# University of North Texas Bulletin | 2021-2022 Undergraduate Catalog

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The information in this catalog is subject to necessary corrections

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This catalog does not include all university policies and procedures for which students are responsible. In addition to reading this catalog carefully, students should consult other publications, such as the *Student Handbook*, the *Code of Student Conduct*, *Parking Regulations*, *Housing Handbook* and specific contracts. This catalog becomes effective on the first day of the fall semester, 2021.

# **Non-Discrimination Policy**

The University of North Texas prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The university takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Equal Opportunity and Title IX coordinates and monitors the University's compliance with the requirements of federal and state non-discrimination laws. Direct questions or concerns to Equal Opportunity and Title IX at 940-565-2759, TTY access: 940-369-8652 or 800-735-2989. You may contact Equal Opportunity and Title IX by email at oeo@unt.edu.

#### **General Information Number**

Directory assistance for all university offices is available through the main switchboard at 940-565-2000; metro 817-267-3731.

# Number 121-2, July 2021

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# The university

The University of North Texas is a place where students transform their lives through education and opportunity.

The flagship of the UNT System, UNT has a legacy of excellence in a broad range of academic areas. It is one of the nation's largest public research universities with nearly 41,000 students and is the most comprehensive university in the Dallas–Fort Worth area. One of the most diverse universities in the nation, UNT is designated a Hispanic-Serving and Minority-Serving Institution. UNT students earned a record-breaking 10,000 degrees last year from its 14 colleges and schools and offers 109 bachelor's, 94 master's and 36 doctoral degree programs — many nationally and internationally recognized. Ranked a Tier One research university by the Carnegie Classification, UNT drives innovation and technology through highlevel research and scholarship, and contributes to the region and state through intellectual capital and economic development.

UNT has been named one of *America's 100 Best College Buys®* for 24 consecutive years, a ranking based on having a high-achieving freshman class and affordable tuition. *The Princeton Review* continually names UNT as a Best in the West school and *Forbes* has listed UNT as an America's Top College for ten consecutive years.

### Location

UNT is in Denton, a town of about 138,000 people located 40 miles north of Dallas and Fort Worth. The 900 acre campus includes 175 buildings including Discovery Park, a 300-acre research facility, accessible from the main campus by shuttle buses. The main campus is easy to walk or bike to, as are residence halls, athletic facilities and other areas of campus.

The Dallas-Fort Worth area is one of the largest, most dynamic regions in the United States and home to many of the nation's fastest growing cities. UNT fuels the North Texas region through innovation, education and research; forming partnerships with many business, industry, education, government and cultural organizations.

# The university's mission

At the University of North Texas, our caring and creative community empowers our students to thrive in a rapidly changing world.

# The university's purpose

Our students will be the innovative leaders of tomorrow.

# The university's vision

We will become globally known for collaborative and imaginative educational innovation and scholarly activity that transforms our students and benefits the world around us.

### Achieving the vision

The Mean Green Family is a community that combines creativity and caring to provide an extraordinary educational environment where we go the extra mile to help our diverse student body. To achieve our vision, we will work together to solve complex issues and find ways to empower our students to succeed in the face of a rapidly changing world. This challenge calls on us to become more nimble and collaborative as an institution. Because we are a caring, creative campus, we value important connections that happen through collaboration, interdisciplinary engagement, connectivity, and synergistic solutions to challenges at our university, in DFW, and beyond. Thus, we will dedicate ourselves to creating a stronger collaborative environment where we hear and respond to the voices of our diverse internal and external communities to empower our students and meet the needs of Texas. The cross-cutting synergies and connectivity created by building a culture of collaboration will drive our success across all planning areas, and enhance our reputation as an innovative, next generation institution.

# History of the university

UNT was founded in 1890 as Texas Normal College and Teachers' Training Institute. Joshua C. Chilton, the founding president, leased facilities above a hardware store on Denton's square to establish a teacher training institute. His opening-day remarks remains an important part of UNT's value system: "It will be our aim to become leaders in the education of the young men and women of Texas, fitting them to creditably fill the most important positions in business and professional circles. We desire the cooperation of all who believe in higher education and who want to see our state in the very front of intellectual as well as material progress."

The university has had seven names through the years:

1890 Texas Normal College and Teacher Training Institute

1894 North Texas Normal College

1901 North Texas State Normal College

1923 North Texas State Teachers College

1949 North Texas State College

1961 North Texas State University

1988 University of North Texas

Incoming students score well above the national and state averages on the SAT, and choose UNT for the quality of its programs. UNT "firsts" through the years include:

- First jazz studies program in the U.S.
- First undergraduate emergency administration and planning program in the U.S.
- First bachelor's degree in digital retailing and in consumer experience management in the U.S. and first Master of Science program in merchandising offered completely online
- First retail program in the U.S. to integrate courses in merchandising, digital retailing, store operations, finance and retail strategy
- First school library certification program in the U.S. offered completely online
- First graduate applied anthropology program in the U.S. offered completely online
- First undergraduate program in applied behavior analysis in the U.S. and first accredited master's program in behavior analysis in the world
- First and only Ph.D. program in art education in Texas
- World's first graduate program in environmental philosophy and world's first field station in environmental philosophy, science and policy at Cape Horn, Chile
- First four-year aviation logistics program at a university in Texas and only such program in the nation
- First master's program in international sustainable tourism in the U.S. and the first to require a year abroad

# **Faculty**

At the heart of the university's efforts to carry out its mission are the faculty. Individually, UNT faculty members have been singled out for contributions to their teaching and research fields through diverse national and international awards.

Collectively, the faculty have contributed significantly to research and scholarship within various fields through numerous publications, presentations at scholarly conferences, concerts, recitals, exhibitions and performances.

Faculty leadership in teaching, research, creative activities, performance and service activities has created national and international reputations for excellence for a number of academic programs within the university's 12 schools and colleges.

# Student life

A wide array of student organizations gives UNT students the opportunity to build friendships with people of both similar and varied interests and provides avenues for organized and meaningful service. Student organizations represent many areas of interest,

such as service professional, political, academic, spiritual, athletic, residential, and Greek. Being involved in a student organization promotes a sense of community and connection to the university, while serving to enhance the social, intellectual and developmental growth of students. For more information, see the Campus Resources section of this catalog, call the Student Activities Center at 940-565-3807 or visit studentactivities.unt.edu.

# **UNT libraries**

A wide range of student- and faculty-centered services are the cornerstone of the Libraries' integral role in the UNT community. As an essential component of education and research at UNT, the Libraries offer access to more than six million print and digital items, along with expert personnel to assist patrons in achieving their academic and scholarly goals. Visit us online at library.unt.edu.

#### Services

UNT Libraries' services include:

- Willis Library open 24/7 during long semesters
- Mac and PC laptop checkout
- Free video games, movies, music and more
- Electronic resources, including journals, books and other research materials
- Library instruction, subject guides and tutorials
- Research assistance from subject experts
- The Spark in Willis Library, a makerspace promoting the creative use of technology
- Accessible tables, study carrels, and computers in Willis, Sycamore, Media and Discovery Park libraries

# Libraries and collections

UNT Libraries have many exceptional collections:

- The Music Library is one of the country's largest music collections, with an extensive phonographic disc and tape collection, and the private jazz collections of Stan Kenton, Don Gillis, Whit Ozier and Leon Breeden.
- Special Collections preserve and provide access to an incredible wealth of materials that document the history and legacy of Texas, as well as touch on numerous topics of national import. Collections include the history of the university, oral histories and Texas county records. Other important archival collections include those of Sarah T. Hughes, Enid Justin and Ruth Salmon. The holdings also feature an outstanding miniature book collection; the private library of Anson Jones, President of the Republic of Texas; Texas Society of Sons of the American Revolution; the Weaver Collection of Juvenile materials; and examples of important early publishing, printing and binding styles. Other collections include the Lesbian, Gay, Bisexual, and Transgender Archive; the Latino/Latina Archive; and the Photography and Visual Materials Collection, which includes the photographic archives of several prominent
- The Government Documents Department contains U.S. and Texas government documents, including the Texas Register. The library has received national recognition for its efforts to preserve online government information through the CyberCemetery and participation in End-of-Term harvests of U.S. government web sites. The UNT Libraries have the distinction of being one of ten affiliated archives of the National Archives.
- Through collaborative efforts such as the Portal to Texas History and the UNT Digital Library, the Libraries provide digital content to a worldwide audience. The Portal is a gateway to Texas history materials from nearly 450 partners at libraries, museums and archives across Texas. The UNT Digital Library includes UNT electronic theses and dissertations, the Federal Communications Commission Record, UNT Scholarly Works, a Virtual Music Rare Book Room and the World War poster collections.

In addition to Willis Library, UNT Libraries include the following:

- The Media Library in Chilton Hall, which houses a large collection of audiovisual materials, including videos, 16 mm - films and audio CDs. Video-on-demand service is provided for curriculum support. This Media library is also home to the Nest, an e-sports and game design space.
- The Discovery Park Library, which supports the College of Engineering and the College of Information.
- The Sycamore Library is home to the Juvenile and CMC Collections, government documents, law, political science, geography, business collections and is also UNT's Funding Information Network location. The Collaboration and Learning Commons, housed within the library, offer student computing services, group and individual study spaces and two study rooms with presentation capabilities.
- The Library Annex and the Research Collection Library both located off-campus—which provide storage for and house the preservation department and the Collection Management division.

# **Computer services**

Centralized campus computing services that support instruction, research and student learning are provided through University Information Technology, UIT, it.unt.edu, in various offices of Sage Hall and the General Academic Building. University IT services include support for a wide range of research computing platforms, training, and consulting. The IT Help Desk, unt.edu/helpdesk, is located in Sage Hall, Room 330.

In addition to the services directly supported by UIT, computer services also are available from the University Libraries, Classroom Support Services, Student Computer Labs, and many college, school and departmental computer support centers. Computer networks are installed in all academic departments to provide internet connectivity. Wireless networking, such as the UNT secure network, is available in most campus classroom buildings and public buildings, such as the University Union and UNT Libraries. Online courses are offered with support from the Center for Learning Enhancement, Assessment and Redesign, CLEAR, clear.unt.edu, using computing systems supported by the UNT System's Information Technology Shared Services, ITSS, itss.untsystem.edu.

#### **Student computing services**

Fourteen general access microcomputer labs, computerlabs.unt. edu, housing approximately 1,000 computers, are available for use by all students. Laser printers are provided in all labs. For students who benefit from adaptive technologies, the Adaptive Computer Lab is available, it.unt.edu/adaptivelab. Approximately 30 additional special-purpose labs serve students in academic disciplines or living in the university residence halls. In addition, all residence hall rooms have network connections, allowing students to have high-speed access to the internet and the campus network on their own computers.

Information Technology Shared Services, ITSS, provides electronic mail to all students via EagleConnect, it.unt.edu/eagleconnect, a web-based email and calendar system. EagleConnect is used as an official communication medium between the university and students. Through the EagleConnect service, currently enrolled students also can download and install Microsoft® Office to their personal computing devices.

# Consulting, training and help desk services

The IT Help Desk provides students with information and help on a variety of computing problems, it.unt.edu/helpdesk. The Help Desk is in Sage Hall, Room 330. The phone number is 940-565-2324.

Computer-based training programs are accessible within general access computer labs or via the web (it.unt.edu/linkedinlearning).

# Accreditation

The University of North Texas is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctorate degrees. Questions about the accreditation of the University of North Texas may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling 404-679-4500, or by using information available on SACSCOC's web site (www.sacscoc.

Please note: SACSCOC should be contacted only to inquire about the accreditation status of UNT, to ask questions about the accreditation process, or to pursue procedures for filing complaints against UNT. General inquiries, such as admission requirements, financial aid, and educational programs, should be addressed directly to UNT and not SACSCOC's office.

In addition, the University of North Texas offers programs accredited by the following organizations.

AACSB International — The Association to Advance Collegiate Schools of Business

ABET-Computing Accreditation Commission

ABET-Engineering Accreditation Commission

ABET-Engineering Technology Accreditation Commission

Accreditation Commission for Programs in Hospitality

Administration

Accrediting Council on Education in Journalism and Mass Communications

American Academy of Forensic Sciences-FEPAC

American Chemical Society

American Library Association

American Psychological Association Commission on Accreditation

American Speech-Language-Hearing Association

Association for Middle Level Education

Behavior Analysis Accreditation Board of ABAI

Commission on English Language Program Accreditation

Council for Accreditation of Counseling and Related Educational Programs

Council for the Accreditation of Education Preparation

Council for Interior Design Accreditation

Council on Rehabilitation Education

Council on Social Work Education

National Association of Schools of Art and Design

National Association of Schools of Music

National Association of Schools of Public Affairs and Administration

National Council for Accreditation of Teacher Education

Texas State Board for Educator Certification

See Accrediting Institutions for addresses of accrediting organizations.

In addition, the University of North Texas offers programs that are approved or recognized by:

American Alliance for Health, Physical Education, Recreation and

Council for Exceptional Children

Educational Leadership Constituent Council

International Society for Technology in Education

National Council of Teachers of English

National Council of Teachers of Mathematics

# **Institutional memberships**

The University of North Texas holds the following memberships.

American Association of Family and Consumer Sciences

American Association of State Colleges and Universities

American College Dance Festival Association

American Collegiate Retailing Association

American Council on Education

American Hotel and Lodging Association

American Mathematical Society

American Political Science Association

Association for Symbolic Logic

Association of Texas Colleges and Universities

Association of Texas Graduate Schools

Association of Women in Mathematics

Broadcast Education Association

Coalition of Urban and Metropolitan Universities

Conference of Southern Graduate Schools

Council for Chemical Research

Council for Higher Education Accreditation

Council for Public University Presidents and Chancellors

Council of Graduate Schools

Council on Undergraduate Research

Dallas Dance Council

Federation of North Texas Area Universities

Greater Denton Arts Council

Hospitality Sales and Marketing Association International

International Council of Shopping Centers

International Council on Hotel, Restaurant and Institutional

Education

International Textile and Apparel Association

Mathematical Association of America

National Association of State Universities and Land-Grant Colleges

National Collegiate Honors Council

National Restaurant Association

National Retail Federation

National Women's Studies Association

Oak Ridge Associated Universities

Society for Cinema and Media Studies

Texas Association of Broadcast Educators

Texas Educational Theatre Association

University Film and Video Association

# Administration, faculty and librarians

See the Administration, faculty and librarians section for lists of university officers, UNT System officers and academic deans.

Information regarding individual faculty members and librarians is available from the Faculty Profile System (faculty.unt.edu/index. php). Select "Faculty Profiles" from the Browse menu. To access faculty information from a specific department or from the Libraries, use the drop-down menu at the head of the faculty list.

Graduate faculty of the Graduate School of Biomedical Sciences and the School of Public Health at the University of North Texas Health Science Center at Fort Worth (UNTHSC) also are members of the graduate faculty of the University of North Texas and thus can serve as mentors or committee members of UNT graduate students appropriate to their graduate appointment. See the UNTHSC Graduate Catalog for UNTHSC graduate faculty listings.

# **UNT presidents**

Joshua C. Chilton (1890–1893)

John J. Crumley (1893-1894)

Menter B. Terrill (1894–1901)

J.S. Kendall (1901-1906)

W.H. Bruce (1906-1923)

Robert L. Marquis (1923-1934)

W.J. McConnell (1934-1951)

J.C. Matthews (1951–1968) John J. Kamerick (1968–1970)

John L. Carter, Jr. (acting, 1970-1971)

C.C. Nolen (1971–1979)

John L. Carter, Jr. (acting, 1979-1980)

Frank E. Vandiver (1980-1981)

Howard W. Smith Jr. (ad interim, 1981-1982)

Alfred F. Hurley (1982–2000)

Norval F. Pohl (2000-2006)

Gretchen M. Bataille (2006-2010)

Phillip C. Diebel (ad interim, 2010) V. Lane Rawlins (2010-2014)

Neal Smatresk (2014-present)

From 1981 until 2000, the president also carried the responsibilities and title of Chancellor of the University and the University of North Texas Health Science Center at Fort Worth. Senate Bill 751 of the 76th Texas Legislature provided for the establishment of the University of North Texas System, and in July 1999, the Texas

Higher Education Coordinating Board confirmed formal system status for UNT System Center (now in Dallas), including the Denton campus, UNTHSC at Fort Worth and the UNT Dallas Campus. In October 2000, the positions of president and chancellor were officially separated.

# **UNT chancellors**

Frank E. Vandiver (1981) Howard E. Smith (ad interim, 1981) Alfred F. Hurley (1981–2002) Lee Jackson (2002–2017) Lesa Roe (2017-present)

On August 24, 2002, the UNT Board of Regents named Alfred F. Hurley Chancellor Emeritus of the UNT System and President Emeritus of the university.

# 2021-2022 Academic calendar

Dates are subject to change by official action of UNT.

# Fall 2021

August 23, 2021	First class day (Monday)
August 20-27, 2021	Student-requested schedule changes may be made during add/drop.
August 27, 2021	Last day for change of schedule other than a drop. (Last day to add a class.)
September 6, 2021	Labor Day (university closed)
October 1, 2021	Last day for change in pass/no pass status.
November 12, 2021	Last day to drop a course.
November 12, 2021	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
November 13, 2021	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
November 25-26, 2021	Thanksgiving break (university closed)
December 1-2, 2021	Pre-finals days
December 2, 2021	Last regular class meeting
December 3, 2021	Reading day (no classes)
December 4-10, 2021	Final examinations
December 10, 2021	Last day of term
December 10-12, 2021	Commencement ceremonies
December 24, 2020 – January 1, 2021	Winter break (university closed)

# Fall 2021—8W1 Session

August 23, 2021	First class day (Monday)
September 6, 2021	Labor Day (university closed)
September 10, 2021	Last day for change in pass/no pass status.
October 1, 2021	Last day to drop a course.
October 1, 2021	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
October 2, 2021	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
October 14, 2021	Last regular class meeting
October 15, 2021	Final examinations
October 15, 2021	Last day of session

# Fall 2021—8W2 Session

October 18, 2021	First class day (Monday)
November 5, 2021	Last day for change in pass/no pass status.
November 25-26, 2021	Thanksgiving break (university closed)
November 19, 2021	Last day to drop a course.
November 19, 2021	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
November 20, 2021	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
December 9, 2021	Last regular class meeting
December 10, 2021	Final examinations
December 10, 2021	Last day of term

# Spring 2022—3W1 Winter Session

December 13, 2021	First class day (Monday)
December 14, 2021	Student-requested schedule changes may be made during add/drop.
December 14, 2021	Last day for change of schedule other than a drop. (Last day to add a class.)
December 17, 2021	Last day for change in pass/no pass status.
December 20, 2021 – January 1, 2022	Winter Break (university closed)
January 7, 2022	Last day to drop a course.
January 7, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
January 8, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
January 13, 2022	Last regular class meeting
January 14, 2022	Final examinations
January 14, 2022	Last day of session

# Spring 2022

MLK Day (university closed)
First class day
Last day for change of schedule other than a drop. (Last day to add a class.)
Last day for change in pass/no pass status.
Spring break (no classes)
Last day to drop a course.
Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
Pre-finals days
Last regular class meeting
Reading day (no classes)
Final examinations
Last day of term
Commencement ceremonies

# Spring 2022—8W1 Session

January 17, 2022	MLK Day (university closed)
January 18, 2022	First class day (Tuesday)
January 21, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
February 4, 2022	Last day for change in pass/no pass status.
February 25, 2022	Last day to drop a course.
February 25, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
February 26, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
March 10, 2022	Last regular class meeting
March 11, 2022	Final examinations

# Spring 2022—8W2 Session

March 21, 2022	First class day (Monday)
March 25, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
April 8, 2022	Last day for change in pass/no pass status.
April 29, 2022	Last day to drop a course.
April 29, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
April 30, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
May 12, 2022	Last regular class meeting
May 13, 2022	Final examinations

# Summer 2022

May 16, 2022	First class day
May 20, 2022	Student-requested schedule changes may be made during add/drop.
May 20, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
May 30, 2022	Memorial Day (university closed)
June 24, 2022	Last day for change in pass/no pass status.
July 4, 2022	Independence Day (university closed)
July 21, 2022	Last day to drop a course.
July 21, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
July 22, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
August 11, 2022	Last class day
August 12, 2022	Final examinations
August 12, 2022	Last day of session

# **3W1 Session**

May 16, 2022	First class day
May 16, 2022	Student-requested schedule changes may be made during add/drop.
May 16, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
May 20, 2022	Last day for change in pass/no pass status.
May 30, 2022	Memorial Day (university closed)
May 31, 2022	Last day to drop a course.
May 31, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
June 1, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
June 2, 2022	Last class day
June 3, 2022	Final examinations
June 3, 2022	Last day of session

# **8W1 Session**

May 16, 2022	First class day
May 20, 2022	Student-requested schedule changes may be made during add/drop.
May 20, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
May 30, 2022	Memorial Day (university closed)
June 3, 2022	Last day for change in pass/no pass status.
June 24, 2022	Last day to drop a course.
June 24, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
June 25, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)

July 4, 2022	Independence Day (university closed)
July 7, 2022	Last class day
July 8, 2022	Final examinations
July 8, 2022	Last day of session

# **8W2 Session**

June 6, 2022	First class day
June 10, 2022	Student-requested schedule changes may be made during add/drop.
June 10, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
June 24, 2022	Last day for change in pass/no pass status.
July 4, 2022	Independence Day (university closed)
July 15, 2022	Last day to drop a course.
July 15, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
July 16, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
July 28, 2022	Last class day
July 29, 2022	Final examinations
July 29, 2022	Last day of session

# **5W1 Session**

June 6, 2022	First class day
June 8, 2022	Student-requested schedule changes may be made during add/drop.
June 8, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
June 17, 2022	Last day for change in pass/no pass status.
June 30, 2022	Last day to drop a course.
June 30, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
July 1, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
July 4, 2022	Independence Day (university closed)
July 7, 2022	Last class day
July 8, 2022	Final examinations
July 8, 2022	Last day of session

# **10W Session**

June 6, 2022	First class day
June 10, 2022	Student-requested schedule changes may be made during add/drop.
June 10, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)
July 1, 2022	Last day for change in pass/no pass status.
July 4, 2022	Independence Day (university closed)
July 27, 2022	Last day to drop a course.
July 27, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.
July 28, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)
August 11, 2022	Last class day
August 12, 2022	Final examinations
August 12, 2022	Last day of session

# **5W2 Session**

July 11, 2022	First class day	
July 13, 2022	Student-requested schedule changes may be made during add/drop.	
July 13, 2022	Last day for change of schedule other than a drop. (Last day to add a class.)	
July 22, 2022	Last day for change in pass/no pass status.	
August 4, 2022	Last day to drop a course.	
August 4, 2022	Last day to withdraw from the semester. Process must be completed by 5 p.m. in the Dean of Students Office. Grades of W are assigned.	
August 5, 2022	Beginning this date a student who qualifies may request a grade of I, incomplete. (See "Grading system" in the Academics section of this catalog.)	
August 11, 2022	Last class day	
August 12, 2022	Final examinations	
August 12, 2022	Last day of session	

# **Additional calendar information**

Admissions	Phone: 940-565-2681
	Web site: admissions.unt.edu
Graduate School	Phone: 940-565-2383
	Web site: tgs.unt.edu
Registrar's Office	Phone: 940-565-2111
	E-mail: registrar@unt.edu
	Web site: registrar.unt.edu
Student Financial Services	Phone: 940-565-3225
	Web site: sfs.unt.edu
Housing	Phone: 940-565-2610
	E-mail: housinginfo@unt.edu
	Web site: housing.unt.edu
Orientation and Transition Programs	Phone: 940-565-4198
Offentation and Transition Frograms	
	E-mail: freshman@unt.edu and transfer@unt.edu
	Web site: studentaffairs.unt.edu/orientation-and-transition-programs
UNT-International	Phone: 940-565-2197
	E-mail: international@unt.edu
	Web site: international.unt.edu
Libraries	Web site: www.library.unt.edu

Dates subject to change at any time by official action of UNT. Academic Calendar: http://www.unt.edu/catalog/

# **Admission**

Admission policies are reviewed periodically and are subject to change. Check the UNT web site at admissions.unt.edu for the latest admission information or contact the Office of Admissions at 940-565-2681, 800-868-8211, Dallas–Fort Worth Metro 817-267-3731

# Application for admission for new undergraduate students

The University of North Texas is a selective university and does not guarantee admission of all applicants. It is recommended that students apply well in advance of stated application deadlines.

Applicants to the University of North Texas must meet academic requirements outlined in this catalog or other applicable publications of the university. The Office of Admissions, located in the Eagle Student Services Center provides complete admissions counseling for new students. Admissions Counselors are available to assist prospective students throughout the admissions process. Initial inquiries may be submitted online pages.unt.edu/undergradinfo, by calling us at (940) 565-2681, or by writing to the University of North Texas, Office of Admissions, 1155 Union Circle #311277, Denton, TX 76203-5017. The Office of Admissions requires undergraduate applicants to submit the ApplyTexas application online at www.applytexas.org or the Common Application online at www.commonapp.org. Students have the option to complete either application and are not required to submit both.

Prospective undergraduate students should apply as early as possible. All necessary credentials, including application forms, all official transcripts, test scores, etc., must be on file in the Office of Admissions by the following deadlines to be evaluated and processed for admission and enrollment at UNT. Applications received after these deadlines will be subject to a late application fee.

### Fall 2021

- February 1, 2021—to allow time for processing prior to the March 1, 2021, scholarship application deadline, freshmen should apply and pay fee no later than February 1, 2021
- March 1, 2021—priority application date for freshmen
- July 1, 2021—priority application date for transfer students

#### Spring 2022

December 1, 2021, for classes beginning January 18, 2022

# Summer 2022

- May 3, 2021, for classes beginning May 10, 2021
- May 25, 2021, for classes beginning June 1, 2021
- July 1, 2021, for classes beginning July 5, 2021

### Fall 2022

- February 1, 2022 To allow time for processing prior to the March 1, 2022, scholarship application deadline, freshmen should apply and pay fee no later than February 1, 2022
- March 1, 2022 priority application date for freshmen
- July 1, 2022 priority application date for transfer students

Applications received after the deadlines must be accompanied by all official transcripts for evaluation. The prospective student must meet the stated admission requirements, must register for courses during late registration and will be subject to a late registration fee. All new undergraduate students enrolling must comply with state law and university policies concerning the Texas Success Initiative as described in the Academics section of this publication.

# **Former students**

All previous, regularly admitted students who have been enrolled at UNT within the last year will not need to re-apply for admission. If you wer previously admitted and have not enrolled at UNT at least

once during the 12 consecutive months prior to the term/semester you wish to return, please apply online at www.applytexas.org and fill out a readmit application. Student who have attended UNT but were not admitted under regular admission standards—transients, summer visitors, special students, and dual credit high school students—must apply for regular admission and meet standards in order to return to UNT.

# **Programs with specific requirements**

The Office of Admissions coordinates all policies and procedures for university admission. Some programs require that students meet additional requirements in order to be admitted to a particular program. Those programs with admission requirements in addition to those for general university admission are listed below. Students should consult that section of the catalog for specific program requirements.

### G. Brint Ryan College of Business

All programs

#### College of Education

Teacher Education

#### College of Engineering

All programs

#### College of Health and Public Service

Social Work

#### College of Information

BS - Information Science

### Frank W. and Sue Mayborn School of Journalism

All programs

#### College of Liberal Arts and Social Sciences

Converged Broadcast Media Media Arts

#### College of Merchandising, Hospitality and Tourism

All programs

# College of Music

All programs

### College of Science

Biochemistry Biology

# College of Visual Arts and Design

All programs

# Admission application fee

A non-refundable undergraduate application fee of \$75 is charged to all domestic, new, undergraduate, first-time-in-college and transfer applicants. The fee must be paid in U.S. dollars. Students applying after the February 1, application deadline will be charged a \$90 application fee. Admission applications will be processed after the application fee is received. Admission decisions will be made after all academic credentials are received and evaluated.

# **High school graduates**

Note: Admission requirements are subject to change. For the latest information, visit the UNT web site at admissions.unt.edu.

The University of North Texas is a selective university and does not guarantee admission of all applicants. It is recommended that students apply well in advance of stated application deadlines.

Students admitted to the first term/semester of college work must have graduated from an accredited high school and complete the Foundation (HB5), Foundation with Endorsements (HB5), Distinguished Achievement (HB5), Minimum (UAP), Recommended

(UAP) or Distinguished (UAP) high school program or complete the portion of the program that was available to them; or, successfully complete a curriculum that is equivalent in content and rigor to the Foundation, Foundation with Endorsements, Distinguished Achievement, Minimum (UAP), Recommended or Advanced (Distinguished Achievement) high school program at a high school that is exempt from offering such programs. Students must submit an application for admission to UNT with a transcript showing their high school credits and rank in their graduating class. Transcripts showing rank in class should be sent after completion of the junior year. For admission purposes, a high school rank is required. If your school does not rank, the Office of Admissions will assign you a rank based on a review of your high school transcript, including your SAT and/or ACT scores as pursuant by Section 51.9241 of the Texas Education Code.

In addition, it is recommended that students present satisfactory scores on the SAT or the ACT exam. Appropriateness of experience in lieu of academic credential (i.e., GED, home schooling, graduation from an unaccredited high school, etc.) may be assessed on an individual review basis by the UNT Admissions Review Committee (ARC). For more information, see "Admission by Individual Review" in this section of the catalog. To be more successful at UNT, we strongly recommend that students successfully complete the following classes in high school:

- English: 4 credits (English I-IV)
- Mathematics: 4 credits (Algebra I, Geometry, Algebra II and Pre-Calculus)
- Sciences: 4 credits (to be selected from Biology, Chemistry, Environmental Sciences and Physics)
- Social Sciences: 4 credits (World Geography, World History Studies, U.S. Government and Economics and U.S. History)
- Foreign Language: 2 credits (Levels I-III proficiency of the same language) (UNT recommends 3 credits)
- Health: 1/2 credit minimum
- Fine Arts: 1 credit
- Physical Education: 1 1/2 credits
- Computer Science: 1 credit (demonstrated proficiency at Level I)
- Electives: 3 1/2 creditsSpeech: 1/2 credit

\*In March 2016, College Board began administering a new version of the SAT exam. Any scores from prior to March 2016 will be recentered compared to new SAT scores, in accordance with the SAT equivalency guidelines published by College Board. Any SAT scores mentioned are subject to change. Please visit admissions.unt.edu for updated information.

# **Entrance examination**

Guaranteed admission is granted to students who have earned a minimum score on the SAT or ACT exam and minimum score requirements vary according to the applicant's rank in their high school graduating class. The writing sections of wither exam is not required. SAT or ACT exam scores are required for guaranteed admission and are recommended but not required for admission. High school seniors who plan to attend UNT should take entrance examinations at least five months before enrollment dates. See a high school counselor for more information or visit: The Collegge Board web site at sat.collegeboard.org; or ACT, www.actstudent.org. (The UNT institutional codes for score reporting purposes are SAT, 6481; ACT, 4136.)

#### Admission of new freshmen

Policies for the admission of new freshmen are established by the North Texas Board of Regents. Students who do not meet the requirements for automatic or regular admission should refer to the section titled "Admission by Individual Review" for more information. Per the Texas Education Code TEC 51.803-51.809, Uniform Admissions Policy (UAP) requires applicants to four-year public universities to meet college readiness standards through completion of a high school graduation program or equivalent or through SAT or ACT score benchmarks. Students who attend an out-of-state high school are exempt from the UAP.

Students must meet one of the following college readiness standards in order to be eligible for consideration for admission at a Texas Four-Year Public Institution:

Successfully complete the Foundation (HB5), Foundation with Endorsements (HB5), Distinguished Achievement (HB5), Minimum (UAP), Recommended (UAP) or Distinguished (UAP) high school program or complete the portion of the program that was available to them: or

Successfully complete a curriculum that is equivalent\* in content and rigor to the Foundation, Foundation with Endorsements, Distinguished Achievement, Minimum (UAP), Recommended or Advanced (Distinguished Achievement) high school program at a high school that is exempt from offering such programs; or

Satisfy the College Readiness Benchmarks on the SAT or ACT assessment: SAT - 1500 out of 2400 (for tests prior to March 2016) or 1090 out of 1600 (for tests March 2016 to present) or ACT - 18 English, 22 Reading, 22 Mathematics and 23 Science

\*Under TEC Section 51.807 and with consultation of the Texas Education Agency, the Texas Higher Education Coordinating Board has determined that the high schools are responsible for providing the appropriate documentation to confirm the curriculum requirements and/or equivalencies.

Applicants meeting the curriculum or the SAT/ACT\* assessment score requirements mandated by the Texas Education Code, but not meeting UNT's admission requirements, may be reviewed individually by the Office of Admissions. Students must meet requirements as outlined by TEC Sections 51.801-51.809 to be considered for admission at UNT.

Note: Admission requirements are subject to periodic review and change. For the latest information, visit the UNT web site: admissions.unt.edu.

#### **Automatic admission**

In compliance with state law, applicants who graduated in the top 10 percent\* of their high school class and who completed a high school graduation program or equivalent program recognized under the Uniform Admissions Policy (UAP) as outlined under the Texas Education Code TEC 51.803-51.809shall be admitted automatically to the university.

# **Regular admission**

Applicants shall be guaranteed admission if they meet the UAP requirement and:

- Rank in the top 10% of your high school class and submit SAT or ACT scores
- Rank in the next 15% and have a minimum 1030 SAT or 20 ACT
- Rank in the 2nd quarter and have a minimum 1130 SAT or 23 ACT
- Rank in the 3rd quarter and have a minimum 1250 SAT or 26 ACT
- Have a cumulative unweighted high school GPA of 3.00 or higher on a 4.00 scale

Applicants who rank in the 4th quarter, applicants whose GPAs are below the standard, or applicants who do not meet the requirements in either the automatic or regular admissions categories, will have their applications reviewed by a UNT admission officer. (See "Admission by Individual Review" in this section.)

# Undergraduate admission requirements

Classification	Prerequisites	Official transcripts	Entrance exam <sup>1</sup>
Beginning freshman (student who has never attended college or community college following high school graduation)	Graduation from an accredited high school and meet one of the following college readiness standards: Successfully complete the Foundation (HB5), Foundation with Endorsements (HB5), Distinguished Achievement (HB5), Minimum (UAP), Recommended (UAP) or Distinguished (UAP) high school program or complete the portion of the program that was available to you; or successfully complete a curriculum that is equivalent (as documented by the high school) in content and rigor to the Foundation, Foundation with Endorsements, Distinguished Achievement, Minimum (UAP), Recommended or Advanced (Distinguished Achievement) high school program	Yes: Showing grade and rank in class or GPA through at least junior year.	Automatic admission— Applicants who graduated in the top 10 percent of their high school class shall be admitted automatically to the university.*  Regular admission— Applicants shall be guaranteed admission if they  • rank in the next 15 percent and have a minimum 1030 SAT or 20 ACT, or
	at a high school that is exempt from offering such programs; or satisfy the College Readiness Benchmarks on the SAT or ACT assessment: SAT-1500 out of 2400 (for tests prior to March 2016) or 1090 out of 1600 (for tests March 2016 to present) or ACT - 18 English, 22 Reading, 22 Mathematics and 23 Science		rank in the 2nd quarter and have a minimum 1130 SAT or 23 ACT, or rank in the 3rd quarter and have a minimum 1250 new
Transfer freshman (fewer than 15 college credit hours)	Graduation from an accredited high school.  Minimum 2.5 college GPA (on a 4.0 scale) and must be eligible to return to all institutions attended.	Yes: Transcript from high school and each college or university attended.	SAT or 26 ACT. Individual review—Applicants not possessing or meeting the high school rank/tank score
Transfer freshman (at least 15 but less than 30 college hours)	Minimum college 2.5 college GPA (on a 4.0 scale) and must be eligible to return to all institutions attended.	Yes: Transcript from each college or university attended.	requirements, who do not meet the high school GPA requirement may be admitted only by individual review.*
Transfer student (30-44 college credit hours)	Minimum 2.25 college GPA (on a 4.0 scale) and must be eligible to return to all institutions attended.	Yes: Transcript from each college or university attended.	No.
Transfer student (more than 44 college credit hours)	Minimum 2.00 college GPA (on a 4.0 scale) and must be eligible to return to all institutions attended.	Yes: Transcipt from each college or university attended.	No.
Transient student <sup>2</sup> (fall or spring only) or Summer visiting student <sup>2</sup> (summer only)	Academic good standing at last college or university attended.	Yes: From the last college attended	No.
Early admission student	Top quarter of high school class; solid B average; be on target to meet Texas Education Code, Sections 51.801-51.809 requirements; letters from school counselor or principal recommending early admission, and from parents or guardians concurring with intention; interview in admissions office.	Yes: Through junior year. Transcript must reflect completion of 3 units of English and 3 units each of solid mathematics, social science and natural science.	Minimum 1250 SAT or 26 ACT

# Notes for admissions chart

*	For automatic admission, freshman applicants should submit SAT or ACT exam scores. It is recommended but not required that all freshman applicants to the University of North Texas submit SAT or ACT exam scores.  High school seniors who plan to attend UNT should take entrance examinations at least five months before enrollment dates. See high school counselor for more information or visit: the College Board web site: www.collegeboard.org or the ACT web site: www.act.org. (The UNT institutional codes for score reporting purposes are SAT, 6481; ACT 4136.)
1	UNT applicants should take entrance exams at least five months before admission deadline. See high school counselor for information. The writing section of the SAT or ACT is not a requirement for admission to UNT.
2	A transient student is an undergraduate student who enrolls at UNT for one long semester only (fall or spring). A summer visiting student is an undergraduate student who enrolls at UNT for one or more summer terms with the intent of returning to the home institution upon completion of summer studies. If a transient (or summer visiting) student decides to continue at UNT after the first semester, the student must apply as a transfer student and meet all normal admission requirements. (Summer visiting students must reapply each summer that enrollment is sought.)

### Texas uniform admission policy (SB 3826)

State law TEC 51.803-51.809, Uniform Admissions Policy (UAP) requires applicants to four-year public universities to meet college readiness standards through completion of a high school graduation program or equivalent or through SAT or ACT score benchmarks. Students who attend an out-of-state high school, are exempt from the UAP

Students must meet one of the following college readiness standards in order to be eligible for consideration for admission at UNT:

- Successfully complete the Foundation (HB5), Foundation with Endorsements (HB5), Distinguished Achievement (HB5), Minimum (UAP), Recommended (UAP) or Distinguished (UAP) high school program; or
- Successfully complete a curriculum that is equivalent (as
  documented by the high school) in content and rigor to the
  Foundation, Foundation with Endorsements, Distinguished
  Achievement, Minimum (UAP), Recommended or
  Advanced (Distinguished Achievement) high school
  program at a high school that is exempt from offering such
  programs; or
- Satisfy the College Readiness Benchmarks on the SAT or ACT assessment: SAT - 1500 out of 2400 (for tests prior to March 2016) or 1090 out of 1600 (for tests March 2016 to present) or ACT - 18 English, 22 Reading, 22 Mathematics and 23 Science

Under TEC Section 51.807 and with consultation of the Texas Education Agency, the Texas Higher Education Coordinating Board has determined that the high schools are responsible for providing the appropriate documentation to confirm the curriculum requirements.

Applicants meeting the curriculum or the SAT/ACT assessment score requirements mandated by the Texas Education Code, but not meeting UNT's admission requirements, may be reviewed individually by the Office of Admissions.

# **Early admission**

On an individual basis, UNT may admit high school students to the freshman class after completion of the junior year of high school. To be considered, students must:

- 1. be ranked in the top quarter of their class;
- 2. have a strong B average;
- have completed 3 units of English and 3 units each of solid mathematics, social science and natural science;
- present minimum combined SAT (combined critical reading/verbal + math) score of 1250 or ACT composite of 26;
- submit letters from high school counselor or principal recommending early admission;
- submit a letter from parents or guardians stating they approve of early admission; and
- 7. arrange an interview in the Office of Admissions.

Under this program, high school seniors may be enrolled concurrently at UNT through coordination with the UNT Director of Admissions and the high school.

### **Texas Success Initiative**

See "Texas Success Initiative" in the Academics section of this catalog for additional information.

The Texas Success Initiative (TSI) is a state statute requiring all undergraduate students entering a Texas public institution of higher education to demonstrate readiness for college-level reading, writing and mathematics before enrolling in college-level coursework. Students may demonstrate college readiness by achieving the statutory threshold on the state-approved TSI Assessment, unless they are exempt (see the Academics section of this catalog for exemption information). Students must satisfy all TSI requirements before receiving a baccalaureate degree.

The TSI Assessment minimum score threshold required to demonstrate college readiness in each subject is as follows:

	Math	ELAR
TSI Assessment	CRC 950	CRC 945 and Essay 5-8
January 11,	or	or
2021-present	CRC 910-949 and	
	Diagnostic Level 6	Diagnostic Level 5-6 and Essay 5-8

	Reading	Math	Writing
TSI Assessment	351	350	Placement Score of 340 and Essay Score of 4+
Prior to			or
January 11, 2021			Placement Score of less than 340, ABE level of at least 4 and an Essay Score of at least 5

Students shall participate in a designated education plan for each semester of enrollment for those subjects where readiness has not been demonstrated. Students may demonstrate readiness by either passing the highest level of indicated coursework or by scoring above statutory threshold on the TSI Assessment.

College readiness testing is not used in admission decisions at UNT. UNT must, however, have the results of a readiness assessment before Orientation and registration. For more information, visit learningcenter.unt.edu/tsi or contact the Learning Center at 940-369-7006 or TSI@unt.edu.

# Texas Academy of Mathematics and Science students

The Texas Academy of Mathematics and Science (TAMS) is an early admission residential program for accelerated study designed to attract high-achieving high school age students to the science and mathematics fields. Beginning the program no later than the junior year in high school, academy students are enrolled as regular college students and earn two years of college credit. Students selected for this program are admitted solely to attend the academy. Admission to the academy is based on the student's commitment to complete the two-year program. Eligibility for enrollment in university courses is contingent upon continued enrollment at the academy.

Until the TAMS class with which the student originally entered has completed the two-year program, enrollment at UNT (outside of the academy curriculum) will be considered only if all published UNT Early Admission program requirements and procedures are met. This includes successful completion of first-year TAMS studies and a letter of recommendation from the academy dean. Should a student leave the program for any reason and achieve high school graduation, the standard UNT admission process would apply. Applicable freshman and/or transfer requirements for regular admission would need to be satisfied.

For additional information, contact the TAMS Office of Admissions at 800-241-TAMS, or by e-mail at tamsadmissions@unt.edu.

# Eagle Bound Program (Admissions Partnership Agreement)

The University of North Texas has an admission partnership, called the Eagle Bound Program, with several community college districts, including Collin College, the Dallas County Community College District (DCCCD), North Central Texas College (NCTC), Hill College, Grayson College and Weatherford College. The Eagle Bound Program allows students who meet UNT admission requirements to establish a concurrent admission relationship with UNT prior to completing their studies at their community college.

Contact the Office of Admissions for additional information.

Note: Concurrent admission programs are subject to periodic review.

# Academic fresh start for admissions decisions

Section 51.931 of the Texas Education Code allows Texas resident students who were enrolled in a post-secondary institution 10 or more years ago to seek admission to UNT without consideration of that academic work.

To take advantage of this option, you must request it prior to your first enrollment at UNT. You must report and submit all of your college transcripts with your application for admission. You must also complete and submit a Fresh Start request form. Hours excluded under the Fresh Start option may still be used to claim exemption from the Texas Success Initiative.

Contact the Office of Admissions for more information at 940-565-2681, 800-868-8211, Dallas—Fort Worth Metro 817-267-3731, or online at admissions.unt.edu.

# **Transfer students**

A transfer student is defined as any student new to UNT who has been enrolled at another college or university and has earned college credit after high school graduation prior to attendance at UNT.

Applicants must submit records of all institutions attended, even if they do not wish to transfer the credit to UNT.

Transfer students with less than 15 transferable college credit hours must:

- submit an application for admission;
- meet the entrance requirements listed above for high school graduates;
- have a minimum 2.5 college GPA on a 4.0 scale;
- be eligible to return to any institution attended; and
- provide an official transcript from high school and each college or university attended.

Transfer students with at least 15 but no less than 30 transferable college credit hours must:

- submit an application for admission;
- have a minimum 2.5 college GPA on a 4.0 scale;
- be eligible to return to any institution attended; and
- provide an official transcript from each college or university attended.

Transfer students with 30-44 transferable college credit hours must:

- submit an application for admission;
- have a minimum 2.25 college GPA on a 4.0 scale;
- be eligible to return to any institution attended; and
- provide an official transcript from each college or university attended

Transfer students with more than 44 transferable college credit hours must:

- submit an application for admission
- have a minimum 2.00 college GPA on a 4.0 scale;
- be eligible to return to any institutions attended; and
- provide an official transcript from each college or university attended.

Transfer applicants who do not meet the above requirements for regular transfer admission should refer to the section titled "Admission by Individual Review" in this section for more information. All transfer applicants admitted by individual review may be required to participate in success programs as recommended.

The University of North Texas is a selective university and does not guarantee admission of all applicants. It is recommended that students apply well in advance of stated application deadlines.

The Registrar's Office determines acceptable transfer credit from other institutions. The student's academic dean determines applicability of the credit to a degree program. If UNT does not accept lower-division course credit earned by a student at another Texas public institution of higher education, UNT shall give written notice to the student and the other institution that the transfer of the course credit is denied. UNT shall also provide written notice of the reason for denying credit for a particular course or set of courses at the request of the other institution.

A student may dispute the denial of credit by contacting a designated official at either UNT or the other institution.

The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Texas Higher Education Coordinating Board rules and/or guidelines. If the transfer dispute is not resolved to the satisfaction of the student or the institution at which the credit was earned within 45 days after the date the student receives written notice of the denial, UNT shall notify the commissioner of the Texas Higher Education Coordinating Board of its denial and the reason for the denial.

The commissioner of higher education or the commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

The Texas Higher Education Coordinating Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the commissioner or the commissioner's designee.

If UNT has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, UNT will first contact the other institution and attempt to resolve the problem. In the event that the two institutions are unable to come to a satisfactory resolution, UNT may notify the commissioner of higher education, who may investigate the course. If its quality is found to be unacceptable, the Texas Higher Education Coordinating Board may discontinue funding for the course.

Transfer credit is subject to audit during a student's academic career at UNT. Total hours accepted may be increased or decreased to reflect correction of prior evaluation or consideration of additional transfer work to ensure compliance with UNT academic policies.

# Texas community college transfer students

Prior to transferring to UNT from a Texas community college, students should discuss the UNT Course Equivalency Guide and the degree audit information contained in the UNT *Undergraduate Catalog* with their community college academic advisor/counselor.

Students are encouraged to plan all course selections at the community college as far in advance as possible. Proper planning and use of the UNT Course Equivalency Guide and the UNT degree audit information will maximize the transfer of credit to UNT.

The university participates in the Texas Common Course Numbering System (TCCNS) to facilitate the transfer of credits, and lists most community college and area four-year institution course equivalency information in its Transferology System at www.transferology.com/school/unt. Transferology allows students to create user accounts to store completed course work and to run UNT major-specific planning guides. Transfer guides using the TCCNS courses are available for each major on the Registrar's web site at registrar.unt.edu/transferguides.

# Transfer of the core curriculum

A student who successfully completes the common core curriculum at a state-assisted institution of higher education in Texas may transfer as "core complete" to UNT. The student will receive academic credit for each of the courses transferred. See also the UNT transfer articulation web page at registrar.unt.edu/transferguides, where you can find information on the online transfer course equivalency tool Transferology.

# **Choice of catalog**

Any student transferring directly from a Texas public community college to UNT shall have the same choice of catalog designating degree requirements as the student would have had if the dates

of attendance at the university had been the same as the dates of attendance at the community college. See "Graduation Under a Particular Catalog" in the Academics section of this catalog.

#### **Advanced-hour credit**

A lower-level course that is determined to be equivalent to a UNT upper-level course does not satisfy the requirement of advanced hours.

# **Texas Common Course Numbering System**

The Texas Common Course Numbering System (TCCNS) has been designed for the purpose of aiding students in the transfer of general academic courses between colleges and universities through-out Texas. A link to the list of currently approved TCCNS numbers may be found in the left-hand navigation on this page. In course descriptions, TCCNS prefixes and/or numbers, when applicable, are indicated in parentheses immediately following the UNT course number. Information provided is subject to change without notice and does not constitute a contract between UNT and a student or applicant for admission. Prospective transfer students should contact the academic dean's advising office of their intended major for course work guidelines prior to enrollment.

#### **Transfer hours**

Students who complete work at another institution to be applied toward a bachelor's degree at the University of North Texas should make sure that the appropriate officer of the other institution furnishes to the Office of Admissions at the University of North Texas a complete official transcript of such work.

The Registrar's Office determines acceptable transfer credit from other institutions based on evaluation of course content as described in the catalogs of those institutions and in consultation with appropriate academic units at UNT as necessary for clarification. Transfer credit may only be received for course work completed at an accredited institution of higher education. Transfer credit from other institutions will be converted to semester hours and a 4.0 grading system (that mimics UNT's current grading system) for evaluation purposes as appropriate. The student's academic dean determines applicability of the credit to a degree program. Students seeking the Bachelor of Applied Arts and Sciences (BAAS) should refer to the special provisions of the respective BAAS degree programs.

Students who have begun residence work at UNT and who have attained junior standing may, only with the prior written approval of their academic dean, enroll in and transfer hours from approved two-year colleges.

Transfer credit is subject to audit during a student's academic career at UNT. Total hours accepted may be increased or decreased to reflect correction of prior evaluation or consideration of additional transfer work to ensure compliance with UNT academic policies.

# Admission by individual review

Any applicants who do not meet the requirements in either the freshman automatic or regular admissions categories, or transfer requirements, will have their applications reviewed by a UNT admissions officer and may be given the opportunity to provide additional information to justify their admission to the university.

Upon review of the application file, the admission officer will forward a letter to the student stating the options for possible admission to UNT. These options may include, but are not limited to, the following:

- submitting new entrance exam scores (SAT or ACT);
- attending a community college and completing 30 or more college level hours with a minimum 2.25 GPA;
- duplicating college-level work in which the student received a D or F to improve college GPA;
- submitting two letters of recommendation\* and an essay (personal statement) addressing the student's education and career goals.

Students should carry out the suggested option for the best possibility of admission into UNT.

Appropriateness of experience in lieu of academic credentials (i.e., GED, home schooling, graduation from an unaccredited high school) will also be assessed on an individual review basis.

Factors that may assist in determining academic readiness under the individual review provision may include, but are not limited to, the following:

- high school attended
- first-generation college attendance
- employment experience
- special abilities such as bilingual proficiency and meeting family responsibilities
- individual achievements
- leadership activities
- public service
- extra-curricular activities

Consideration for admission by individual review can occur only if the applicant has submitted all required credentials, letters of recommendation\*, essay, etc., and, if required, scheduled an interview with an admissions officer prior to the published deadline for admission application.

New UNT students who have fewer than 15 hours of transfer credit, excluding non-traditional credit, who are admitted via individual review and have less than a 2.0 grade point average will be placed on academic alert.

Other transfer students with 30 or more hours of transfer credit who are admitted via individual review are placed automatically on academic probation if their transfer cumulative grade point average is below 2.0. See "Transfer Student" in this section for a statement of the current minimum entrance requirements for transfer students. To avoid academic suspension, transfer students admitted on academic probation must make a grade point average equal or exceeding the minimum for the appropriate classification as shown in the Table of Minimum Academic Requirements. See the Academics section of this catalog.

A limited number of admissions may be granted to students who do not satisfy the admission standards but who have demonstrated some exceptional talent. These students must have the approval of the Vice President for Enrollment or a designee of the Vice President.

For more information, contact the Office of Admissions.

\*Letters of Recommendation: Beginning freshmen who are pursuing admission by individual review should submit letters of recommendation from a high school counselor and a teacher. Transfer students who are pursuing admission by individual review should request letters of recommendation from a college instructor and their college academic advisor. All letters should address the student's academic ability and preparedness for university-level study.

# Transient and summer visiting students

Undergraduate students who have been enrolled at another college or university previously may attend UNT as transient students for one long fall or spring term only, provided their intent is to return to their previous college or university. A summer visiting student is an undergraduate student who enrolls at UNT for any summer session/term with the intent of returning to the home institution upon completion of summer studies. An official transcript from the student's most recent college or university attended must be submitted with the application for admission and the application fee prior to the application deadline. The transcript must reflect that the student is not on academic probation or suspension from the last institution attended to be admitted as a transient or summer visiting student.

If a transient or summer visiting student later decides to continue at UNT, the transient or summer visiting status ends and all admission requirements for a beginning transfer student (see "Transfer

Students" above) must be met prior to subsequent enrollment at UNT. All students previously admitted as a transient or summer visitor must first contact the Office of Admissions for clearance to reenroll. If a student originally applies as a regular transfer student and is denied for admission, the student cannot change application status to transient or summer visiting.

UNT Dallas students benefit from a special program that allows for dual enrollment at both UNT and UNT Dallas called the "UNT – UNT Dallas Affiliate Program". The Affiliate program is a partnership between UNT and UNT Dallas that allows students the opportunity to take courses at UNT and UNT Dallas. UNT Dallas students must complete an admissions application through www. applytexas.org in order to take courses at UNT.

# **International visiting students**

International students who are seeking degrees at institutions abroad with the intent to enroll at UNT for one to two semesters or a summer term, and return to their home institution, may only enroll at UNT for this period of time if their home institution has an agreement with UNT for such a collaboration. All agreements and programs of this nature are run through UNT—International, and international students at these UNT partner schools must apply through and be nominated by their home institution in order to participate in such a program.

# Inactive continuing students (undergraduate students only)

Students who have previously attended UNT but who have not enrolled at least once during the 12 consecutive months prior to the term/semester of planned enrollment and who have not received a degree during that time period, must complete the following requirements to re-enroll:

- complete the ApplyTexas Readmit Application online at www.applytexas.org;
- submit transcripts from all colleges attended, if any, since leaving UNT;
- if previous UNT enrollment was as a transient, dual credit, summer visiting student or special student, an admissions application and all academic credentials are required prior to re-enrollment.

# **Graduate students**

Individuals who hold a bachelor's degree or its equivalent from a regionally accredited institution and who wish to be considered for admission at UNT for the first time should contact the Toulouse Graduate School. Applicants who hold a degree are considered graduate students, whether or not an additional degree is sought. General admission requirements to the Toulouse Graduate School (www.gradschool.unt.edu), specific admission requirements to graduate degree programs and descriptions of graduate courses are printed in the Graduate Catalog.

# **International students**

Applicants who do not hold either U.S. citizenship or U.S. permanent resident status should apply as international students.

# **Application deadlines**

Undergraduate: Submit all documents at least six months before enrollment date.

Check application deadlines with your department.

# Three types of admission

#### 1. Direct UNT admission

Students who meet all academic requirements and English Language Proficiency requirements, as well as submit official documents for admission will be considered for direct UNT admission.

#### 2. Conditional UNT admission

Students who do not meet English Language Proficiency requirements for admission but are otherwise admissible may qualify for conditional admission in a future semester to UNT if they are enrolled at UNT's Intensive English Language Institute (IELI) and complete their IELI studies. Students seeking conditional admission should apply to both UNT and to IELI.

# 3. English language study only at UNT's Intensive English Language Institute (IELI).

Students who are interested in studying English as a second language should apply for admission to the Intensive English Language Institute (IELI). For more information about this program, please visit the UNT website at: international.unt.edu/ieli.

### English language proficiency measure

UNT accepts any 1 of the following 4 measures as proof of English language proficiency:

# 1. Complete Level 6 at UNT's Intensive English Language Institute (IELI):

The Intensive English Language Institute (IELI) at the University of North Texas helps international students develop academic skills in English. These skills prepare students for success in UNT degree programs and beyond. \*\*we do not accept intensive English language completion from other institutions

When you complete Level 6 of the IELI program, you will be qualified to apply for:

- All undergraduate degree programs
- Most graduate degree programs (check with your department)

#### 2. Complete a Qualifying Academic Program

#### U.S. High School:

Official transcript showing graduation from accredited U.S. high school or U.S. Department of Defense School overseas-attended for at least 3 years

# U.S. Degree:

Official transcript of U.S. accredited Associate's, Bachelor's, Master's or Doctoral degree

# 1) High School Diploma or 2) College/University Degree or 3) Citizenship from one of the below English speaking countries (not the United States):

\*\*Official transcripts and degrees will need to be provided \*\*Schools of attendance must be recognized by UNT

Anguilla, Antigua/Barbuda, Australia, Bahamas, Barbados, Belize, Bermuda, British Guyana, Canada (except Quebec), Cayman Islands, Dominica, Falkland Islands (Islas Malvinas), Grenada, Guam, Guyana, Ireland, Jamaica/other West Indies, Liberia, Montserrat, New Zealand, South Africa, St. Helena, St. Kitts & Nevis, St. Lucia, St. Vincent, Trinidad & Tobago, Turks & Caico Isle, United Kingdom, Virgin Islands

# Achieve a Qualifying Score on an English Language Proficiency Test Accepted by UNT:

Arrange to have official test scores sent to UNT.

- UNT test score reporting code (TOEFL, SAT, GRE/ GMAT): 6481
- TOEFL/IELTS scores must have been taken in the last 2 years. The only exception when a student can submit a score for a test taken more than 2 years ago is if the student has been continuously studying at a college or university within the U.S.

TEST	SCORE
AP English Language & Composition Exams	Score of 5
GCE (General Certificate of Education), GCSE, IGCSE www.cie.org.uk (except Sri Lanka)	C or higher in English Language
IELTS www.ielts.org **IELTS scores must be less than 2 years old. Students may provide an official score report if the student has been continuously studying at an accredited U.S. College or Institution.	Overall band 6.0 or higher
TOEFL www.ets.org **TOEL scores must be less than 2 years old. Students may provide an official score report if the student has been continuously studying at an accredited U.S. College or Institution. We do not accept Institutional TOEFL scores from other schools.	Internet-Based (IBT): 79 Paper-Based: 550
PTE www.pearsonpte.com **PTE scores must be less than 2 years old. Students may provide an official score report if the student has been continuously studying at an accredited U.S. College or Institution.	Score of 53 or higher
DuoLingo (DET) taken prior to July 15, 2019 **DET scores must be less than 2 years old. Students may provide an official score report if the student has been continuously studying at an accredited U.S. College or Institution.	Score of 71 or higher
DuoLingo (DET) taken on July 15, 2019 or later  **DET scores must be less than 2 years old. Students may provide an official score report if the student has been continuously studying at an accredited U.S. College or Institution.	Score of 100 or higher
West Africa and Kenya: WASSCE (West African Senior School Certificate Examination, KCSE (Kenya Certificate of Secondary Education), NECO (National Examinations Council)	B or higher in English Language
SATI taken prior to March, 2016	500 or higher on both Critical Reading & Writing
SATI taken after March, 2016	560 or higher on EBRW
CAE (Cambridge Advanced Exam)	B or higher
CPE (Cambridge English: Proficiency)	C or higher
MELAB (official version)	80 or higher

# 4. Complete Qualifying Courses, Degrees or Diplomas:

IB (International Baccalaureate)

Grade 5 or above on the Higher-Level English A1 subject

#### College Level English courses

Students must complete two college-level, academic English courses and earn a total of 6 credit hours with a grade of C or better in BOTH courses at an accredited college or university in the U.S. or one of the above listed English speaking countries.

#### **Earned College hours**

Completion of 30 hours of college-level, academic coursework with an overall GPA of 2.25 at an accredited college or university in the U.S. or one of the listed English speaking countries. Student must be enrolled at the time of application and must have maintained continuous enrollment prior to their transfer to UNT to meet this requirement.

# **Application**

Applications are available online at www.applytexas.org or www. commonapp.org. Students have the option to complete either application and are not required to submit both.

# **Application fee**

The non-refundable application fee must be received for the admission processing to begin.

International Undergraduate application fee \$85

Send all application forms and documents to:

UNT Admissions University of North Texas 1155 Union Circle #311277 Eagle Student Services Center, Room 305 Denton, Texas 76203-5017 U.S.A.

E-mail: international@unt.edu Telephone: 940-565-2681

Students who are interested in studying English as a second language should apply for admission to the Intensive English Language Institute (IELI). For more information about this program, please visit the UNT website at: international.unt.edu/ieli.

Students who do not meet English Language Proficiency requirements for admission but are otherwise admissible may qualify for conditional admission in a future semester to UNT if they are enrolled at IELI. Students seeking conditional admission should apply to both UNT and to IELI.

IELI Application Fee: \$75

Send application and all documents for IELI admission to ieli@unt.

# Texas Success Initiative requirement and remediation for non-native English speakers

The Texas Success Initiative (TSI) is a state statute requiring all undergraduate students entering a Texas public institution of higher education to demonstrate readiness for college-level reading, writing and mathematics before enrolling in college-level course work. Students may demonstrate college readiness by achieving the statutory threshold on the state-approved TSI Assessment, unless they are exempt (see the Academics section of this catalog for exemption information). Students must satisfy all TSI requirements before receiving a baccalaureate degree.

The TSI Assessment minimum score threshold required to demonstrate college readiness in each subject is as follows:

	Math	ELAR
TSI Assessment	CRC 950	CRC 945 and Essay 5-8
January 11, 2021-Present	or CRC 910-949 and Diagnostic Level 6	or CRC 910-944 and Diagnostic Level 5-6 and Essay 5-8

	Reading	Math	Writing
TSI Assessment*	351	350	Placement Score of 340 and Essay Score of 4+
Prior to January 11, 2021			or Placement Score of less than 340, ABE level of at least 4 and an Essay Score of at least 5

Students shall participate in a designated education plan for each semester of enrollment for those subjects where readiness has not been demonstrated. Students may demonstrate readiness by either passing the highest level of indicated course work or by scoring above statutory thresholds on the TSI Assessment.

The following procedures apply to TSI-related developmental course work.

 All developmental education students must meet with a Learning Center representative prior to registration.

- Students must participate in a designated education plan each semester of enrollment until they are TSI complete. Courses not successfully completed will be repeated.
- Regular attendance is required in all TSI related courses. Instructors will monitor course attendance, and advisors will follow up on absences.

# **International student admission requirements**

All students who are not U.S. citizens or U.S. permanent residents are considered international students at the University of North Texas and must meet the following admission requirements, plus all additional departmental requirements.

Once fully admitted to UNT, international students who require an immigration form I-20 to study in the United States will need to request their initial I-20 by submitting required documents through iNorthTX. The International Student and Scholar Services Office assists students with the initial I-20 process. Please contact I20@unt. edu with any questions.

Classification	Prerequisites	Official transcripts	Entrance and/or language proficiency exams
Intensive English Language	Institute		
IELI student	Graduation from high school recognized by the home country ministry of education	Copy of diploma/certificate	Placement test at IELI to determine current English language proficiency
Freshman / first-year studen	ts		
Beginning freshman from an international high school	Graduation from a high school recognized by the home country ministry of education	Official transcripts in native language and English showing all courses and marks of final three years of secondary school plus graduation date	Show English language proficiency. For a complete list of ways to demonstrate proficiency, see our website at: https://admissions.unt.edu/international/english-language-requirements.
Beginning freshman from a U.S. high school	Minimum of three years and graduation from an accredited high school in the U.S.	Official transcripts, showing grades and rank in class or GPA through at least junior year	U.S. high school graduates only: SAT or ACT scores are recommended but not required.
Transfer students (Transfer c	redit may be audited with an inc	rease/decrease in transferred credit	.)
Transfer freshman with less than 15 transferable college credit hours	Graduation from an accredited high school; minimum 2.5 college GPA on a 4.0 scale; must be eligible to return to all institutions previously attended	Official transcripts (in native language and English) from high school and each college or university attended	Show English language proficiency (as above)
Transfer freshman with at least 15 but less than 30 transferable college credit hours	Minimum 2.5 college GPA on a 4.0 scale; must be eligible to return to all institutions previously attended	Official transcripts (in native language and English) from each college or university attended	Show English language proficiency (as above)
Transfer student with 30–44 transferable college credit hours	Minimum 2.25 college GPA on a 4.0 scale; must be eligible to return to all institutions previously attended	Official transcripts (in native language and English) from each college or university attended	Show English language proficiency (as above)
Transfer student with more than 44 transferable college credit hours	Minimum 2.00 college GPA on a 4.0 scale; must be eligible to return to all institutions previously attended	Official transcripts (in native language and English) from each college or university attended	Show English language proficiency (as above)
Former UNT student	If not in good academic standing when leaving UNT, must have earned a higher GPA in all schools subsequently attended; must be eligible to return to UNT	Official transcripts (in native language and English) from each college or university attended since leaving UNT; must be eligible to return to all institutions attended	Show English language proficiency (as above)

# Adult admission program

Freshman applicants who have been out of high school for at least five years and who have earned fewer than 30 semester hours at a college or university may be eligible for admission to UNT under the Adult Admission Program.

Individuals eligible for this program may be accepted without the required SAT or ACT test scores only if evidence provided to the admissions office staff suggests the potential of academic success for the individual.

Applicants under the Adult Admission Program must submit

- an application for admission, which can be completed online at www.applytexas.org or www.commonapp.org.
   Students have the option to complete either application and are not required to submit both;
- a non-refundable \$75 application fee;
- official copy of all high school transcripts;
- official transcripts of any previous college/university work (students who are transferring fewer than 30 hours from another college/university also must have a minimum 2.5 grade point average [4.0 grading system] and be eligible to return to any institution attended);
- a written personal statement concerning your academic preparedness for university-level study, your intended major and career goals, and any other information you feel is pertinent to the individual review of your application; and
- the Adult Admission Program Request Form.

A personal interview with the prospective student may also be required at the discretion of the reviewer (see "Admission by Individual Review"). The purpose of the interview is to allow the committee to gain additional information relevant to the admission decision. The Admissions Office will reach out to the student if it is determined that the interview is required.

Students who are admitted under the provisions of the Adult Admission Program are subject to all other academic and programmatic requirements of the university.

Prospective students interested in the Adult Admission Program are encouraged to contact the Office of Admissions for further information or to request adult admission consideration.

# Admission or re-enrollment as related to personal conduct and admission falsification

It is the responsibility of the Director of Admissions to refer to the Dean of Students any application for admission or re-enrollment that indicates possible ineligibility of the applicant on grounds involving admission falsification. The potential of the applicant to benefit from university attendance, will be carefully considered before permission to enroll will be granted.

# Orientation

All accepted undergraduate students new to UNT are required to attend an orientation session prior to registration for classes.

New freshman students entering in the fall term/semester are invited to attend one of the Freshman Orientation sessions where they receive academic advising and assistance with class scheduling and have the opportunity to interact with their peers. These sessions are conducted throughout the summer. Orientation includes campus life sessions, a resource and organization fair, placement testing, academic advising, registration (web registration) for classes and completion of the tuition and fee payment process. A fee is charged for room, meals and administrative costs.

Transfer students have a couple of options. They can choose to attend a one-day drive-in style session or a half day express orientation program. Each session focuses on meeting with an advisor, registering for classes and learning about campus resources. Orientations are also held each December and January for students beginning in the spring semester and throughout the summer for those students beginning classes during a summer term.

All new undergraduate students receive orientation information following acceptance notification.

Questions regarding Orientation should be directed to the Orientation and Transition Programs office at 940-565-4198 in the University Union, Suite 377 or visit unt.edu/orientation.

In addition to New Student Orientation, new international students are required to attend an orientation conducted by the International Welcome Center.

# Advanced placement and credit by examination

UNT awards undergraduate college credit on the basis of local and national examinations, subject to general limitations. This also includes military service credit and classroom instruction offered through the non-academic institutions approved by the American Council on Education. Such credit is not included in determining grade point averages and has the following additional restrictions:

- may not be used to reduce the general degree requirement of completing a minimum of 30 semester hours in residence on the UNT campus;
- may not be used to reduce the general degree requirement of completing at least 24 semester hours of advanced work at UNT:
- may not be used to reduce the general degree requirement of completing at least 12 advanced hours in the major at UNT;
- may not be earned in any course the student has previously completed at any university; and
- may not be earned in any course prerequisite to another course in the same subject for which the student has previously earned credit.

UNT recognizes exam credit in transfer from other accredited institutions within the limits outlined above. Scores from exam credits accepted in transfer are not re-evaluated by UNT. Credit by examination cannot be substituted for any grade, including an F earned for a course in high school, at UNT or at another college or university. The credit earned through examination will not be included in the grade point average at UNT, but it will be included in accepted semester credit hours and on the UNT transcript.

Credit and advanced placement may be granted only in accordance with policy and procedures in operation at UNT. Departments that honor the CLEP Subject Examinations, the College Board Advanced Placement Examinations, or other instruments for granting advanced placement set departmental standards for their use. Policies for awarding credit are reviewed periodically and are subject to change.

# **Advanced Placement (AP) Examinations**

Students who have received college-level training in secondary school and who present applicable scores on the appropriate Advanced Placement Examination will be granted, on request, placement and credit for comparable courses at the university following enrollment.

Visit www.unt.edu/credit for updated information.

AP Examination	AP Exam score	Semester credit hours	UNT course equivalent
Composition and	Literatur	e	
English Language and	3 or 4	3	ENGL 1310
Composition	5	6	ENGL 1310, ENGL 1320
English Literature and Composition	3, 4 or 5	3	ENGL 2210

AP Examination	AP Exam score	Semester credit hours	UNT course equivalent
Fine Arts			
Art History	3, 4 or 5	3	ART 2350 or ART 2360 or ART 2370 (with a score of 3 or higher, student can choose one in consult with an academic advisor)
Studio Art  – Drawing Portfolio	3, 4 or 5	3	ART 1600
Studio Art – 2D Design	3, 4 or 5	3	ART 1800
Studio Art – 3D Design	3, 4 or 5	3	ART 1700
Languages			
Chinese Language	3	6	CHIN 1010, CHIN 1020
	4	9	CHINI 1010 CHINI
	5	12	CHIN 1010, CHIN 1020, CHIN 2040
			CHIN 1010, CHIN 1020, CHIN 2040, CHIN 2050
French Language	3	6	FREN 1010, FREN 1020
	4	9	FREN 1010, FREN
	5	12	1020, FREN 2040 FREN 1010, FREN 1020, FREN 2040, FREN 2050
German Language	3	6	GERM 1010, GERM 1020
	4	9	GERNA AND GERNA
	5	12	GERM 1010, GERM 1020, GERM 2040
			GERM 1010, GERM 1020, GERM 2040, GERM 2050
Italian Language	3	6	ITAL 1010, ITAL 1020
	4	9	ITAL 1010, ITAL 1020, ITAL 2040
	5	12	ITAL 1010, ITAL 1020, ITAL 2040, ITAL 2050
Japanese Language	3	6	JAPN 1010, JAPN 1020
,	4	9	
	5	12	JAPN 1010, JAPN 1020, JAPN 2040
			JAPN 1010, JAPN 1020, JAPN 2040, JAPN 2050

AP Examination	AP Exam score	Semester credit hours	UNT course equivalent
Latin – Vergil	3	6	LATI 1010, LATI 1020
	4	9	LATI 1010, LATI 1020, LATI 2040
	5	12	
			LATI 1010, LATI 1020, LATI 2040, LATI 2050
Spanish Language	3	6	SPAN 1010, SPAN 1020
	4	9	SPAN 1010, SPAN
	5	12	1020, SPAN 2040
			SPAN 1010, SPAN 1020, SPAN 2040, SPAN 2050
Spanish Literature and Culture	3, 4 or 5	3	SPAN 3110
Mathematics		l	<u> </u>
Calculus AB	3, 4 or 5	4	MATH 1710
Calculus BC	3, 4 or 5	7	MATH 1710, MATH 1720
Calculus AB Subscore for the Calculus BC exam	3, 4 or 5	4	MATH 1710
Statistics	3, 4 or 5	3	MATH 1680
Natural and Com	puter Sci	ences	
Biology	3	6	BIOL 1112, BIOL 1142
	4 or 5	8	BIOL 1710, BIOL 1720, BIOL 1760
Chemistry	3	3	CHEM 1360
	4	4	CHEM 1410/CHEM 1430
	5	8	CHEM 1410/CHEM 1430, CHEM 1420/ CHEM 1440
Computer Science A	3	3	CSCE 1010
	4 or 5	4	CSCE 1030
Computer Science - Computer science principles	3, 4 or 5	3	CSCE 1010
Environmental Science	3, 4 or 5	3	BIOL 1132
Physics 1	3	3	PHYS 1210
	4 or 5	4	PHYS 1410/PHYS 1430
Physics 2	3	3	PHYS 1315
	4 or 5	4	PHYS 1420/PHYS 1440

AP Examination	AP Exam score	Semester credit hours	UNT course equivalent
Physics C (Electricity and	3	4	PHYS 1420/PHYS 1440
magnetism)	4 or 5	4	PHYS 2220/PHYS 2240
Physics C (Mechanics)	3	4	PHYS 1410/PHYS 1430
	4 or 5	4	PHYS 1710/PHYS 1730
Social Sciences an	nd History	7	
Economics- macroeconomics	3, 4 or 5	3	ECON 1110
Economics- microeconomics	3, 4 or 5	3	ECON 1100
Government and Politics – Comparative	3, 4 or 5	3	Political science elective hours
Government and Politics – U.S.	3, 4 or 5	3	PSCI 2305
History – European	3, 4 or 5	6	History elective hours
History – U.S.	3, 4 or 5	6	HIST 2610, HIST 2620
History – World	3, 4 or 5	6	HIST 1050, HIST 1060
Human Geography	3, 4 or 5	3	GEOG 2170
Psychology	3, 4 or 5	3	PSYC 1630

The College Board Advanced Placement Examinations are offered in May each year and are administered by The College Board in most school districts. Students typically complete an AP course offered by their high school before taking an AP examination in that subject. However, in consideration of homeschooled students and students whose schools do not offer AP courses, The College Board does not require a student to complete an AP course before taking an AP examination. All requests for information should be directed to the Advanced Placement Program of The College Board, http://apstudent.collegeboard.org.

#### AP credit evaluation and notification

Entering freshmen who took the Advanced Placement (AP) Exam for credit (and who designated that their scores be sent to the University of North Texas, code 6481) will have their AP credit applied automatically to their UNT academic record. Students should consult their academic advisor about the application of their AP credits. Students who have questions about the receipt of their AP scores should check with the Office of the Registrar.

Former, continuing and transfer students who wish to have their AP test results applied to their UNT transcript must initiate this process through the Office of the Registrar during their first term/ semester enrolled at UNT. (Note: students who fail to initiate the process during their first term/semester at UNT may still be eligible to receive credit but may be subject to the standards in place at the time of initiation, rather than those that were current when the test was taken.)

# **College-Level Examination Program (CLEP)**

UNT recognizes credit earned through College-Level Examinations of the College Board only if the credit is first certified by the Office of the Registrar. The dean of the student's college or school at UNT has the option of applying CLEP credit to the student's degree audit.

#### **CLEP General Examinations**

UNT does not grant credit on the basis of College Board CLEP General Examination scores.

# **CLEP Subject Examinations**

CLEP Subject Exams are scheduled throughout the year at participating colleges and universities. UNT certifies CLEP credit if the score meets or exceeds the recommended credit-granting score for that subject. Policies for granting CLEP credit are subject to change.

#### **Use of CLEP credit**

A student may not earn examination credit for any course failed. All general regulations for credit by examination apply to CLEP credit.

CLEP Subject Examination	Maximum semester credit hours
Languages	
College French, (two to four semesters, depending on score)	6–12 hours
College German, (two to four semesters, depending on score)	6–12 hours
College Spanish, (two to four semesters, depending on score)	6–12 hours
Mathematics	
Calculus	4 hours
Pre-calculus	5 hours
College Algebra	3 hours
Trigonometry	3 hours
College Mathematics	3 hours
Natural Science	
General Biology	6 hours
General Chemistry	6 hours
Social Sciences and History	
American Government	3 hours
History of the United States I	3 hours
History of the United States II	3 hours
Human Growth and Development	3 hours
Introduction to Educational Psychology	3 hours
Introductory Psychology	3 hours
Introductory Sociology	3 hours
Principles of Macroeconomics	3 hours
Principles of Microeconomics	3 hours
Western Civilization I	3 hours
Western Civilization II	3 hours

### **SAT Subject Tests**

UNT does not grant college credit on the basis of The College Board SAT Subject Test scores.

# **Educational experience in the armed services**

Credit may be given for formal service school courses completed in the armed services after evaluation of official documents by the Office of the Registrar. The student's academic dean decides if credit awarded for such courses will be applied toward requirements for the bachelor's degree.

# **International Baccalaureate (IB)**

UNT awards a minimum of 24 semester hours of credit to students who have completed the International Baccalaureate Program and have received the International Baccalaureate Diploma. Students must earn a minimum score of 4 on tests that count toward the diploma. The Registrar's Office will certify the examination credit based on the qualifying scores.

A student who has completed a high school International Baccalaureate Program but has not earned the diploma and who has scored 5, 6 or 7 on the higher level IB examination will receive college credit at UNT. Credit is awarded as listed in the chart below.

**Note**: The minimum score requirements for awarding credit based upon International Baccalaureate examinations is under review and subject to change.

The IB institution code for UNT is 01800. Students should use this code when requesting to have IB scores sent to the UNT Admissions Office.

Subject area	IB exam score	Hours	UNT equivalent
Arabic – Language AB	5, 6 or 7	12	ARBC 1010, ARBC 1020, ARBC 2040, ARBC 2050
Arabic – Language B	5, 6 or 7	12	ARBC 1010, ARBC 1020, ARBC 2040, ARBC 2050
Art/Design	5, 6 or 7	3	ART 2900, applied to degree audit as lower-level elective (see COVAD policy regarding IB Credit)
Biology	5, 6 or 7	8	BIOL 1710, BIOL 1720, BIOL 1760
Business Management	5, 6 or 7	3	MGMT elective
Chemistry	5, 6 or 7	8	CHEM 1410/CHEM 1430, CHEM 1420/ CHEM 1440
Chinese – Language AB	5, 6 or 7	12	CHIN 1010, CHIN 1020, CHIN 2040, CHIN 2050
Chinese – Language B	5, 6 or 7	12	CHIN 1010, CHIN 1020, CHIN 2040, CHIN 2050
Computer Science Computing Studies	5, 6 or 7	7	CSCE 1030, CSCE 1040
Danish – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Danish – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Dutch – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Dutch – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Economics	5, 6 or 7	3	ECON 1110
English A: Language and Literature	5 6 or 7	6 12	ENGL 1310, ENGL 2210 ENGL 1310, ENGL 1320, ENGL 2210, ENGL 2220

Subject area	IB exam	Hours	UNT equivalent
English I	score	2	ENGL 2210
English Language A: Literature	5 6 or 7	3 6	ENGL 2210 ENGL 2210, ENGL 2220
Environmental Systems and Societies	5, 6 or 7	3	BIOL 1132
Film	5, 6 or 7	3	MRTS elective
French – Language AB	5, 6 or 7	12	FREN 1010, FREN 1020, FREN 2040, FREN 2050
French – Language B	5, 6 or 7	12	FREN 1010, FREN 1020, FREN 2040, FREN 2050
Geography	5, 6 or 7	3	GEOG 1200
German – Language AB	5, 6 or 7	12	GERM 1010, GERM 1020, GERM 2040, GERM 2050
German – Language B	5, 6 or 7	12	GERM 1010, GERM 1020, GERM 2040, GERM 2050
Global Politics	5, 6 or 7	3	INST 2100
Hebrew – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Hebrew – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Hindi – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Hindi – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
History	5, 6 or 7	6	HIST 1060, HIST elective
History – Culture of the Islamic World	5, 6 or 7	3	HIST elective
History of the Americas	5, 6 or 7	3	HIST elective
Information Technology in a Global Society	5, 6 or 7	6	SOCI 1000-level elective and PHIL 1000-level elective
Italian – Language AB	5, 6 or 7	12	ITAL 1010, ITAL 1020, ITAL 2040, ITAL 2050
Italian – Language B	5, 6 or 7	12	ITAL 1010, ITAL 1020, ITAL 2040, ITAL 2050
Japanese – Language AB	5, 6 or 7	12	JAPN 1010, JAPN 1020, JAPN 2040, JAPN 2050
Japanese – Language B	5, 6 or 7	12	JAPN 1010, JAPN 1020, JAPN 2040, JAPN 2050
Mathematics	5, 6 or 7	4	MATH 1710
Math Studies	5, 6 or 7	3	MATH 1580
Music	5, 6 or 7	3	Music elective
Norwegian – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050

Subject area	IB exam score	Hours	UNT equivalent
Norwegian – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Philosophy	5, 6 or 7	3	PHIL 1050
Physics	5, 6 or 7	8	PHYS 1410/PHYS 1430, PHYS 1420/ PHYS 1440
Portuguese – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Portuguese – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Psychology	5, 6 or 7	3	PSYC 1630
Russian – Language AB	5, 6 or 7	12	RUSS 1010, RUSS 1020, RUSS 2040, RUSS 2050
Russian – Language B	5, 6 or 7	12	RUSS 1010, RUSS 1020, RUSS 2040, RUSS 2050
Social and Cultural Anthropology	5, 6 or 7	3	ANTH 2300
Spanish – Language AB	5, 6 or 7	12	SPAN 1010, SPAN 1020, SPAN 2040, SPAN 2050
Spanish – Language B	5, 6 or 7	12	SPAN 1010, SPAN 1020, SPAN 2040, SPAN 2050
Swedish – Language AB	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Swedish – Language B	5, 6 or 7	12	LANG 1010, LANG 1020, LANG 2040, LANG 2050
Theater Arts	5, 6 or 7	3	THEA 2340
Visual Arts	5, 6 or 7	3	Visual arts elective

# **Academics**

# **Definition of terms**

#### Academic status

This term is used as an indication of a student's academic standing with the university.

# Minimum CGPA requirement

This term refers to the minimum cumulative grade point average a student must achieve to remain in good academic standing. At the end of the first term of enrollment at UNT, the minimum CGPA requirement is 1.8. In each subsequent term of enrollment, the minimum CGPA requirement is 2.0.

# Good academic standing

This term refers to the academic status students maintain when achieving the minimum CGPA requirement after each term of enrollment at UNT.

#### Academic alert

A freshman or first time in college (FTIC) in their first semester at UNT is placed on academic alert if the CGPA achieved for a term falls below the minimum CGPA requirement. To be removed from academic alert, the student must raise the CGPA to a minimum of 2.0 during the next period of enrollment. A student on academic alert who does not raise the CGPA to at least a minimum of 2.0 at the end of the next term/semester of enrollment is placed on academic probation.

#### Academic probation

A student who is not classified as a freshman, or a student who is currently or has been on academic alert, is placed on academic probation at the end of any enrollment period in which the CGPA drops below the minimum CGPA requirement.

#### Academic suspension

A student who, during a probationary fall or spring term/semester, fails to raise the CGPA to a 2.0, or who fails to make at least a 2.25 for the term/semester, is automatically suspended from UNT for one or more long terms/semesters.

# **Classification of students**

Students are classified on the basis of term/semester hours passed. Semester hours passed are computed by adding transfer hours accepted, pass/no pass hours passed, graded hours passed and non-traditional credit accepted at UNT.

Undergraduate classifications are: freshmen, those who have completed less than 30 semester hours of college credit; sophomores, 30 to 59 hours completed; juniors, 60 to 89 hours completed; seniors, 90 or more hours completed but who have not received a bachelor's degree. Graduate students are those who have graduated with a baccalaureate degree from an accredited college or university.

# **Continuing students**

Continuing students are those who have been officially enrolled at UNT at least once during the 12 consecutive months **prior** to the term/semester of planned enrollment and/or have not received a degree during the same period. Students who receive a degree and reapply to the university are considered new graduate students.

#### **Core complete**

A student who transfers to UNT as core complete has successfully completed the common core curriculum at another state-assisted institution of higher education in Texas and will have satisfied the core curriculum at UNT.

# Inactive continuing students (undergraduate students only)

Inactive students are undergraduates who have not been officially enrolled at UNT in the last 12 consecutive months and who have not received a degree during the same period. Inactive students are required to complete the following requirements to re-enroll:

- complete the ApplyTexas Application for returning students;
- submit transcripts from all colleges attended, if any, since leaving UNT; and
- if previous UNT enrollment was as a transient, dual credit, summer visiting student or special student, all academic credentials from all institutions attended are required prior to re-enrollment; international students should contact the Office of International Admissions.

Readmission applicants who have attended any other institution of higher education since last enrollment at UNT must submit official transcripts prior to readmission. If transcripts are not received by this time, then an academic hold may be placed on the student's account preventing registration and receipt of an official UNT transcript.

The returning student application priority deadline for each semester is Monday prior to each registration period for a given term, and applications received by this date will receive priority during registration.

# **Course numbering system**

Developmental courses, 100-999. Freshman courses, 1000-1999. Sophomore courses, 2000-2999. Junior courses, 3000-3999. Senior courses, 4000-4999. Graduate courses, 5000 and above.

The graduate student enrolled in a 5000-level course that meets with a senior-level undergraduate course will be expected to complete additional requirements beyond those expected of undergraduates in the same course.

Courses 2900, 2910, 4900 and 4910, **Special Problems**, are used upon approval of the department chair or dean for individual instruction in any department to cover course content in special circumstances. Courses 5900, 5910, 5920 and 5930 are used in any department that offers graduate work; courses 6900 and 6910 are used in any department that offers doctoral work.

**Experimental Courses** (1980, 2980 and 4980) are new courses offered on a trial basis for 1–4 hours credit each. Registration is permitted only upon approval of the department chair.

Honors College Capstone Thesis, 4951, allows a student in the Honors College to complete an honors thesis as a course within the student's major. The Honors College Capstone Thesis is a major research project prepared by the student with the mentorship of a faculty member in the student's major department. An oral defense is required for successful completion of the thesis.

Advanced Courses (or upper-level or upper-division courses), numbered 3000 to 4999, are open to students who have 12 semester hours of credit in a given subject or who have the indicated prerequisites, and to those without the prerequisites who have the consent of the department. In some instances, college/school/departmental requirements may vary. Students should consult individual areas prior to enrolling in advanced courses.

# Cumulative grade point average

The cumulative grade point average (CGPA) upon which academic standards are based is calculated by dividing the total number of grade points earned in residence at UNT by the total number of semester credit hours (SCH) attempted in residence at UNT.

Not included in the definition of student classification for academic standards are hours granted by this university for extension courses, service experience, advanced placement, credit by examination, CLEP or transfer hours attempted but not passed.

Excluded from the calculation of the CGPA are all courses in which the student received grades of I, NP, NPR, P, PR, W or Z.

The cumulative grade point average as defined here is used only for determining a student's academic status and is not necessarily related to the grade point average that governs eligibility for graduation or graduating with honors.

# Degree plan

The degree plan is an official document prepared in the office of the student's academic dean. It lists all courses completed, courses not completed, proficiency examinations and all other requirements

for a particular degree sought. A student should have a degree plan prepared no later than the beginning of the junior year. See also the entries for "Major," "Double Major" and "Minor," all in this section.

# Degree programs, majors, minors, and certificates listed by academic unit

For a listing of recommended courses in sequence for timely degree completion and to assess transfer course applicability, including Texas Common Core, please refer to "Undergraduate Major and Certificate Course Sequencing Maps and Transfer Guides" (registrar. unt.edu/transfer-guides).

# **Dual/joint degree programs**

Dual degree programs are separate degree programs that have been approved to work together to allow students to pursue two degrees simultaneously. This may be done by using courses for the major from each degree toward the minor on the other degree or by other approved means.

Joint degree programs are separate degree programs at different institutions that have been approved to work together to offer one degree. This is made possible by sharing faculty and academic

# Former students (graduated students only)

Former students are those graduated students who have not been enrolled at least once during the 12 consecutive months prior to planned enrollment and/or those who have received a degree.

#### Graduate academic certificates

The University of North Texas offers certificate programs for graduate credit at the post-baccalaureate and post-master's levels in areas of study designed to enhance existing bachelor's or master's degrees. Graduate academic certificates normally require 9-18 hours of graduate-level course work (5000- and 6000-level courses). See the Graduate Catalog for additional information, including admission requirements. Disclosures: gradschool.unt.edu/ certificatedisclosure.

#### Major

At least 24 semester hours in a given subject are required for a major, including 12 hours of advanced work. The number of hours required depends on the department selected.

The term "professional field" is used in the College of Business to designate the major for the Bachelor of Business Administration (BBA) and the Master of Business Administration (MBA) degrees.

# **Double major**

A student seeking a double major must consult with an advisor from the second department. If approved, the requirements for the second major are incorporated into the student's degree audit.

A minor requires at least 18 semester hours in a given subject, including 6 hours of advanced work. Specific course sequences for a minor are determined by the department offering the minor. Not all degrees require a minor.

# Prerequisite

A prerequisite is a course or other preparation that must be completed before enrollment in another course. All prerequisites are included in catalog course descriptions.

# Schedule change (add/drop, withdrawal)

Students may make adjustments to their schedule by adding and/ or dropping classes or by withdrawing from the university. Specific procedures must be followed in making these changes. Dropping all courses during a term/semester constitutes withdrawing from the university for that term/semester. Students must notify the Dean of Students Office of their intent to withdraw from the university. Procedures and deadlines for withdrawing are available in the Dean of Students Office or online at deanofstudents.unt.edu/withdrawals.

#### Semester hour

A semester hour is the unit of credit at UNT; the credit allows for 1 lecture hour a week for 15 weeks or the equivalent. In course listings, figures in parentheses following the course credit hours indicate the number of clock hours per week devoted to lecture and laboratory. When it appears, the third and final number in these parentheses indicates the number of recitation hours per week.

# Summer visiting student

A summer visiting student is an undergraduate student (U.S. citizen or permanent resident alien) who has been enrolled at another college or university and who enrolls at UNT for any summer session/term with the intent of returning to the home institution upon completion of summer studies. Summer visiting students must reapply each summer that enrollment is sought.

### Term/semester/session

The academic year includes three terms/semesters: fall, spring and summer. During the summer term, a number of sessions are scheduled. Presently the options include 3W1 (three week one), 5W1 and 5W2 (five week one and two), 8W1 (eight week one), 10W (ten week) and SUM (full summer term).

# **Track**

A track is a group of courses designed for students seeking specialized training toward specific career objectives or a group of courses designed to meet a specific need within a degree program.

At the UNT Health Science Center, concentrations under the major are referred to as tracks.

#### Transient student

A transient student is an undergraduate student who has been enrolled at another college or university and who plans to attend UNT for one long term/semester only and then to return to the college or university where previously enrolled.

# **Undergraduate academic certificates**

The University of North Texas offers upper-division undergraduate academic certificates to meet workforce needs or to provide students with life/career skills and knowledge and to allow for specialization in academic disciplines. Undergraduate academic certificates require 12-20 hours, the majority of which must be advanced. See "Undergraduate Academic Certificate Programs" for additional details.

# Degrees offered

Bachelor of Applied Arts and Sciences (BAAS)

Bachelor of Arts (BA)

Bachelor of Business Administration (BBA)

Bachelor of Fine Arts (BFA)

Bachelor of Music (BM)

Bachelor of Science (BS)

Bachelor of Science in Biochemistry (BSBC)

Bachelor of Science in Biology (BSBIO)

Bachelor of Science in Chemistry (BSCHM)

Bachelor of Science in Economics (BSECO)

Bachelor of Science in Engineering Technology (BSET)

Bachelor of Science in Mathematics (BSMTH)

Bachelor of Science in Medical Laboratory Sciences (BSMLS)

Bachelor of Science in Physics (BSPHY)

Bachelor of Social Work (BSW)

Master of Arts (MA)

Master of Business Administration (MBA)

Master of Education (MEd)

Master of Fine Arts (MFA)

Master of Journalism (MJ)

Master of Music (MM)

Master of Music Education (MMEd)

Master of Public Administration (MPA)

Master of Science (MS)

Master of Social Work (MSW)

Doctor of Audiology (AuD)

Doctor of Education (EdD)

Doctor of Musical Arts (DMA)

Doctor of Philosophy (PhD)

# Colleges and schools

The University of North Texas is organized into the following colleges and schools.

Honors College New College

G. Brint Ryan College of Business

College of Education College of Engineering College of Information

College of Health and Public Service

Frank W. and Sue Mayborn School of Journalism

College of Liberal Arts and Social Sciences

College of Merchandising, Hospitality and Tourism

College of Music College of Science

College of Visual Arts and Design

Toulouse Graduate School

These schools and colleges offer the degrees, majors, concentrations under majors, minors, certifications, and preprofessional programs listed under Majors, minors, certificates. See individual areas in this catalog for information about undergraduate offerings. Information about advanced offerings may be found in the Graduate Catalog.

# **General degree requirements** Writing proficiency

Exemption

UNT is committed to the discovery, acquisition, development, preservation and dissemination of knowledge and the enhancement of the intellectual, cultural and proficiency levels of all who enter its programs. Fulfilling this commitment will contribute to both a better society and a more rewarding pattern of individual life. As students endeavor to complete their academic studies, they are expected to exhibit good written English skills in all university course work as a consideration in grading.

### Graduation under a particular catalog

A student may meet the graduation requirements noted in the catalog in effect at the time of admission to UNT or the requirements in any later catalog published before the student's graduation.

Any student transferring directly from a Texas public community college to UNT shall have the same choice of catalog designating degree requirements as the student would have had if the dates of attendance at the university had been the same as the dates of attendance at the community college. Transfer students from senior institutions or out-of-state community colleges will use the catalog in effect at their date of enrollment at UNT.

All requirements of the chosen catalog must be met within eight years of that catalog's publication. This catalog will expire at the close of the 2029 summer semester/term.

Changes in either major or non-major requirements made necessary by altered or discontinued courses or by requirements imposed by external accrediting or certification agencies become effective for degree audit purposes at the beginning of the academic year immediately following the academic year in which the changes are published in the university catalog. The changes may include additions, deletions and other changes in prerequisite requirements for existing courses. Whenever possible, new requirements are implemented with a beginning class or upon the expiration of the appropriate time limit.

# **Texas Success Initiative**

The Texas Success Initiative (TSI) is a state statute requiring all undergraduate students who enter a Texas public institution of higher education to either demonstrate readiness for college-level reading, writing and mathematics before enrolling in college-level academic course work by achieving the statutory threshold on the state-approved TSI Assessment or meet one of the conditions for exemption from the testing requirement. Students must satisfy all TSI requirements before receiving a baccalaureate degree.

Math

Writing

Exemption	Reading Writing Math			
ACT (Score good for 5 years from date taken)	Composite 23 AND English 19	Composite 23 AND English 19	Composite 23 AND English 19	
SAT (Taken prior to 3/5/2016) (SAT Composite=critical reading plus math; score good for 5 years from date taken)	Composite 1070 AND Critical Reading/Verbal 500	Composite 1070 AND Critical Reading/Verbal 500	Composite 1070 AND Math 500	
Revised SAT (Taken 3/5/2016 and later) (Score good for 5 years from date taken)	Evidence Based Reading/ Writing 480	Evidence Based Reading/Writing 480	Math 530	
STAAR	End-of-course score of level 2 on English III	End-of-course score of level 2 English III	End-of-course score of level 2 on Algebra II	
AP	3-English Lang & Comp 3-History 3-Govt. and Politics	3-English Lang & Comp 3-History	3-Calculus 3-Statistics	
Ar	There are many AP exam possibilities with the most common accepted listed here. If you have successfully completed a different AP exam and would like for us to review your score for TSI exemption purposes, please send us your score report.			
Dual Credit/Previous College Credit	Depending on what college-level course(s) you have already successfully completed, you may be exempt from taking the TSI Assessment in one or more areas. A TSI Coordinator will evaluate your college/university transcript(s) to determine if the courses you have successfully completed will qualify.  Straighterline and ALEKS are not accepted for TSI purposes.			
Degree Holder	You are exempt in all areas if you accredited institution of higher ed	u hold a domestic associate or baccalaure ducation.	ate degree from an	
Military	You may be exempt if you are serving on active duty as a member of the armed forces of the U.S., the Texas National Guard, or as a member of a reserve component of the armed forces of the U.S. and have been serving for at least years preceding enrollment. You may be exempt if you were honorably discharged, retired, or released from active duty as a member of the armed forces of the U.S. or the Texas National Guard or served as a member of the armed forces of the U.S.			
Previous TSI Exemption	Often times, if you attended a previous college/university that has already determined you TSI complete, your transcripts from that previous institution may indicate the same.			
None of These Apply	You must take the TSI Assessment before attending orientation.			

Reading

Exemption documentation should be submitted in one of the following ways

- in person to the Learning Center, Sage Hall, Room 170;
- mailed to
  - O UNT Learning Center Attn: TSI Evaluation 1155 Union Circle #305038 Denton, TX 76203-5017
- sent via e-mail to TSI@unt.edu; or
- sent via fax to 940-369-8394.

### Readiness assessment and course placement

UNT only accepts scores on the TSI Assessment for assessment purposes. This state-approved test measures college-level readiness in reading, mathematics, and writing. Minimum score thresholds required to demonstrate college readiness in each subject area as follows:

	Math	ELAR
TSI Assessment	CRC 940	CRC 945 and Essay 5-8
January 11, 2021-Present	or CRC 910-949 and Diagnostic Level 6	or CRC 910-944 and Diagnostic Level 5-6 and Essay 5-8

	Reading	Math	Writing
TSI Assessment	351	350	Placement Score of 340 and Essay Score of 4+
Prior to January 11, 2021			or Placement Score of less than 340, ABE level of at least 4 and an Essay Score of at least 5

Students may demonstrate readiness by either passing the highest level of indicated TSI course work or by scoring above the statutory threshold on the TSI Assessment.

Students are individually advised into the appropriate TSI course work according to their individual needs. UNT offers course-based and non-course-based TSI related courses. The courses offered at UNT include:

#### Reading

 PSCI 2305, PSCI 2306, HIST 2610, or HIST 2620 with corequisite tutorial requirement

#### Writing

• ENGL 1310 with co-requisite tutorial requirement

### Math

- Math for major with co-requisite lab
- MATH 340 Integrated Pre and Beginning Algebra
- MATH 350 Beginning Algebra

#### **Demonstrating college readiness**

Students may demonstrate college readiness or otherwise satisfy TSI requirements by any of the following:

- Successfully completing all required coursework needed to prove readiness.
- Achieving a score above the statutory threshold on the TSI Assessment.

# Requirements of this catalog; University Core Curriculum

- 1. A minimum of 120 semester hours.
- Completion of all requirements in the university core curriculum (42-hour minimum) (See "University Core Curriculum").

- A major of at least 24 semester hours. At least 12 hours of advanced work (3000/4000 level) in the major must be earned at UNT (except for the BAAS degree). See "Major" in the Academics section of this catalog.
- 4. A minor, if required for a particular undergraduate degree, of a minimum of 18 semester hours, including at least 6 hours of advanced work (3000/4000 level). For details, see the individual requirements under specific degree programs in this catalog.
- A minimum of 36 semester hours of advanced work, 24
  of which must be completed at UNT. A lower level course
  that, when transferred, is determined to be equivalent to a
  UNT upper-level course does not satisfy the requirement of
  advanced hours.
- An official degree plan prepared by the academic dean. It is recommended that the degree plan be made no later than the beginning of the junior year.
- 7. A minimum grade point average of 2.000 (C) on all work attempted, including all transfer, correspondence, extension and residence work. It should be noted that the GPA that appears on grade reports and is used to determine the student's academic status, does not include correspondence, extension and transfer work. Thus, a 2.000 GPA on the grade report does not necessarily imply eligibility for graduation.
- A minimum GPA of 2.000 (C) on all work at UNT.
   Transferred work may not be used to raise the GPA of work done at UNT.
- At least twenty-five percent of the total number of hours for the degree (e.g., 30 hours for a 120-hour degree) must be earned in residence.
- 10. A proficiency in English composition. Students must show competence in written expression by receiving credit for or earning a grade of C or better in two general education English courses that have a strong writing component (Group 1: ENGL 1310, ENGL 1311, ENGL 1315, LING 1312, LING 1322, TECM 1700; Group 2: ENGL 1320, ENGL 1321, ENGL 1325, LING 1322, TECM 2700). Students who have earned a D in one or more of these two required courses must repeat the course and raise the grade to a C or better.

Students who are transferring to UNT with more than 90 hours and who have earned a D in any of the basic English writing courses must retake the course during their first term/semester in residence.

# University Core Curriculum University Core Curriculum requirements

The University Core Curriculum is designed to ensure that all UNT students graduate with breadth of knowledge gained through their general education classes as well as depth of knowledge gained from courses in their major area of study. The core curriculum at UNT requires that students study in the "foundational component areas" of communication, mathematics, life and physical sciences, language, philosophy and culture, creative arts, American history, government/political science, and social and behavioral sciences. In addition, the UNT core curriculum includes 6 semester credit hours of core option classes. These classes help students further develop important and fundamental skills that will help them be successful in all their classes and will prepare them for their lives after college. These "core objectives" are Critical Thinking, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. Through the Core, students will gain an enthusiasm for learning and an intellectual capacity that they will use throughout their lives.

# Statement of Purpose

Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

#### **Core Objectives**

- Critical Thinking Skills, including creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- Communication Skills, including effective development, interpretation and expression of ideas through written, oral and visual communication
- Empirical and Quantitative Skills, including the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Teamwork, including the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
- Personal Responsibility, including the ability to connect choices, actions and consequences to ethical decisionmaking
- Social Responsibility, including intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

The UNT Core Curriculum complies with the mandates of the 1997 Texas Legislature regarding requirements for state-assisted institutions.

Individual academic programs may require courses contained in parts of the University Core Curriculum. Students who wish to take courses that will fulfill both core and major requirements simultaneously should check with academic advisors for assistance in selecting core courses.

Students may also choose to use core courses to meet the minimum number of advanced hours required by their degree.

Note: Additional courses are under review for inclusion in the University Core Curriculum.

# Requirements

**Note:** Texas Common Course Numbering System (TCCNS) numbers, when applicable, are indicated in parentheses following the UNT course number and title. Some courses may have additional equivalents. See the Courses of Instruction section of this catalog for additional information about the TCCNS.

# Communication (English Composition and Rhetoric), 6 hours

Developing Critical Thinking, Communication Skills, Teamwork, and Personal Responsibility

Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding and building the skills needed to communicate persuasively. Courses involve the command of oral, aural, written and visual literacy skills that enable people to exchange messages appropriate to the subject, occasion, and audience. The student may choose from the following courses, usually taken in sequence (ENGL 1310 followed by ENGL 1320, for example):

#### Group 1

One course from the following, usually taken first in the sequence:

- ENGL 1310 First-Year Writing I
- ENGL 1311 Honors First-Year Writing I \*
- ENGL 1315 Writing About Literature I
- LING 1312 Academic Grammar and Writing for International Students \*\*
- TECM 1700 Introduction to Professional, Science, and Technical Writing

#### Group 2

One course from the following, usually taken second in the sequence:

- ENGL 1320 First-Year Writing II
- ENGL 1321 Honors First-Year Writing II \*
- ENGL 1325 Writing About Literature II

- LING 1322 Research Writing and Preparation for International Students \*\*
- TECM 2700 Technical Writing

#### Note

TECM 2700 (ENGL 2311) may be substituted for ENGL 1320 upon approval of the school/college.

A grade of C or better is required for courses applied toward this requirement. See your advisor for assistance.

#### Mathematics, 3 hours

Developing Critical Thinking, Communication Skills, and Empirical and Quantitative Skills

Courses in this category focus on quantitative literacy in logic, patterns and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.

The student may choose from the following courses:

- DSCI 2710 Data Analysis with Spreadsheets
- MATH 1180 College Math for Business, Economics and Related Fields
- MATH 1190 Business Calculus
- MATH 1350 Mathematics for Elementary Education Majors I \*\*\*
- MATH 1580 Survey of Mathematics with Applications
- MATH 1600 Trigonometry
- MATH 1610 Functions, Graphs and Applications
- MATH 1650 Pre-Calculus
- MATH 1680 Elementary Probability and Statistics
- MATH 1681 Elementary Probability and Statistics with Algebra Review
- MATH 1710 Calculus I

#### Note

The following courses have college-level prerequisites: MATH 1190, MATH 1350, MATH 1600, MATH 1610, MATH 1650 and MATH 1710

# Life and physical sciences, 6 hours

Developing Critical Thinking, Communication Skills, Empirical and Quantitative Skills, and Teamwork

Courses in this category focus on describing, explaining and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

This requirement may be satisfied by earning 6 semester hours in two laboratory sciences that meet the science requirement of the student's degree program. The student may choose from the following courses:

- ANTH 2700 Introduction to Physical Anthropology
- ARCH 2800 Archaeological Science
- BIOL 1082 Biology for Educators
- BIOL 1112 Contemporary Biology
- BIOL 1132 Environmental Science
- BIOL 1142 Microbes and Society
- BIOL 1710 Biology for Science Majors I
   BIOL 1711 Honors Biology for Science Majors I \*
- BIOL 1720 Biology for Science Majors II
- BIOL 1722 Honors Biology for Science Majors II \*
- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2700 Human Evolution and Physical Anthropology
- CHEM 1360 Context of Chemistry
- CHEM 1410 General Chemistry for Science Majors

- CHEM 1412 General Chemistry for the Honors College \*
- CHEM 1413 Honors General Chemistry \*
- CHEM 1415 General Chemistry for Engineering Majors
- CHEM 1420 General Chemistry for Science Majors
- CHEM 1422 General Chemistry for the Honors College \*
- CHEM 1423 Honors General Chemistry \*
- GEOG 1710 Earth Science
- GEOL 1610 Introduction to Geology
- HMGT 2460 Introduction to Nutrition Science
- PHYS 1052 The Solar System
- PHYS 1062 Stars and the Universe
- PHYS 1210 Conceptual Physics \*\*\*
- PHYS 1270 Science and Technology of Musical Sound
- PHYS 1315 Introduction to the World of Physics
- PHYS 1410 General Physics I
- PHYS 1420 General Physics II
- PHYS 1510 General Physics I with Calculus
- PHYS 1520 General Physics II with Calculus
- PHYS 1710 Mechanics
- PHYS 2220 Electricity and Magnetism

### American History, 6 hours

Developing Critical Thinking, Communication Skills, Social Responsibility, and Personal Responsibility

Courses in this category focus on the consideration of past events and ideas relative to the United States, with the option of including Texas History for a portion of this component area. Courses involve the interaction among individuals, communities, states, the nation, and the world, considering how these interactions have contributed to the development of the United States and its global role.

Texas state law requires that the university may not award a baccalaureate degree or a lesser degree or academic certificate unless the student has credit for 6 semester hours in American History. A student is entitled to submit as much as 3 hours of credit, or its equivalent, in Texas History in partial satisfaction of this requirement. The university may determine that a student has met the requirement by work transferred from another accredited college or upon successful completion of an advanced standing examination. The student may satisfy the entire 6-hour American/Texas history requirement by advanced standing examination.

This requirement may be satisfied by earning 6 hours credit from the following courses:

- HIST 2610 United States History to 1865
- HIST 2620 United States History Since 1865
- HIST 2675 Honors United States History to 1865 \*
- HIST 2685 Honors United States History Since 1865 \*

# Government/Political Science, 6 hours

Developing Critical Thinking, Communication Skills, Social Responsibility, and Personal Responsibility

Courses in this category focus on consideration of the Constitution of the United States and the constitutions of the states, with special emphasis on that of Texas. Courses involve the analysis of governmental institutions, political behavior, civic engagement, and their political and philosophical foundations.

Texas state law requires that the university not award a baccalaureate degree or a lesser degree or academic certificate unless the student has completed 6 hours of credit in American Government to include consideration of the constitutions of the United States and Texas. The university may determine that a student has met the requirement in whole or in part on the basis of credit transferred from another accredited college or upon successful completion of an advanced standing examination. The university may grant as much as 3 hours of credit toward satisfaction of this requirement for substantially equivalent work in an approved senior ROTC unit. The student may satisfy the entire 6-hour political science requirement by advanced

standing examination. Transfer students who have completed both GOVT 2305 and 2306 or their equivalents have satisfied this requirement. Transfer students who have only completed one of these two courses, GOVT 2305 or 2306, should consult with their academic advisor to determine which course is required to complete this requirement.

This requirement may be satisfied by earning 6 hours credit from the following courses:

- PSCI 2305 US Political Behavior and Policy
- PSCI 2315 Honors US Political Behavior and Policy \*
- PSCI 2306 US and Texas Constitutions and Institutions
- PSCI 2316 Honors U.S. and Texas Constitutions and Institutions \*

#### Creative Arts, 3 hours

Developing Critical Thinking, Communication Skills, Teamwork, and Social Responsibility

Courses in this category focus on the appreciation and analysis of creative artifacts and works of the human imagination. Courses involve the synthesis and interpretation of artistic expression and enable critical, creative, and innovative communication about works of art

This requirement may be satisfied by 3 hours credit in any of the following:

- ART 1300 Art Appreciation for Non–Art Majors
- ART 1301 Honors Art Appreciation \*
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- COMM 2060 Performance of Literature
- DANC 1200 Appreciation of Dance as a Contemporary Art Form
- DANC 2800 Survey of Dance
- MUJS 3400 Understanding and Appreciating Jazz in U.S. and World History and Culture
- MUMH 1610 Music as Communication
- MUMH 2040 Music Appreciation
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3000 Nineteenth-Century Music
- MUMH 3010 Twentieth-Century Music
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
- THEA 1340 Aesthetics of the Theatre Throughout the World
- THEA 2340 Theatre Appreciation
- THEA 3030 World Theatre to 1700
- THEA 3040 World Theatre After 1700

# Language, Philosophy and Culture, 3 hours

Developing Critical Thinking, Communication Skills, Social Responsibility, and Personal Responsibility

Courses in this category focus on how ideas, values, beliefs and other aspects of culture express and affect human experience. Courses involve the exploration of ideas that foster aesthetic and intellectual creation in order to understand the human condition across cultures.

This requirement may be satisfied by 3 hours credit in any of the following:

- AGER 2250 Images of Aging in Film and Literature
- ANTH 3101 American Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3120 Indigenous Cultures of the Southwest
- ANTH 3140 Latinos in the U.S.
- ANTH 3200 Latin America
- ANTH 3210 Meso America

- ANTH 3220 Mayan Culture
- ANTH 3300 Peoples and Cultures of the Pacific
- ANTH 3400 Peoples and Cultures of Africa
- ANTH 3500 Cultures and Civilizations of the Middle East
- ANTH 3700 Peoples and Cultures of South Asia
- ART 2350 Art History Survey I
- ENGL 2210 Survey of World Literatures from Antiquity to 1700
- ENGL 2220 Survey of World Literatures from 1700 to the Present
- ENGL 2321 British Literature
- ENGL 2326 American Literature
- ENGL 2331 World Literature
- ENGL 2341 Forms of Literature
- ENGL 2351 Mexican American Literature
- ENGL 3450 Short Story
- FREN 3040 France Today
- FREN 4060 Studies in French Literature
- FREN 4310 Contemporary French Civilization
- GEOG 1000 National Parks: America's Best Idea
- GERM 3040 Topics in German Culture
- GERM 3050 Topics in German Literature
- HDFS 2313 Courtship and Marriage
- HIST 1050 World History to the Sixteenth Century
- HIST 1060 World History from the Sixteenth Century
- ITAL 3040 Topics in Italian Culture
- ITAL 3050 Contemporary Italian Culture Through Film
- JAPN 3020 Advanced Japanese I
- LING 2050 The Language of Now: Pop Culture, Technology and Society
- MUET 2000 Global Perspectives in Popular Music
- MUET 3030 Music Cultures of the World
- PHIL 1050 Introduction to Philosophy
- PHIL 1400 Ethics and Society
- PHIL 2050 Logic and Critical Thinking
- PHIL 2070 World Religions
- PHIL 2100 Introduction to Judaism
- PHIL 2310 Introduction to Ancient Philosophy
- PHIL 2600 Ethics in Science
- WLLC 3810 Russian Popular Culture

# Social and Behavioral Sciences, 3 hours

Developing Critical Thinking, Communication Skills, Empirical and Quantitative Skills, and Social Responsibility

Courses in this category focus on the application of empirical and scientific methods that contribute to the understanding of what makes us human. Courses involve the exploration of behavior and interactions among individuals, groups, institutions and events, examining their impact on the individual, society and culture.

This requirement may be satisfied by 3 hours credit in any of the following:

- AGER 4560 Minority Aging
- AGER 4800 The Social Context of Aging: Global Perspectives
- ANTH 1010 Introduction to Anthropology
- ANTH 2300 Culture and Society
- BEHV 2300 Behavior Principles I
- CJUS 2100 Crime and Justice in the United States
- COMM 2020 Interpersonal Communication
- EADP 4050 Social Vulnerability in Disasters

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- GEOG 1200 Global Societies
- HDFS 1013 Human Development
- HLTH 2200 Family Life and Human Sexuality
- JOUR 1210 Mass Communication and Society
- MDSE 2750 Consumers in a Global Market
- PADM 2100 Cultural Competency in Urban Governance
- PSYC 1630 General Psychology I
- PSYC 1650 Biological Psychology
- PSYC 3620 Developmental Psychology
- RHAB 3100 Disability and Society
- SOCI 1510 Introduction to Sociology
- SOWK 1450 Introduction to Social Work

### Core Option Courses, 6 hours

Developing Critical Thinking, Communication Skills, and other core objectives related to an associated foundational component area

Core Option courses are designed to help students further develop the tools necessary for full engagement in the undergraduate experience. Students must complete an additional six hours of coursework from the courses above or from Core Option A or Core Option B courses listed below. Please note that only three hours of this requirement may be satisfied by courses designated as Core Option B. Students should consult with their academic advisor to determine whether specific Core Option courses are necessary to make timely degree progression in their chosen field of study.

### **Component Area Option A**

- AGER 2250 Images of Aging in Film and Literature
- ANTH 1100 World Cultures
- ANTH 1150 World Cultures Through Film
- ANTH 2200 Gender in Cross-Cultural Perspective
- ART 1200 Art Appreciation
- ART 1300 Art Appreciation for Non-Art Majors
- ART 1301 Honors Art Appreciation \*
- BIOL 1000 Discover Life Science

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- BIOL 1750 Introductory Biology Research Laboratory I
- BIOL 1755 Introductory Biology Research Laboratory II

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- BUSI 1340 Managing the Business Enterprise
- COMM 2040 Public Speaking
- COMM 2140 Advocating in Public
- COUN 2620 Diversity and Cultural Awareness
- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills
- ENGR 1030 Technological Systems
- GEOG 1500 Geospatial Technology and Urban Environments
- HDFS 3423 Family, School and Community
- HMGT 1450 Principles of Nutrition
- HNRS 1100 The Good Society \*
- HNRS 1500 Introduction to Research: An Interdisciplinary Perspective \*
- ITAL 1610 Italian Influences in the United States of America
- JOUR 1210 Mass Communication and Society
- JOUR 2250 Media Literacy
- MATH 1720 Calculus II
- MDSE 2750 Consumers in a Global Market

- MDSE 3370 Social Psychology of Dress and Appearance
- MKTG 3010 Professional Selling
- MTSE 1100 Discover How and Why Materials "Matter"
- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
- MUMH 3500 Music History and Literature to 1750
- MUMH 3510 Music History and Literature Since 1750
- PHIL 1800 Philosophy of Self
- PHIL 2400 Religion and American Society
- PHIL 2500 Environment and Society
- PHIL 4150 Feminism
- PHIL 4200 Science, Technology and Society
- PHIL 4300 Philosophy of Food
- SOCI 2070 Introduction to Race and Ethnic Relations
- SOWK 4540 Human Diversity for the Helping Professions

#### **Component Area Option B**

- COMM 1010 Introduction to Communication
- COMM 1440 Honors Classical Argument \*
- CSCE 1010 Discovering Computer Science
- HDFS 2033 Parenting
- HLTH 2000 Introduction to Public Health
- INST 2100 Introduction to International Studies
- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2300 Principles of News
- KINE 2050 Sociology of Sport
- LING 2070 Language and Discrimination
- MGMT 3330 Communicating in Business
- MKTG 2650 Culture and Consumption
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness
- RHAB 3000 Microcounseling
- TECM 1500 New Media Experience
- WGST 2100 Introduction to Women's and Gender Studies

#### **Notes**

- \* Course offered for Honors College students only.
- \*\* Course offered for international students only.
- \*\*\* Course offered for elementary education students only.

Inclusion of specific courses within core categories is subject to final approval.

# Transfer of the core curriculum

A student who successfully completes the common core curriculum at a state-assisted institution of higher education in Texas may transfer as "core complete" to UNT. The student will receive academic credit for each of the courses transferred. The student will need to work with an academic advisor in the appropriate college or school academic advising office to determine if additional requirements will be necessary to satisfy the 42-hour UNT core. See also the UNT transfer articulation web page at http://registrar.unt. edu/transfer-guides, where you can find information on the online transfer course equivalence tool Transferology.

#### College or school requirements

Students must satisfactorily complete all degree requirements specified by the school or college in which the degree is offered. In many instances, the college/school/department academic program requirements may exceed the university core requirements.

Individual academic programs may require courses contained in part of the University Core Curriculum to satisfy specific degree requirements. Students may be required to take additional courses if they fail to select these courses.

# **Undergraduate academic certificate programs**

The University of North Texas offers upper-division undergraduate academic certificate programs to meet workforce needs or to provide students with life/career skills and knowledge and to allow for specialization in academic disciplines.

#### Admission

All students pursuing an undergraduate academic certificate must meet regular UNT admission requirements. Candidates for admission to the undergraduate academic certificate program must meet the minimum academic standards for the academic discipline. Post-baccalaureate students are eligible to pursue an undergraduate academic certificate.

#### Requirements

Undergraduate academic certificates require 12–20 semester credit hours, the majority of which must be advanced.

Students are responsible for all prerequisites specified in course requirements.

Students are expected to complete all hours for the undergraduate academic certificate requirements at UNT.

Upon completion of the requirement for an undergraduate academic certificate program, a student should apply to the academic dean of his or her college or school. Application forms are sent to the Registrar's Office at the end of each term.

The Registrar's Office posts undergraduate academic certificates to students' transcripts at the end of the semester earned and prints the certificates, which are mailed by the school or college awarding them.

**Note:** Hours used for attaining an undergraduate academic certificate could potentially exclude a student from consideration for the \$1,000 Tuition Rebate since all hours earned for the undergraduate academic certificate are counted in the total hours earned toward a degree.

# **Disability Accommodation**

In accordance with university policies, and state and federal regulations [especially Section 504 of the Rehabilitation Act and the Americans with Disabilities Act as Amended], the University of North Texas endeavors to make reasonable academic adjustments for qualified students with disabilities who require accommodation in order to fulfill the requirements for a degree.

A student who encounters access problems in a campus instructional facility or who wishes to request accommodation in a course because of a disability (i.e., sign language interpreters, material in alternate format, accommodated testing) should follow the procedures listed below:

- Students must be registered with the Office of Disability
  Access (ODA) in order to request a letter of accommodation
  be sent to their instructor. This document will contain
  information relative to the reasonable accommodations
  of the student and will assure the instructor that proof
  of disability is on file with the ODA. Students who do
  not present such a form can be referred to the ODA for
  assistance in documenting their disability.
- Preferably, within the first week of class, qualified students must notify the instructor of the need for academic adjustments and present the letter of accommodation from the ODA.
- The qualified student should confer with the instructor (during office hours) to reach mutual agreement on how accommodations are to be achieved.

4. If a student does not feel the accommodations are effective, or if they are not provided, the student should contact his/her ODA Coordinator to help facilitate a solution. If the student is not satisfied with the resolution, a formal appeal may be filed in accordance with the procedures described here: studentaffairs.unt.edu/office-disability-access/grievance.

# **Application for graduation**

Students who may be eligible to graduate must submit their application through the MyUNT student portal. (Visit registrar.unt. edu for additional information about degree application deadlines.)

Degree applications are accepted only from undergraduate students who have a minimum overall C average. See "Grade point average" for grade point calculation details. Before applying, the student also must remove grades of I in required courses necessary for graduation if these courses increase the term/semester load beyond the maximum permitted.

Students otherwise eligible for graduation who complete their final course or courses elsewhere will not graduate at the end of the term/semester or summer session/term in which the work is completed because of the time required for obtaining transcripts; such students will have their degrees conferred at the close of a subsequent UNT term/semester.

August graduates may file for graduation before the end of the spring term/semester.

# Requirements for a second bachelor's degree

To be eligible for a second bachelor's degree, a student must meet all current catalog requirements for the second degree, including 12 hours of advanced courses in a field different from the major for the first bachelor's degree.

# Degree plan/audit

The degree audit is an official document prepared in the office of the student's academic dean that lists courses completed, courses to be completed, proficiency examinations and all other requirements for a particular degree program. A student should have a degree audit prepared no later than the beginning of the junior year.

# **Grading system**

UNT's grading system uses the letters A, B, C, D, F, P, NP, NPR, I, PR and W. The letter Z is used to indicate that a grade was not properly received and/or recorded for a course.

A	_	excellent work, four grade points for each semester hour.
В	_	good work, three grade points for each semester hour.
С	_	fair work, two grade points for each semester hour.
D	_	passing work, one grade point for each semester hour.
F	_	failure; given when a student (1) has failed the course while still officially enrolled at the end of the term/semester; (2) is failing a course and misses the final examination without satisfactory explanation; or (3) stops attending class without processing an official drop or withdrawal.
P	_	passed; a credit grade (1) on pass/no pass option, (2) on student teaching, and (3) in selected undergraduate and graduate individual problems, research, thesis and dissertation courses.
NP	_	not passed; a failing grade on the pass/no pass option; non-punitive.

		Γ	
I		I is a non-punitive grade given only during the last one-fourth of a term/semester and only if a student (1) is passing the course and (2) has justifiable and documented reason, beyond the control of the student (such as serious illness or military service), for not completing the work on schedule. The student must arrange with the instructor to finish the course at a later date by completing specific requirements. These requirements must be listed on a Request for Grade of Incomplete form signed by the instructor, student and department chair and must be entered on the grade roster by the instructor. Grades of I assigned to an undergraduate course at the end of the Fall 2007 semester and later will default to F unless the instructor has designated a different automatic grade. See also "Removal of I" policy in the Academics section of this catalog.	
PR	_	assigned at the close of each semester of summer term in which the graduate student is enrolled in thesis (5950) or dissertation (6950). No credit hours are shown when the grade of PR is assigned. When thesis or dissertation has been completed and submitted to the graduate dean, appropriate grades and credit hours will be shown on the student's record for the required number of enrollments.	
NPR	used to indicate no progress on thesis or disserts courses numbered 5950 and 6950, 6951, 6952, or 6954 in a given term; non-punitive. No credit hours are earned when the grade of NPR is assigned.		
W	_	drop or withdrawal without penalty. Given when a student drops or withdraws from the university prior to the designated day of a given semester's 10th week of class for the long terms/semesters or corresponding dates for 8 week and summer sessions (specific dates are published in the online academic calendar). See regulations for dropping and withdrawing.	

**Note:** No grade points are allowed for grades F, I, NP, NPR, P, PR, W, or Z. (Use of WF grade was discontinued fall 2018.)

A complete record of all previously used grades and grading systems is detailed on the official transcript.

# **Grade point averages**

#### Overall Grade Point Average (OGPA)

Includes transfer and University of North Texas attempted hours.

# University of North Texas Cumulative GPA (UNT-CGPA)

Includes attempted hours at the University of North Texas.

The overall grade point average (OGPA) is used to determine student class loads, eligibility for admission to the university and certain programs, and eligibility for graduation. All GPA calculations are subject to post-audit and correction by the Registrar's Office.

The GPA is calculated by dividing the total number of grade points by the total number of semester hours attempted. The number of semester hours attempted includes all courses with grades of A, B, C, D, and F unless replaced by a later grade. Courses with grades of I, NP, NPR, P, PR, W or Z are not counted as courses attempted.

#### Academic standards

Students must achieve a minimum cumulative grade point average, referred to as the minimum UNT-CGPA requirement, to remain in good academic standing. At the end of the first term of enrollment at UNT, the minimum UNT-CGPA requirement is 1.8. In each subsequent term of enrollment, the minimum UNT-CGPA requirement is 2.0.

The UNT-CGPA upon which academic standards are based is calculated by dividing the total number of grade points earned in residence at UNT by the total number of semester credit hours

(SCH) attempted in residence at UNT. Excluded in this calculation are all courses in which the student received grades of NP, NPR, P, PR, W, Z or I. The cumulative grade point average as defined here is used only for determining a student's academic status and is not necessarily related to the grade point average that governs eligibility for graduation.

In calculating grade points, grades count as follows: A=4 points per semester credit hour, B=3 points, C=2 points, D=1 point, F=0 points.

Classification for the purpose of establishing the academic standing of the student is determined by the sum of all hours attempted in residence in regularly graded courses at UNT, hours passed in pass/no pass graded courses at UNT, and hours transferred from other institutions. Not included in the definition of student classification for academic standards are hours granted by the university for extension, service experience, advanced placement, credit by examination, CLEP or transfer hours attempted but not passed or accepted by the university for academic credit.

A student is placed on academic alert or academic probation at the end of any enrollment period in which the UNT-CGPA on work attempted in residence at this university does not equal or exceed the minimum UNT-CGPA requirement.

# Regulations governing students on academic alert

A freshman or a first time in college (FTIC) student in their first term/semester at UNT is placed on academic alert the first term/semester if the CGPA drops below the minimum CGPA requirement. To be removed from academic alert, the student must raise the CGPA to a minimum of 2.0 during the next period of enrollment.

A student on academic alert who does not raise the CGPA to at least a minimum of 2.0 at the end of the next term/semester of enrollment is placed on academic probation.

# Regulations governing students on academic probation

A student who is not classified as a freshman, or a student who is currently or has been on academic alert, is placed on academic probation at the end of any enrollment period in which the CGPA drops below the minimum CGPA requirement.

A student remains on academic probation at the end of any enrollment period in which the student earns at least a 2.25 GPA but does not achieve a 2.0 CGPA.

A student remains on academic probation during any summer enrollment in which the student fails to raise the CGPA to a 2.0.

A student who, during a probationary fall or spring term/semester, fails to raise the CGPA to a 2.0, or who fails to make at least a 2.25 GPA for the term/semester, is automatically suspended from UNT for one or more long terms/semesters. (See "Regulations Governing Students Under Academic Suspension.")

The electronic grade report, available online at my.unt.edu at the end of each term/semester, includes a statement of academic status and a CGPA summary on which the status is based. Each student is responsible for knowing whether the minimum CGPA has been achieved and whether they are eligible to re-enroll or remain enrolled in the university. Any student enrolled when ineligible will be withdrawn by the Registrar, and no special consideration will be given to such student on a plea of ignorance of academic status. If the cumulative record is believed incorrect, the student should contact the Registrar's Office.

# Regulations governing students under academic suspension

A student who is suspended from the university for failure to meet the standards prescribed in the "Regulations Governing Students on Academic Probation" is prohibited from re-enrolling for the following long term(s)/semester(s) as outlined below:

First suspension:	One long term/semester
Second suspension:	Two long terms/semesters
Third suspension:	Indefinite

A student who has been suspended for an indefinite period may request, at the end of two calendar years from the time of the suspension, a review of the case by the appropriate academic dean.

Each student is responsible for knowing the minimum CGPA requirements and the standards for academic standing. Any ineligible student who enrolls during a long term/semester will be withdrawn by the Registrar, regardless of whether the student has registered or pre-registered and paid fees. The student should be aware that course work taken at another institution while the student is suspended from the University of North Texas may not apply to a degree.

A student who has been suspended from the University of North Texas re-enters on academic probation. A student under academic suspension may attend the UNT summer enrollment periods with the approval of their college or school. Students should contact the academic advising office to request approval for summer enrollment. If, at the end of the summer enrollment period, a student raises the CGPA to a minimum of 2.0, the student will be reinstated in good academic standing.

# **Course duplications**

A student may take a course a second or subsequent time. The Registrar's Office will post duplications at the request of the student, at the request of an academic advisor or upon review of the student's record. Once a duplication of a UNT course is posted by the Registrar's Office, the first instance of the UNT course will be excluded from the student's UNT-CGPA, cumulative record of hours attempted and grade points earned. The Registrar includes without exception any course repeated *more than once* in the student's UNT cumulative record of hours attempted and grade points earned. Departments may count the highest grade for departmental GPA requirements; however, the academic dean uses only the last grade recorded in certifying the student's eligibility for graduation.

Undergraduate students who enroll in the same course more than twice may be charged additional tuition amounts.

# Status changes due to course duplications

A student request for the recording of a course duplication made before or on the last class day of any term or session will be reflected in the hours attempted and grade points earned at the beginning of the term/semester or session.

If a student who is on academic alert or academic probation requests the recording of course duplications, and the resulting adjusted CGPA equals or exceeds the minimum CGPA requirement, the academic alert or probation status will be removed if the student notifies the Registrar's Office on or before the last class day for that term/semester or session. Otherwise, the student will remain on academic alert or probation for that enrollment period and be subject to attendant penalties.

If a student is suspended at the end of a term/semester during which the student has repeated a course and the posting of that duplication will result in a CGPA that would have been sufficient to be continued on probation at the end of that term/semester (or to be cleared), the student will be reinstated if the student requests the duplication and applies for reinstatement at the Registrar's Office. The delayed posting of course duplications completed during prior enrollment periods cannot be used as a basis for altering suspension history or reinstating lost registration schedules.

Courses duplicated Fall 2005 and later will result in a re-evaluation of a student's suspension history beginning with the term that the duplication was completed. The delayed processing of course duplications and updating of suspension history cannot be used as justification for reinstating lost registration schedules.

#### Academic standards for transfer students

New UNT students who have fewer than 30 hours of transfer credit, excluding non-traditional credit, who are admitted via individual review and have less than the minimum CGPA requirement will be placed on academic alert. Other transfer students with 30 or more hours of transfer credit who are admitted via individual review are placed automatically on academic probation if their transfer cumulative grade point average falls below the minimum CGPA requirement. See "Transfer Students" in the Admission section of this catalog for a statement of current minimum entrance requirements for transfer students. To avoid academic suspension, transfer students admitted on academic probation must make a grade point average equal to or exceeding the minimum CGPA requirement.

Transfer students admitted to UNT in good standing are subject to minimum academic requirements. Thus, if at the end of the first enrollment period a transfer student's grade point average on all work attempted at UNT does not meet the minimum CGPA requirement, the student will be placed on academic alert or academic probation for the next period of enrollment and the Regulations Governing Students on Academic Alert or Academic Probation will apply.

Transfer students who have more than 30 credit hours and are admitted to UNT on academic probation are evaluated at the end of their first long term/semester in attendance, at which time they are either cleared from probation or suspended. To avoid academic suspension, the student must have earned a CGPA on all work attempted at UNT equal to or greater than the minimum CGPA requirement.

Additional information concerning academic status is available from the offices of the academic deans or the Registrar's Office.

#### Transfer hours from another institution

Students who complete work at another institution, to be applied toward a bachelor's degree at the University of North Texas, should make sure that the appropriate officer of the other institution furnishes to the Office of Admissions or the Registrar's Office at the University of North Texas a complete official transcript of such work.

The Registrar's Office determines acceptable transfer credit from other institutions based on evaluation of course content as described in the catalogs of those institutions and in consultation with appropriate academic units at UNT as necessary for clarification. Transfer credit may only be received for course work completed at an accredited institution of higher education. Transfer credit from other institutions will be converted to semester hours and a 4.0 grading system for evaluation purposes as appropriate. The student's academic dean determines applicability of the credit to a degree program. Students seeking a Bachelor of Applied Arts and Sciences (BAAS) degree should refer to the special provisions of the respective degree programs.

Students who have begun residence work at UNT and who have attained junior standing may, only with the *prior written consent* of their academic dean, enroll in and transfer hours from approved two-year colleges.

Grade points earned at other institutions are excluded in the computations of the UNT-CGPA, but transfer hours accepted are included in determining the classification and minimum required level of performance.

Additional information concerning academic status is available from the advising offices of the academic deans or the Registrar's Office.

Because of the time required for receipt of transcripts, students otherwise eligible for graduation who complete their last course or courses elsewhere do not graduate at the end of the term/semester or summer session in which the work is completed, but receive their degrees at the close of a subsequent UNT term/semester or summer session.

Transfer hours from another institution are included in the overall GPA when determining honors for graduation.

#### Transfer of the core curriculum

A student who successfully completes the common core curriculum at a state-assisted institution of higher education in Texas may transfer as "core complete" to UNT. The student will receive academic credit for each of the courses transferred. The student will need to work with an academic advisor in the appropriate college or school academic advising office to determine if additional requirements will be necessary to satisfy the 42-hour UNT core. See also the UNT transfer articulation web page at http://registrar.unt. edu/transfer-guides, where you can find information on the online transfer course equivalence tool Transferology.

### **Advanced-hour credit**

A lower-level course that is substituted for a UNT upper-level course may not be used to satisfy advanced-hour requirements.

#### Effects of withdrawal on academic status

Any student who withdraws from UNT at least two weeks before the first day of final exams for long terms/semesters or the equivalent dates for 8 week and summer sessions is given grades of W and is not penalized with a reduced CGPA. A student who does not officially withdraw from the university is held responsible for grades of F and is placed on probation or suspended from the university if the grades of F bring the CGPA below the minimum required. For official dates and deadlines for withdrawal, visit the academic calendar.

# Students called to active duty

Texas Education Code 54.006 (f) indicates, "Beginning with the summer semester of 1990, if a student withdraws from an institution of higher education because the student is called to active military service, the institution, at the student's option, shall: (1) refund the tuition and fees paid by the student for the semester in which the student withdraws; (2) grant a student, who is eligible under the institution's guidelines, an incomplete grade in all courses by designating 'withdrawn-military' on the student's transcript; or (3) as determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of course work and who has demonstrated sufficient mastery of the course material."

In order to be eligible for options under this law, a UNT student must produce a copy of his or her orders. Withdrawal may or may not require that the student talk with each instructor depending on timing in the semester; however, the latter two options do require that the student talk with his or her instructors and come to a decision as to which solution is best for each class given timing and circumstances. A student called to active duty may consider the following options:

- withdrawal with a full refund of appropriate tuition/fees;
- 2. incomplete grades with the one-year I (Incomplete) removal time limit starting with the end of active duty; or
- a final grade if the course is essentially over and the course material has been sufficiently mastered (determined by the instructor).

### **Grade reports**

The electronic grade report and academic standing are available online at my.unt.edu at the close of each term/semester. If the grade report or the academic standing is believed to be in error, the student should contact the Registrar's Office within 30 days following the first class day of the succeeding term/semester.

At mid-term/semester in the long session, instructors may provide individual written warnings to students who are doing unsatisfactory class work. These warnings are mailed from the Registrar's Office upon request by the instructor.

# **Transcripts**

Transcript request information can also be found on the Registrar web page: (http://registrar.unt.edu/transcripts-and-records/order-transcript).

Before an official transcript can be released, all financial or administrative obligations to the university must be resolved. To check for blocks, please refer to the student center at my.unt.edu. UNT transcripts may be ordered in person at the Registrar's Office or requested online.

If you have any questions concerning transcripts, please contact the Registrar's Office in person or call the Registrar's Office at 940-565-2111.

#### **Grade books**

University policy requires that grade books be retained by the departmental chair for five years.

#### **Tests**

University policy requires that departments retain tests for one year after the term/semester has been completed or return tests to students. If the tests are returned, students are responsible for producing the tests should a grade appeal be necessary.

# **Grade appeals procedure**

- 1. Any student who believes a grade has been inequitably awarded should first contact the instructor who awarded the grade to discuss the issue and attempt to resolve the differences. Any instructor no longer associated with UNT at the time of the appeal will be represented in these proceedings by the chair of the department in question. A student not in residence the term/semester following the awarding of the grade or a resident student who is unable to resolve the differences with the instructor has 30 days following the first class day of the succeeding term/semester to file a written appeal with the chair of the instructor's department, or the equivalent administrative unit.
- The chair may follow any of the four procedures below, or a combination of them:
  - a. The chair may confer with the instructor; or
  - The chair may request that the instructor submit a written reply to the student's complaint; or
  - The chair may conduct a meeting of the two parties;
     or
  - d. The chair may refer the case directly to the appropriate departmental committee, as outlined below.

In following one of the first three procedures above (a, b or c), the chair should make a judgment on the merits of the case and recommend a specific action in regard to the disputed grade. Either the student or the instructor may appeal the recommendations of the chair.

- The appropriate departmental committee to hear cases sent directly to it by the chair or appealed to it by either the student or the instructor shall be constituted as follows and shall perform the following duties.
  - a. It shall be an ad hoc committee consisting of two faculty members from the department in which the grade is being questioned, one of those members to be chosen by the student and one to be chosen by the instructor. If either party to the dispute declines to choose a member of the committee, the department chair will select that member, and one selected by the chair with agreement of the other two committee members.
  - b. This ad hoc committee should require written statements from each participant in the dispute. Judgments may be rendered upon the basis of these statements, upon other evidence submitted in support of the statements and upon the basis of an oral hearing, if such a hearing seems necessary.
  - The committee must make a recommendation for disposition of the case within 30 days of its appointment.

- All records in the case will be filed with the chair of the department in which the grade was originally awarded.
- 4. Either party to the dispute has 15 days following the rendering of the ad hoc committee recommendation to appeal that recommendation to the dean of the respective college, if the appeal is based solely upon alleged violations of established procedures. Substantive matters, up to and including the refusal of the instructor to act in accordance with the ad hoc committee's recommendation or the student's refusal to accept the verdict, may not be appealed to the dean.
- 5. The dean of the college in question, after a review of the submitted written materials (and oral hearings if desired), shall make within 15 days a ruling about procedural questions. Said ruling may be appealed by either the student or the instructor to an ad hoc committee composed of three faculty members appointed by the dean and representing departments other than the one in which the disputed grade was awarded and three students appointed by the Committee on Committees of the Student Government Association.
  - a. This ad hoc committee will have 30 days from the date of its appointment to complete its work.
  - This committee shall operate within the guidelines set out for departmental ad hoc committees in 3b above.
  - c. All rulings made by this committee regarding procedural questions shall be final.
  - All documents related to the case shall be returned to the chair of the originating department for department files.

# **Grade changes**

No grade except I may be removed from a student's record once properly recorded. Changes are not permitted after grades have been filed except to correct clerical errors.

Requests for error correction must be initiated immediately after the close of the term/semester for which the grade was recorded.

A faculty member who believes an error has been made in calculating or recording a grade may submit *in person* a request for a grade change to the department chair and the appropriate dean. The Registrar accepts requests for grade changes only from the academic deans.

# Removal of I

A student may remove a grade of I within one year by completing the stipulated work. After the student completes the stipulated work, the instructor records the final grade on a UNT Grade Change Form and obtains the department chair's signature. The instructor's academic dean completes processing with the Registrar's Office, where the grade point average is adjusted accordingly. For undergraduate courses taken Fall 2007 or later, if a student does not complete the stipulated work within the time specified, the grade of I will default to F unless the instructor has designated a different automatic grade. The GPA is adjusted accordingly, and the student will be subject to academic penalty should any exist.

# Pass/no pass option Undergraduate Students

An incoming freshman or any undergraduate in good standing with a C average or better on all work attempted in residence at UNT may schedule one course a term/semester on the pass/no pass option. Seniors may elect more than one pass/no pass course during their final term/semester.

A maximum of 18 semester hours of credit under the pass/no pass option may be applied toward the bachelor's degree. Only courses counted as electives on the student's degree plan may be scheduled under the pass/no pass option. These hours are not used in calculating the grade point average, but count as full credit.

A grade of D or better will be shown as a P. If the course is not passed, the record will show NP and the hours attempted will not be used in calculating the grade point average.

A student may change to the pass/no pass option in the office of their academic dean/advisor any time before the end of the sixth week of class, or the corresponding point of a summer session, provided eligibility requirements above are met.

Courses taken under the regular grading system may not be repeated as pass/no pass courses unless a grade of W was previously received.

A student who changes majors is not automatically denied credit for a pass/no pass course that becomes a degree audit requirement for the new major. The decision is made by the academic dean of the new department. However, under no circumstances is a grade of P changed to a letter grade.

Transfer students have the same pass/no pass privileges and restrictions, but they must pass 30 semester hours of regularly graded courses at UNT to be eligible for graduation.

#### **Graduate students**

Graduate students may enroll under the pass/no pass option only for undergraduate courses that are not required as a deficiency makeup or as a graduate degree requirement.

#### Courses automatically graded pass/no pass

Certain graduate-level individual instruction courses will be graded pass/no pass when classes are taught on campus in those departments whose faculty have voted for the use of this grading system for individual instruction.

## Dean's list and president's list

Students completing at least 12 hours of class work in regularly graded courses taken in residence during the long session with a UNT term grade point average of 4.0 are eligible for recognition on the president's list. Students with a UNT term grade point average of 3.5 or above are eligible for recognition on the dean's list. Students are notified of this recognition by the president or the appropriate academic dean.

# **Graduation with honors**

Candidates for graduation whose overall grade point average (OGPA), based on grades earned in University of North Texas resident credit courses and transferred resident credit courses, is at least 3.500 but less than 3.700 are eligible to graduate *cum laude*; those whose OGPA, as defined above, is at least 3.700 but less than 3.900 are eligible to graduate *magna cum laude*; and those whose OGPA, as defined above, is 3.900 to 4.000 are eligible to graduate *summa cum laude*.

Hours earned through correspondence and extension courses, or pass/no pass courses, may not be counted in calculating the GPA for determination of eligibility for graduation with honors. Candidates for a second bachelor's degree are not eligible for graduation with honors.

# **Records policies**

#### State privacy policy

State law, with few exceptions, gives individuals the right to be informed about the information UNT collects about them. It also gives individuals the right to receive and review collected information and the opportunity to have UNT change any incorrect information. UNT's privacy policy (no. 14.009) is available at www. unt.edu/policy.

#### Student education records

Pursuant to the Family Educational Rights and Privacy Act (FERPA), the university has established policies relating to the accessibility of student information in the custody of the University of North Texas. The UNT FERPA policy statement appears in its entirety in the UNT

Policy Manual, policy number 07.018. Information not covered by FERPA will be released only in accordance with the policy on public information found in policy number 04.002 of the UNT Policy Manual. Requests for public information not subject to FERPA must be submitted to the university Public Information Officer in writing. The UNT Policy manual with the complete FERPA policy (07.018) can be found at www.unt.edu/policy.

FERPA affords students certain rights with respect to their education records. Students have the right to:

 Inspect, review and receive copies of their own education record upon request to the appropriate records custodian (i.e.- Registrar, Dean, Department Head, or other appropriate official). The request must be provided in writing and must specifically identify the requested education records. The university will comply with all request within forty-five (45) calendar days from the date the request was received.

The university official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the university official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

 Request the amendment of personal education records the student believes are inaccurate, misleading or a violation of privacy.

The student should write to the Dean of Students Office, clearly identify the part of the record he or she wants changed, and specify why it is inaccurate or misleading. Students may request a hearing to review a denial of a request to amend educational records. Additional information regarding the hearing procedures will be provided to the student when notified of the decision to deny a request to amend. The right to amend education records does not apply to grade appeals.

Generally, FERPA requires written consent before
personally identifiable information contained in a
student's education records may be disclosed to a
third party. However, FERPA authorizes disclosure of
personally identifiable information without the student's
consent under certain circumstances. One such exception
is directory information.

Directory information consists of a student's name; address; major field of study; participation in officially recognized activities and sports; weight and height of members of athletic teams; dates of attendance; enrollment status (e.g., undergraduate or graduate; full-time or part-time); classification; degrees, awards and honors received (including selection criteria); expected graduation date; dissertation and thesis titles; most recent previous school attended; and photograph.

Directory information will be provided without a student's consent upon request unless the student files a request in the Registrar's Office asking that their directory information not be disclosed without specific authorization. The request should be submitted prior to the 12th class day in the fall and spring terms, the 2nd class day of a three-week session, or the 4th class day of a five-week summer session. A request to withhold information may be submitted after the stated deadline for a term or session, but information may be released between the deadline and receipt of the request. The university will comply with a student's request to have their information excluded from available directory information until the request is amended in writing.

The University of North Texas will disclose information from a student's education records without the written consent of the student to the following individuals or under the following conditions:

1. School officials who have a legitimate educational interest.

#### Parents when:

- the student is a dependent of the parent for tax purposes as evidenced by appropriate documentation, including the parent's most recent tax return or a student financial aid application;
- a health or safety emergency necessitates disclosure to protect the health or safety of the student or another individual; or
- c. the student is under 21 years of age at the time of the disclosure and the student has violated a federal, state or local law or any rule or UNT policy governing the use or possession of alcohol or a controlled substance and UNT has found the student in violation of the Code of Student's Rights, Responsibilities and Conduct.
- Officials of another school to which a student seeks or intends to enroll or has already enrolled, upon written request, if the disclosure is for purposes related to the student's enrollment or transfer.
- 4. Certain officials of the U.S. Department of Education, the Comptroller General, the Attorney General of the United States, the U.S. Department of Veteran Affairs, and state and local educational authorities in connection with an audit or evaluation of federal or state supported education programs, or for the enforcement of or compliance with federal legal requirements that relate to those programs.
- 5. Financial aid personnel in conjunction with an application for or receipt of financial assistance, provided the disclosure is needed: (i) to determine the eligibility of the student for financial aid, (ii) to determine the amount of financial aid, (iii) to determine the conditions that will be imposed, or (iv) to enforce the terms or conditions of the financial aid.
- 6. Individuals delivering a judicial order or lawfully issued subpoena. The university will make reasonable efforts to notify the student before disclosing records in advance of compliance with the order or subpoena, except when directed not to do so by the court order or subpoena or when otherwise required by law.
- 7. Organizations conducting studies for or on behalf of UNT pursuant to a written agreement to develop, validate or administer predictive tests or student aid programs, or to improve instruction. Information from education records may only be used to meet the purposes of the study stated in the written agreement between the university and the organization(s) and must contain the current restrictions on re disclosure and destruction of information requirements applicable to information disclosed under this exception.
- 8. Accrediting organizations to carry out their accrediting functions
- To appropriate parties in a health or safety emergency.
   Appropriate parties include, but are not limited to, school officials, law enforcement officials, parents and emergency/medical personnel.
- 10. To victims of an alleged perpetrator of a crime of violence or a non-forcible sex offense, limited only to the final results of a UNT disciplinary proceeding regardless of whether UNT determines through its own investigation that a violation was committed.
- 11. To any member of the public in matters relating to sex offenders and information provided to UNT under relevant federal law.
- 12. To a court in which the university is defending itself against legal action initiated by a parent or eligible student.
- 13. To the originating party identified as the party that provided or created the record. This allows for returning documents, such as official transcripts, that appear to have been falsified back to the institution or school official identified as the creator or sender of the record for confirmation of its status as an authentic record.
- Individuals requesting records for students who are deceased.

Individuals may file a complaint with the U.S. Department of Education if they believe the University of North Texas has failed to comply with the requirements of FERPA. The complaint should be sent to:

Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202

For information regarding the university's policy on access to student education records contact the university Registrar. For information regarding access to public information contact the UNT System Office of General Counsel.

# **UNT** internships

Many employers prefer to hire graduates with hands-on experience in their majors. Students can gain practical experience and enhance their classroom learning through an internship opportunity.

In addition to providing insight into future careers, working as an intern provides a competitive advantage in the job market because of the skills developed while in the position.

The Career Center helps students obtain high-quality internships prior to graduation by working closely with potential and existing employers to promote internships within their organizations.

The Career Center hosts a number of career-related workshops open to all enrolled students. For more details, students can visit on Handshake.

## **Internships**

Internships are work experiences (typically one semester) related to a student's field of study and may provide a competitive advantage in the job market by:

- providing transferable skills through work in a professional environment,
- creating professional contacts within an industry or occupational area, and
- teaching more about major and career path.

The Career Center works with thousands of employers who offer internship programs as well as full-time job opportunities at companies such as Toyota, Southwest Airlines, Fidelity Investments, Texas Instruments, Hitachi, Lockheed Martin and many others.

Internships can be part time or full time and are available throughout the year. The summer is the most popular season for obtaining them. Depending on a student's major, academic credit may be received for completing an internship. Completing an internship is mandatory in some degree programs.

The Career Center strongly promotes paid internships; however, in some cases, depending on the organization, industry and specific job, internships may be unpaid. If a student accepts an unpaid internship, there may be a small stipend available to the student by contacting the Career Center.

Some degree programs require students to fulfill an internship as part of their course work and in some cases a paid internship is mandatory to meet curriculum requirements.

#### **Earning academic credit**

Depending on the chosen major, students may be eligible to receive academic credit for an internship. Department policies vary based on these opportunities but often they are evaluated based on how the work relates to the student's field of study, the length of the internship, what learning opportunities are available and whether supervision or mentoring is provided by a professional in the field.

Career Center staff work closely with faculty members to coordinate the student's academic credit.

For further information, contact the Career Center in Sage Hall, Suite 202; by phone, 940-565-2105; or visit the web site at careercenter. unt.edu.

# **Lifelong Learning and Community Engagement**

Lifelong Learning and Community Engagement (LLCE) provides the administrative structure for lifelong learning programs that meet the needs of the 50 and better community and programming for UNT's retirees

Lifelong learning and community engagement programs are offered year around through LLCE. Programming includes classes, events, trips, special lectures, and activities.

Programs include the Osher Lifelong Learning Institute at UNT (OLLI at UNT, formerly Emeritus College), and the UNT Retiree Association (UNTRA). OLLI at UNT offers non-credit classes and activities for adults 50 and older. The UNT Retiree Association offers engagement opportunities, events, and activities for UNT's retirees.

Lifelong Learning and Community Engagement is located at 1716 Scripture Street, Denton, TX 76201. For additional information, call 940-369-7293, visit the website at untra.unt.edu or olli.unt.edu, or write the director, 1155 Union Circle #310560, Denton, TX 76203-5017

# **Enrollment**

# **Student load**

# Fall/spring

# Undergraduate

The normal load for full-time undergraduate students is 15 semester hours for each fall or spring term/semester, or 30 hours for the nine-month academic year. Note: For information pertaining to the required semester hours for enrollment verification purposes, refer to "Enrollment Certification" below.

An undergraduate student with a GPA of less than 3.000 may schedule a maximum of 19 semester hours.

An undergraduate student with a GPA of at least 3.000 may enroll for a maximum of 21 hours for the fall or spring term/semester by meeting the following conditions:

- at least a 3.000 GPA on a minimum 15-hour residence load for the term/semester just completed
- at least a 3.000 GPA on a minimum 12-hour residence load for the summer term/semester just completed, or
- at least a 3.000 GPA on all work completed at UNT and a minimum 24 hours of credit in residence.

**Note**: For 3W1 (three week one) the normal load for full-time students is 3 hours. Undergraduate students may schedule a maximum of 4 hours in 3W1 session.

#### Graduate

Graduate students may schedule a maximum of 16 hours during any fall or spring term/semester.

**Note**: For 3W1 (three week one) the normal load for full-time students is 3 hours. Graduate students may schedule a maximum of 4 hours in 3W1 session.

#### Summer

# Undergraduate

The normal load for full-time students is 12 hours for the summer term/semester.

During the summer term/semester, a full-time undergraduate student with a GPA of less than 3.000 may select multiple sessions for a maximum of 18 semester hours.

Undergraduate students may schedule a maximum of 4 hours in 3W1 session, a maximum of 9 hours in 8W1 session, a maximum of 8 hours in 5W1 session, a maximum of 7 hours in 5W2 session, and a maximum of 15 hours in 10W session.

**Note:** For 3W1 (three week one) the normal load for full-time students is 3 hours. Undergraduate students may schedule a maximum of 4 hours in 3W1 session.

#### Graduate

A full-time graduate student with a GPA of at least 3.000 may select multiple sessions for a maximum of 18 hours.

Constraints apply to graduate course enrollment. Graduate students may schedule a maximum of 4 hours in a three week session (3W1), a maximum of 7 hours in a five week session (5W1, 5W2), a maximum of 9 hours in a ten week session (10W), or a maximum of 9 hours in an eight week session (8W1). At no time during concurrently running summer sessions can graduate students' enrollment exceed 10 hours. For purposes of fulfilling the graduate residence requirements, a load of 9 semester hours is considered a full load. Graduate students enrolled only in undergraduate courses, for undergraduate credit, may request special consideration of the graduate dean.

**Note:** For 3W1 (three week one) the normal load for full-time students is 3 hours. Graduate students may schedule a maximum of 4 hours in 3W1 session.

#### **Enrollment certification**

Enrollment verification for loan deferments is completed in the Registrar's Office and is based upon a student's having registered and paid tuition and fees according to the following criteria. See "Special Conditions for Financial Aid Applicants" in the Financial Information section of this catalog for loan deferment requirements.

# Undergraduate

Full Time: fall, spring or summer term/semester, 12 or more hours. Three-Quarter Time: fall, spring or summer term/semester, 9 to 11 hours.

Half Time: fall, spring or summer term/semester, 6 to 8 hours.

#### Graduate

Full Time: fall, spring or summer term/semester, 9 or more hours. Three-Quarter Time: fall, spring or summer term/semester, 6 to 8 hours.

Half Time: fall, spring or summer term/semester, 5 hours.

Extension courses are considered nontraditional credit and are excluded for certification purposes.

International students also may request International Advising to issue letters of enrollment for the use of foreign governments, embassies, scholarship agencies and banks. International Advising is located on the second floor of Sycamore Hall.

# Verification of enrollment/enrollment certificate

UNT student enrollment verifications are supplied by the National Student Clearinghouse (NSC). Third parties such as health care companies, prospective employers, or insurance agencies seeking verification of enrollment may contact the NSC online by going to https://secure.studentclearinghouse.org/vs/Index.

#### Student enrollment verification self-service

Current and former UNT students may request their own enrollment verification/certification through a direct link in MyUNT. Enrollment verification certificates printed via the National Student Clearinghouse (NSC) should be accepted as official and can be used for insurance companies, scholarships, military IDs, employment and all other services that require proof of enrollment at the University of North Texas. For more information, please see the Enrollment Verification/Certification page of the Registrar's web site.

# **Alternative class offerings**

In addition to regular daytime classes, UNT offers evening and weekend on-campus and off-campus residence credit courses and courses at the Universities Center at Dallas, as well as other distance education and web-based courses. See "Distance Education (Web-Based and Videoconference)" in the Campus Resources section of this catalog.

# **Correspondence courses**

#### Regulations governing correspondence courses

- A student in residence who wishes to enroll concurrently in correspondence courses at another accredited institution must first secure the written permission of the student's academic dean at UNT. Failure to obtain advance approval may result in the refusal of the university to accept such work in transfer.
- Not more than 18 hours of correspondence courses from an
  accredited institution may be transferred to UNT and used
  toward a degree program. No more than 30 hours of the
  total number required for any degree may be earned by a
  combination of correspondence and extension.
- A maximum of 6 hours of upper-level correspondence work completed in transfer will be accepted toward a degree program at UNT.
- Graduate credit is not accepted in transfer through correspondence study.

# **Auditing**

With the written permission of the department chair and the dean of the college or school in which the course is taught, an individual fully eligible to enroll in the university may attend a class as an auditor without receiving college credit. The auditor's name is not entered on the class roll, and the instructor does not accept any papers, tests or examinations from the auditor.

Attendance as an auditor may not be made the basis of a claim for credit in the course. Auditors pay a fee. Only one audit fee is required per semester regardless of the number of courses audited. Tuition and fee information is available online at sfs.unt.edu.

Permission forms for auditors are not available during the official registration period but may be requested in the offices of the academic deans after classes begin.

A person 65 years of age or older may enroll as an auditor and observer without credit and without payment of a fee, if space is available and if approved by the department chair and the appropriate dean. Such enrollment entitles the person to library privileges, but not to instruction in applied music or physical education, the use of laboratory equipment and supplies, or admission to university-sponsored fine arts events. (Texas Education Code, Subchapter 54, Section 54.210 as added in 1975)

# Registration

All registration and student-requested schedule changes are conducted via web registration at my.unt.edu. Specific information and instructions as well as dates are found online at www.unt.edu/registrar and at my.unt.edu.

# Late registration

Students who did not enroll during the official registration periods must pay an additional fee to enroll late. Refer to www.unt.edu/registrar for late registration information.

# **Concurrent registration**

A student in residence who wishes to enroll concurrently at another college must first secure the written permission of the appropriate dean at UNT. Failure to obtain advance approval may result in the refusal of the university to accept such work in transfer.

Students who earn transfer hours from other institutions while attending UNT must submit official transcript to the Registrar's Office at the end of each term. If the official transcripts are not received, then an academic hold may be placed on the student's account preventing future registration and receipt of an official UNT transcript.

Special provisions for avoiding more than one minimum tuition charge are available for students enrolling concurrently in more than one state-supported institution of higher education. Students planning concurrent enrollment are cautioned to check these provisions prior to enrollment in any state institution.

# Enrollment at the Universities Center at Dallas

Students may enroll for undergraduate courses offered by UNT at the Universities Center at Dallas (UCD), a Multi-Institutional Teaching Center (MITC) located at 1901 Main Street in downtown Dallas. The University of North Texas and The University of North Texas Dallas cooperate in offering upper-division undergraduate courses and graduate courses at UCD. For more information, call 214-752-5533.

# Enrollment at the Collin Higher Education Center

In 2009 the Texas Higher Education Coordinating Board approved the Collin Higher Education Center (CHEC), where UNT cooperates with Collin College and other universities in the offering of undergraduate and graduate courses and degrees. Enrollment is open to all UNT students.

The CHEC is located at 3452 Spur 399, McKinney, Texas 75059. For current information about the CHEC, call 972-599-3126, visit the CHEC web site at www.collin.edu/chec/, or call the UNT Office of Admissions at 940-565-2681.

# **Schedule changes**

For information concerning adding or dropping courses, consult the online Schedule of Classes at www.unt.edu/registrar or my.unt.edu.

#### Class attendance

Regular and punctual class attendance is expected. Although in general students are graded on intellectual effort and performance rather than attendance, absences may lower the student's grade where class attendance and class participation are deemed essential by the faculty member. In those classes where attendance is considered part of the grade, the instructor should inform students at the semester's beginning by a written notice. Departments and similar academic units have authority to establish a department or course attendance policy, so long as the policy is in accord with the above stipulations.

#### **Authorized absences**

Absences due to participation in sponsored activities must be approved in advance by the department chair and academic dean. Within three days after the absence, students must obtain authorized absence cards from the Dean of Students for presentation to their instructors. Students with authorized absence cards may make up the work missed when practical or be given special allowance so that they are not penalized for the absence.

## Absence for religious holidays

In accordance with state law, a student absent due to the observance of a religious holiday may take examinations or complete assignments scheduled for the day(s) missed, including those missed for travel, within a reasonable time after the absence. The student should notify the instructor of each class of the date of the anticipated absence as early in the semester as possible.

Only holidays or holy days observed by a religion whose place of worship is exempt from property taxation under Section 11.20 of the Tax Code may be included. A student who is excused under this provision may not be penalized for the absence, but the instructor may respond appropriately if the student fails to complete the assignment or examination.

# Students called to active duty

Texas Education Code 54.006 (f) indicates, "Beginning with the summer semester of 1990, if a student withdraws from an institution of higher education because the student is called to active military service, the institution, at the student's option, shall: (1) refund the tuition and fees paid by the student for the semester in which the student withdraws; (2) grant a student, who is eligible under the institution's guidelines, an incomplete grade in all courses by designating 'withdrawn-military' on the student's transcript; or (3) as determined by the instructor, assign an appropriate final grade or credit to a student who has satisfactorily completed a substantial amount of course work and who has demonstrated sufficient mastery of the course material." Students should contact the Dean of Students to determine their options.

In order to be eligible for options under this law a UNT student must produce a copy of his or her orders. Withdrawal may or may not require that the student talk with each instructor depending on timing in the semester; however, the latter two options do require that the student talk with his or her instructors and come to a decision as to which solution is best for each class given timing and circumstances. A student called to active duty may consider the following options:

- 1. withdrawal with a full refund of appropriate tuition/fees;
- 2. incomplete grades with the one-year I (Incomplete) removal time limit starting with the end of active duty; or
- a final grade if the course is essentially over and the course material has been sufficiently mastered (determined by the instructor).

# **Dropping courses**

Students who wish to drop a course before the 12th class day of fall or spring terms/semesters or before the equivalent dates for 8 week or summer sessions, may do so in the Registrar's Office or at my.unt. edu. After the 12th class day for fall or spring terms/semesters or the equivalent dates for 8 week and summer sessions, students must first submit a completed Request to Drop Class form to the Registrar's Office. Students applying for financial aid are required to notify Student Financial Aid and Scholarships before dropping any class to learn how it will affect current or future financial aid eligibility.

Students who drop a course between the 12th day of class and the designated day of a given semester's 10th week for fall or spring terms/semesters or the equivalent dates for 8 week and summer sessions, will receive a grade of W.

If a student fails to drop a course, even if the student does not attend the course, a grade of F will be recorded.

Faculty and staff will not drop a student from a course automatically for nonattendance; the student must initiate the process and complete the necessary steps to ensure the class is dropped.

Drop procedures must be completed by 5 p.m. on the deadline dates specified in the online academic calendar. After these dates, a student may not drop a course.

See the online Registration Guides at www.unt.edu/registrar for drop procedure and instructions.

# **Limitation of drops**

Students enrolling in higher education *for the first time* during the fall 2007 academic term or any term subsequent to the fall 2007 term may drop a total of six courses. This total includes any course a transfer student has dropped at another Texas public institution of higher education. This does not apply to courses dropped prior to the census date or to courses dropped with a grade of WF and does not apply if the student withdraws from the term or session.

Certain exceptions may be made to the six drop limit. Reasonable cause for exception could include, but is not limited to, the following:

- a severe illness or other debilitating condition that affects the student's ability to satisfactorily complete the course;
- the student's responsibility for the care of a sick, injured or needy person if the provision of that care affects the student's ability to satisfactorily complete the course;
- the death of a person who is considered to be a member of the student's family or who is otherwise considered to have a sufficiently close relationship to the student that the person's death is considered to be a showing of good cause;
- the active duty service as a member of the Texas National Guard or the armed forces of the United States of either the student or a person who is considered to be a member of the student's family or who is otherwise considered to have a sufficiently close relationship to the student that the person's active military service is considered to be a showing of good cause;
- the change of the student's work schedule that is beyond the control of the student and that affects the student's ability to satisfactorily complete the course.

Requests for exception to the drop limitation must be made in writing to the student's academic dean and must occur during the semester that the dropped course was taken.

#### Withdrawal from UNT

A student may withdraw from UNT at any time prior to two weeks before the first day of final examinations for fall or spring terms/ semesters or the equivalent dates for 8 week or summer sessions by making a request in the Dean of Students Office. The grade of W is recorded for each course in which a withdrawn student was enrolled.

Official dates and deadlines for withdrawing are specified in the online academic calendar.

To receive a refund for a parking permit, a student must return the permit to Parking Services located in the Highland Parking Garage.

# **Pre-finals days**

So that students can more adequately prepare for their final examinations, the University of North Texas (UNT) sets aside days preceding final examinations during which no new material may be disseminated, and extracurricular and organizational activities are suspended.

Any deviation from these requirements must be approved in advance by the appropriate dean or director.

On the Friday of the week immediately preceding final exams (reading day), no classes are held.

#### Final examinations

Faculty members are required to administer final exams at the designated times during the exam week of each long semester and during the specified day of each summer term if a final examination for the course is required. Any deviation from the published schedule must be approved in advance by the appropriate academic dean.

Students who have more than two final examinations scheduled on one day may request to reschedule one of the examinations on another day during the final examination period.

#### **Commencement exercises**

Commencement exercises are held in December and May. Diplomas are mailed to candidates approximately eight weeks after graduation has been verified.

# **Financial information**

# **Tuition and mandatory fees**

Tuition, fees, room and board are subject to increase or decrease without notice by action of the Texas Legislature and/or the UNT Board of Regents. Students are responsible for any additional amounts due UNT resulting from post audits and corrections, including all fees and waivers; i.e., registration assessing errors, changing from off-campus to on-campus classes, invalid employment waivers, etc.

For current information on tuition and fees, visit the Student Financial Services web site (sfs.unt.edu). Student Financial Services is open from 8 a.m. to 5 p.m. Monday through Friday.

## **Tuition plans**

Undergraduate students have the choice between two tuition plans—the Save and Soar Tuition Plan and the Traditional Tuition Plan.

For additional information concerning UNT's Tuition Plans for Undergraduate Students, go to sfs.unt.edu.

# **Undergraduate tuition rates**

#### (Tuition rates are subject to change)

Undergraduate students who attempt 30 or more semester credit hours beyond the minimum number of hours required for completion of their degree program will be charged additional tuition amounts. Hours attempted by students who initially enrolled as undergraduates prior to the 1999 Fall Semester are exempt. Please refer to www.unt. edu/registrar/Excesshours.htm for specific information.

Undergraduate students who enroll in certain courses more than twice will be charged additional tuition amounts. Please refer to www.unt.edu/registrar/Repeated\_Courses.htm for specific information

#### **Graduate tuition rates**

#### (Tuition rates are subject to change)

Please visit the Student Financial Services web site (sfs.unt.edu) for the most current tuition and fee rates.

# **Explanation of fees**

#### (Fees are subject to change)

Visit the Student Financial Services web site (sfs.unt.edu) for current fees

#### Distance education fee

A distance education fee is assessed to all distance education courses to support and enhance instructional design, management, delivery, maintenance, coaching and technology for distance education

#### **Student service fees**

Student service fees are assessed in proportion to the number of semester credit hours for which a student registers to cover the cost of student services that directly involve or benefit students, including, but not limited to, recreational activities, artist and lecture series, cultural entertainment series, debating and oratorical activities and student government.

#### Student union fee

A fixed student union fee is collected from each enrolled student for the purpose of operating, maintaining, improving and equipping the University Union. Activities financed by the student union fee are limited to those in which the entire student body is eligible to participate.

# Technology use fee

The technology use fee is collected in proportion to the number of credit hours for which a student registers to defray costs associated with the addition of instructional equipment in classrooms and student computer laboratories, development of the degree audit system and instruction-related activities in the Computing Center and classroom technology support.

## Library use fee

The library use fee is collected in proportion to the number of credit hours for which a student registers to support the development and maintenance of library collections and to provide expanded operating hours and other services to meet student needs.

#### Medical services fee

The fixed medical services fee is used solely to provide medical services to students enrolled at the university.

# International education fee

A fixed international education fee is collected from each enrolled student to be used in support of an international education financial aid fund. This fund allows an equal opportunity for all students to participate in student exchange and study abroad programs.

#### **Publication fee**

A fixed publication fee is collected from each enrolled student to defray costs associated with publication and distribution of schedules of classes, catalogs and other publications available to all students.

## Recreational acility fee

A fixed recreational facility fee is collected from each enrolled student for the purpose of operating the Pohl Recreation Center.

# **Transportation fee**

The transportation fee supports the shuttle bus system that transports students to, and around, various locations on campus.

# **Undergraduate Advising Fee**

The undergraduate advising fee supports the advising process for undergraduate courses.

#### Master's Advising Fee

This fee is assessed each semester to students in the Colleges of Engineering; Health and Public Service; Merchandising, Hospitality and Tourism; Education; Information; as well as programs offered by the Toulouse Graduate School (Advanced Data Analytics, Interdisciplinary Studies, graduate non-degree seeking and graduate preparation programs).

#### **International Student Fee**

A fixed international student fee is charged to all non-immigrant visa students for each term in which they enroll in UNT.

# Intercollegiate athletics fee

This fee is assessed in proportion to the number of semester credit hours for which a student registers to cover the cost of UNT athletics programs, capped at 15 hours.

#### **Environmental services fee**

The Environmental Services Fee is used to fund environmentally related projects/activities on campus such as energy and water conservation, waste reduction and recycling, sustainable campus dining, and student projects. The fee is waived for students taking all their courses off campus and is not charged for summer sessions.

# **Property deposit**

All students, except those enrolled in only off-campus courses or covered by other specific waivers, must pay a \$10.00 General Property Deposit at the time of first registering at the university. The deposit may be forfeited to cover any outstanding financial obligation at the university. The fee will otherwise be refunded to the student upon withdrawal or graduation from the university. If the deposit has not been refunded to the student within 4 years of the last enrollment, it will be forfeited as specified by state law.

#### Instructional fees

Instructional fees vary by course and fall into the following two fee categories. Please note that for billing purposes, these fee categories are grouped together and billed as one instructional fee.

Instructional fees will be due at the time of registration or the payment deadline for early registered students. These fees are refundable according to the university refund policy. If a student desires to know what portion of an instructional fee falls into each category listed below, they may contact Student Financial Services at 940-565-3225 or the Registrar's Office at 940-565-2111.

#### **Academic fees**

Academic Fees are assessed at the college/school level based on the estimated costs of goods and services related to instruction at the college/school level. Academic fees are charged to cover consumable supplies, syllabi, tests, classroom guest lecturers, salaries and wages of employees who assist in the preparation, distribution, and supply of classroom materials and some equipment purchases related directly to student participation in the classroom.

#### **Laboratory fees**

Laboratory fees are only applicable to courses that require students to register for a laboratory section. Laboratory fees are collected to cover the cost of materials and supplies used by students in the laboratory. The laboratory fee may not be less than \$2 nor more than \$30 for any one term/semester or summer session.

#### Admission application fee

All undergraduate applicants to the University of North Texas must pay a non-refundable admission application fee.

#### Late application fee

Undergraduate students applying after the application deadline must submit a \$90 application fee.

# Credit by exam fee

UNT awards undergraduate college credit on the basis of local and national examinations, subject to general limitations. Examinations are offered by several UNT departments. A fee is collected from those students who take credit by examination at UNT.

# **Universities Center at Dallas fee**

Students enrolling for upper-division undergraduate courses or graduate courses offered by the partner universities of the Universities Center at Dallas may enroll at their home institution for courses offered by the other UCD universities. UCD is located in downtown Dallas. Please visit sfs.unt.edu/explanation-fees for current per credit fee.

#### **Collin Higher Education Center fee**

Students enrolling in undergraduate or graduate courses offered at the Collin Higher Education Center (CHEC) are assessed a Collin Higher Education Fee. The CHEC, a partnership with Collin County Community College, is located at 3452 Spur 399, McKinney, Texas. Please visit sfs.unt.edu/explanation-fees for current per credit fee.

#### **International Student Health Insurance fee**

Health insurance is required for international students and will be assessed automatically at the time of registration for classes. For further information, please contact the UNT Student Health and Wellness Center.

# **Optional Practical Training fee**

All F-1 international students who choose to apply for Optional Practical Training (OPT), will be required to pay the OPT Case Management Fee. This fee is separate from the USCIS application fee. This fee will be used to subsidize the costs associated with the mandatory case management for students on Optional Practical Training after graduation.

# College of Business Graduate Program Fee – Master's

College of Business master's students are charged a Master's Program Fee. The purpose of the fee is to provide enhanced support services to College of Business master's students.

# College of Information PhD Learning Technology online distance delivered students

This program is a cohort-based program consisting of up to seven semesters (including summer). These students are charged a Distance Delivered Fee. The purpose of the fee is to provide enhanced support services.

# Executive MS in Computer Science – New College at Frisco

Students enrolled in the Executive MS in Computer Science at the New College at Frisco are charged a program fee per semester credit hour. The purpose of the fee is to provide specialized program costs and support services for the Executive Master's students at the Frisco Campus.

## **Out-Of-State-Teaching Fee (OSTF)**

Non-resident students living outside of Texas while taking UNT courses (typically online) are charged an Out-of-State Teaching Fee in lieu of tuition and instructional fees. This fee must cover the cost of instruction and is set by each academic department annually. The OSTF rates (per semester credit hour) can be found at sfs.unt.edu/explanation-fees for current per credit fee.

\* The following fees are waived if students are only enrolled in courses at locations other than the Denton campus: Property Deposit, Medical Service Fee, Student Union Fee, Recreational Facility Fee, Transportation Fee, Environmental Services Fee and Intercollegiate Athletics Fee.

#### Option to pay tuition by installment

The Texas Legislature has the authority to modify or eliminate installment payment of tuition at each regular or called legislative session.

UNT provides for the payment of tuition and fees during the fall and spring terms/semesters through the following alternatives:

- Full payment of tuition and fees upon registration or by the payment deadline for early registration; or
- Selection of the installment plan. By selecting the installment plan, the student understands that it is a contractual agreement and agrees to make the installment payments by the due dates indicated.

Tuition and fees must be paid in full for each summer term upon registration or by the payment deadline for early registration. Tuition payment by installment is not offered during the summer.

## Non-refundable fee for tuition by installment

Administrative fee: \$20.00

**Note:** A \$20.00 non-refundable administrative fee will be charged to the student's account each semester the installment plan is selected. Students who choose the installment plan option recognize they are in a contractual relationship and accept the terms of the installment plan contract.

A student who fails to make payment of tuition and fees (including any incidental fees) by the due date may be prohibited from registering for classes until full payment is made. A student who fails to make payment prior to the end of the term/semester may be denied credit for the work done that term/semester.

See Student Financial Services at sfs.unt.edu for installment plan information.

# **Tuition and fee payments**

Credit card payments (MasterCard, Visa, American Express and Discover) and check payments may be made through self-service at my.unt.edu. Credit and debit card payments are assessed an additional 2.7% service fee to cover the processing cost for the payment. Electronic checks are accepted with no additional fee.

Tuition and fee payments also may be made by personal check, money order, cashier's check, or cash at the Eagle Student Services Center. Student Financial Services requires the student identification number to be recorded on all check and money order payments made in person.

Bills are not mailed for registration. Account balances and schedule information may be obtained through self-service at my.unt.edu.

## **Cash payments**

Cash payments are accepted at Student Financial Services in the Eagle Student Services Center. Please do not mail cash payments.

#### **Tuition and fee policies**

Tuition covers undergraduate and graduate work. Tuition and the various fees provide limited health services and admission to university-sponsored fine arts and athletic events. Instructional fees, materials fees and private instruction fees are additional. Students must purchase their own textbooks and supplies.

Fees charged for late registration, graduation and regalia, late filing for graduation and miscellaneous items are noted at sfs.unt.edu.

#### **Full-time tuition rate information**

(Timely graduation tuition program)

At UNT, **full-time undergraduate** students **pay the same amount** for university tuition and fees in a fall or spring semester **regardless of how many hours they take.** Students are considered full-time once they register for 12 hours or more. More information is available at sfs.unt.edu.

#### Student financial obligation agreement

Each semester, prior to registering for classes, a student is required to accept the Student Financial Obligation Agreement. For additional information, visit sfs.unt.edu.

# Tuition charged for excess and repeated credit hours

Undergraduate students who attempt 30 or more semester credit hours beyond the minimum number of hours required for completion of their degree program will be charged additional tuition amounts. Students initially enrolled prior to the 1999 Fall Semester are exempt. Please refer to www.unt.edu/registrar/Excesshours.htm for specific information.

Undergraduate students who enroll in the same course more than twice will be charged additional tuition amounts. Please refer to unt. edu/registrar/Repeated Courses.htm for specific information.

# Residency regulations for tuition purposes

A student's state of residency is determined prior to first enrollment in accordance with rules and regulations established by the Texas Higher Education Coordinating Board. Detailed information on residency is available at the state website http://www. collegeforalltexans.com. New students may contact the Office of Admissions for detailed residency information. Current UNT students should contact the Registrar's Office. Students who are not legal residents of Texas must pay nonresident tuition, including the statutory tuition charges and standard university fees approved by the Board of Regents. Admission requirements for nonresidents are the same as for resident students. Effective Fall 2015, undergraduate Oklahoma residents will pay a decreased rate for nonresident tuition.

Certain residency exceptions do not affect actual residency status but do allow for a nonresident tuition exemption. Refer to "Tuition and Fee Waivers" in this section for further information.

# Responsibility of the student

Students are notified of their residency classification upon admission and are responsible for providing accurate residency information to the Office of the Registrar. Any questions concerning residence must be discussed with residency determination officials in the Office of Admissions and/or Registrar's Office prior to registration.

Any student erroneously classified as a resident will be reclassified and required to pay all out-of-state tuition due. Attempts to evade nonresident fees may subject the student to the statute penalty and to possible disciplinary action.

# Change of status nonresident to resident

A student who is at any time classified as a nonresident retains nonresident status until reclassification as a resident is applied for and officially approved by the Registrar.

# Change of status resident to nonresident

Students who are classified as residents but become nonresidents by virtue of any change of domicile must notify the Registrar of such change immediately. Students who believe they have been erroneously classified have the opportunity for appeal. The appeal is to be made to the authority by whoever the original classification was assigned, either in the Office of Admissions or Registrar's Office.

#### **Tuition and fee waivers/exemptions**

Several exemptions and waivers are available to qualifying students who meet the specific state requirements for each individual waiver or exemption. Waiver/exemptions refunds must be requested during the term/semester application is made. Such requests must be made prior to the 12th class day in long terms/semesters, the 4th class day in the summer sessions (except 3W1), 2nd class day in 3W1. Requests for retroactive refunds are not honored. Information regarding waivers and exemptions is available at Student Financial Services or at sfs.unt.edu. Posted waivers/exemptions are subject to post audit and correction.

#### **Exemptions and waivers**

For a complete list, please see: sfs.unt.edu/waivers-and-exemptions.

#### **Tuition and fee refunds**

A student who drops a course or withdraws from the university within certain time periods may be entitled to a partial refund of tuition and fees. These refunds are calculated according to the category and time schedule listed at sfs.unt.edu/class-drop-and-withdrawal-refunds. Refund periods and rates are subject to change by the state legislature. Delinquent payment fees, late registration charges, publication fees and installment handling fees are non-refundable. Any financial obligation to UNT must be resolved before any refunds will be made.

## Class drop refunds

Refunds are made for any course dropped through the 12th class day for the long term/semester; corresponding dates are set for 8 week and summer terms/sessions. See the Academic Calendar for specific dates. The semester's first class day is always the first official university day of classes and not the first day of an individual's class.

**Note**: If all classes for the semester are dropped, see "Schedule of Withdrawal Refunds."

Students applying for financial aid are required to notify Student Financial Aid and Scholarships before dropping any class to learn how it will affect current or future financial aid eligibility.

## Withdrawal from the university

Withdrawal refunds are determined by the number of enrolled semester credit hours at the time of withdrawal. Withdrawal percentages are applied to the total amount of tuition and fees as prescribed by state law, not the amount paid. The withdrawal schedule and proration of tuition and fees are mandated by Texas Education Code 54.006. Prorated withdrawals from the term or session are calculated based on the first day of class up to the date of the withdrawal.

Additional information may be found at sfs.unt.edu or by contacting Student Financial Services.

The withdrawal schedule and percentage of a pro-rata refund pertain to total withdrawal from the term/semester and are mandated by federal law. Please contact Student Financial Aid and Scholarships regarding pro-rata refund schedules and percentages.

#### Schedule of withdrawal refunds

Please see sfs.unt.edu for additional information about class drop and withdrawal refunds.

\*Note: Some fees are non-refundable.

Delinquent payment fees, late registration charges, publication fees and installment handling fee are non-refundable.

# Refund of property deposit

Each student who enrolls pays a property deposit that is refundable upon final withdrawal or graduation provide that money is not owed to the university.

# **Tuition rebates for certain undergraduates**

Section 54.0065 of the Texas Education Code provides up to a \$1,000 tuition rebate to students. To be eligible for a rebate under this program, a student must:

- have enrolled for the first time in an institution of higher education in the Fall 1997 semester or later;
- request a rebate for course work related to a first baccalaureate degree received from a general academic teaching institution;
- have been a resident of Texas and have been entitled to pay resident tuition at all times while pursuing the degree;
- 4. if enrolled for the first time in Fall 2005 or later, graduate within four calendar years for a four-year degree or within five calendar years for a five-year degree if the degree is in a program determined by the Texas Higher Education Coordinating Board to require more than four years to complete; and
- have attempted no more than 3 hours in excess of the minimum number of semester credit hours required to complete the degree under the catalog under which the student will graduate.

Hours attempted include transfer credits, course credit earned exclusively by examination (except that, for the purpose of this program, only the number of semester credit hours earned exclusively by examination in excess of 9 semester credit hours is treated as hours attempted), courses dropped after the official

census date, for-credit developmental courses, optional internship and cooperative education courses and repeated courses. Courses earned prior to high school graduation as well as courses dropped for reasons that are determined by the institution to be totally beyond the control of the student shall not be counted.

For students concurrently earning a baccalaureate degree and a Texas teaching certificate, required teacher education courses shall not be counted to the extent that they are over and above the free electives allowed in the baccalaureate degree program.

Effective for students who enroll for the first time in Fall 2005 or later, an otherwise eligible student may be eligible for a tuition rebate without satisfying the requirements of item 4 above if the student is awarded a baccalaureate degree and the institution determines that the student's failure to comply was caused by a demonstrated hardship condition.

For additional information concerning tuition rebates, contact the Registrar's Office or your academic advisor.

# **General financial policies**

UNT is a state-assisted institution subject to state laws. Extension of credit is prohibited and all financial obligations to the university must be paid when due. Tuition, fees, and room and board are subject to change by action of the Texas Legislature or the Board of Regents. Any outstanding financial obligation must be resolved before an official transcript will be released to a current or former student.

#### **Correction of errors**

Students are responsible for any additional amounts due UNT resulting from auditing and correction of records after registration fees have been paid including all registration assessment errors, change from off-campus to on-campus classes, invalid employment waivers, etc.

## Payments by third party

Checks issued by a third party in payment of a student's tuition, fees or other charges made by UNT should be made payable to UNT. The student's name and/or student ID number should be included on the payment.

#### **Returned checks**

A returned check is defined as any check, similar sight order or electronic bank draft returned to the university unpaid due to no fault of the bank or the university.

Upon receipt of a returned check, notification is mailed to the issuing party or the individual in whose behalf the check was issued. The address on the check and/or the address in the official university records is used. The check is payable on or before 10 working days from the date of the notice. Only cash, cashier's check or money order is accepted for payment of the returned check and service charge (\$25 per check).

Check-issuing privileges are suspended while any returned check and/or service charge are outstanding.

If the university receives three or more returned checks during an academic year, the check-issuing privileges of the individual will be revoked.

If all attempts to collect a returned check have failed, civil or criminal legal action may be taken in accordance with Texas state law (Sections 31.06 and 32.41 of the Texas Penal Code).

# **Hazlewood Act for Texas Veterans**

Information on tuition waivers for qualified veterans are available online at sfs.unt.edu or at Student Veteran Services, Sage Hall, Suite 236

#### **Financial Assistance**

Student Financial Aid and Scholarships (SFAS) at the University of North Texas offers a variety of options to assist students in financing their education. For more information on financial aid and scholarships at UNT, please visit financialaid.unt.edu, come by our offices in the Eagle Student Services Center, or call 940-565-2302.

# Aid application period and priority dates

The Free Application for Federal Student Aid (FAFSA) or Renewal FAFSA is available each October 1 for the upcoming UNT academic year (fall, spring, summer). Students are encouraged to apply online at www.fafsa.gov. Students whose application files are completed by priority dates are ensured first consideration for awards. Application data (from the FAFSA or Renewal FAFSA) is received electronically from the Central Processing System (Federal Student Aid Programs) through which applications are processed. The application data must reach our office before a file can be processed.

#### **UNT's Priority Dates:**

• Fall/spring term/semester: January 15

Spring term/semester only: August 15

• Summer term/semester: February 15

A separate UNT summer aid interest form/application must be completed for summer financial aid. This form is available online (my.unt.edu) early in the spring term/semester for the following summer term/semester. The FAFSA for the year preceding the summer is also required.

# **General aid eligibility requirements**

Before any assistance is granted (Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal TEACH Grant, Federal Work-Study, or loans from the Federal Direct Loan Program), general eligibility and program requirements must be met. To be eligible for financial aid students must:

- establish eligibility by completing and submitting the Free Application for Federal Student Aid (FAFSA) or Renewal Application;
- not be in default on any Title IV loan (Federal Perkins, Direct PLUS, FFEL PLUS, Federal Stafford Loan [FFEL], Federal Direct Subsidized or Unsubsidized Loan), or owe a refund or repayment on educational funds received at any institution;
- be a U.S. citizen or eligible noncitizen\*;
- be registered with the Selective Service if you are a male at least 18 years old born after December 31, 1959 (most males between the ages of 18 and 25, including permanent residents and other eligible noncitizens, are required to register with Selective Service);
- enroll in and maintain at least a half-time class load;
- use all funds received through financial aid for educational purposes;
- be accepted for admission by the university and enrolled in a degree or certification program;
- be making Satisfactory Academic Progress (SAP);
- have a valid Social Security Number;
- have a high school diploma or a GED (general equivalency diploma); and
- not be convicted for the possession or sale of illegal drugs for an offense that occurred while receiving federal student aid.

Note: Visiting/transient students are not eligible for financial aid.

\*Non-documented students may qualify for state assistance under Texas Senate Bill 1528. Students should visit *financialaid.unt.edu* for more information.

## Special conditions for financial aid applicants

#### **Enrollment**

Students in an academic program under the undergraduate career (major or concentration) are required to enroll in at least 6 undergraduate hours per term/semester to be considered for financial aid programs.

Financial aid recipients must notify Student Financial Aid and Scholarships (SFAS) before dropping courses. Current award year or future aid eligibility may be affected.

Enrollment hours for financial aid eligibility and loan deferment may differ. Students needing certification of enrollment for loan deferment purposes should visit the UNT Registrar's Office. Also see "Enrollment Certification" in the Enrollment section of this catalog.

#### Official withdrawal from UNT

If a student has registered for classes and decides not to attend UNT, he or she **must** notify **both** Student Financial Aid and Scholarships (SFAS) **and** the Dean of Students Office as early as possible.

If circumstances require that the student withdraw from all classes, SFAS strongly encourages the student to contact his or her academic advisor and Student Financial Aid and Scholarships before making the final decision. The consequences of withdrawing from all classes can be explained and clearly illustrated.

If the student has already made the decision to withdraw, he or she must begin the withdrawal process with UNT's Dean of Students Office. For online information on how to drop a course or withdraw from UNT, including official dates and deadlines, please visit the academic calendar.

If a student officially withdraws, ceases attendance, or is administratively withdrawn from UNT, federal regulations require post-secondary institutions to calculate the amount of Federal Title IV funds (aid) earned during the term from which the student withdrew, unless the student has satisfied the requirements for graduation. Students enrolled in modules (i.e., 8W1, 8W2) who have successfully completed the equivalent of half-time enrollment and/ or a session or combination of sessions comprising at least 49% of the total term length are not considered to have withdrawn for Return of Title IV Funds purposes. Factors considered in this federally mandated calculation include: number of days in the payment period, date of withdrawal/number of calendar days the student attends before total withdrawal as determined by SFAS (excluding scheduled breaks of at least 5 days in length), the total amount of Title IV aid eligibility, tuition and fee charges, on-campus room and board charges (if applicable), and class attendance.

The percentage of time spent in attendance is the percentage of federal funds the student has earned. Other funds received are unearned.

After Student Financial Aid and Scholarships personnel applies the federally mandated calculation, unearned Federal Title IV funds (aid) will be returned to the programs from which the money was paid to the student (or parent) in the following order:

- Federal Direct Unsubsidized Loans
- Federal Direct Subsidized Loans
- Federal Direct Grad PLUS Loans
- Federal Direct Parent (PLUS) Loans
- Federal Pell Grants
- Federal Supplemental Educational Opportunity Grants (FSEOG)
- Teacher Education Assistance for College and Higher Education (TEACH) Grant
- Iraq Afghanistan Service Grants

It is possible the student will owe a repayment of unearned financial aid funds to the university if he or she ceases attendance prior to the sixty percent (60%) completion point of any payment period for which the student has received financial aid funds. The completion point is based on the total number of class days in a payment period.

If it is determined that the student owes a repayment of funds, he or she will receive notification from SFAS. The student can also check the balance owed through the myUNT student portal. Students who owe a balance to UNT from a previous academic year will not be disbursed aid until the balance owed is paid. Official transcripts are not released to any student who has an unpaid account or has defaulted on loans received from any university.

#### Summer term official withdrawal from UNT

For Title IV (Federal Aid) purposes, a student who has enrolled in a session(s) offered in the summer term/semester and does not complete the session(s) in which the student was enrolled is considered to have withdrawn and a Return to Title IV calculation (R2T4) will be completed. Students will not be considered to have withdrawn for the summer term/semester if the student successfully completes (receives a passing grade):

- The student gives the Student Financial Aid and Scholarships office at UNT written confirmation that they will attend a session in the summer term/semester that begins within 45 days from the date of withdrawal. The written confirmation must be provided at the time that would otherwise have been a withdrawal.
- All requirements for graduation from his or her program before completing the days or hours in the period that the student was scheduled to complete.
- One module that includes 49% or more of the number of days in the payment period.
- A combination of modules that when combined contain 49% or more of the numbers of days in the payment period; or
- Course work equal to or greater than the course work required for the institution's definition of a half-time student.

That student may change the date of their attendance in a later session than originally indicated, provided that:

- The later session begins in the summer term/semester;
- The student makes the change in writing prior to the date they had previously confirmed.

If the student does not attend the later session(s), the date of withdrawal from the previous session will be used as the official withdrawal date to determine the amount of Title IV (Federal Aid) to be returned to the U.S. Department of Education (R2T4 calculation).

#### **Basic calculation example**

- Payment period is 113 calendar days. Student attends and participates in academically related activities for 54 days and then withdraws.
- Student stayed 47.8 percent of the number of payment period days. 52.2 percent was unearned.
- Student tuition and fees for payment period totaled \$547.20.
- Federal Title IV funds (aid) disbursed to the student during
  - O \$1,312.00 Federal Direct Subsidized Loan
  - o \$1,562.00 Federal Pell Grant
  - \$2,874 total 47.8 percent equals \$1,373.77 earned aid
- Since earned aid is less than disbursed aid, funds must be returned to the programs from which they were paid to the student (or parent).
- \$2,874 disbursed aid minus \$1,373.77 earned aid equals \$1,500.23 unearned aid.
- It is assumed by regulations that Federal Title IV funds (aid) paid for institutional charges (tuition/fees and room/board if applicable).
- The school pays the lesser of the total unearned (\$1,500.23) aid or the unearned institutional charges \$547.20 multiplied by 52.2 percent equals \$285.64
- The college must return \$285.64 to the lender since the loan funds are returned before grant funds and the school pays its share first

- Once the school repays its unearned share (\$285.64), the remaining unearned share (\$1,214.59) must be returned (repaid) by the student.
- Of the remaining loan amount to be paid (\$1,026.36), the student by regulation will repay the usual monthly repayment by the terms of the loan promissory note.
   Therefore, there is no immediate repayment of loan funds to the lender.
- The remaining amount of the student's unearned share (\$1,214.59 minus \$1,026) is \$188.23; however, by regulation, 50 percent of all Federal Title IV grant aid disbursed plus Federal Title IV grant aid awarded that could have been disbursed is protected. In this example, the Federal Title IV grant aid awarded was \$1,562 in Federal Pell Grant and it was all disbursed. Therefore, \$1,562 multiplied by 50 percent equals \$781 is protected.

If circumstances allow the student to remain in school past the sixty percent (60%) completion point of any payment period, then there is a definite advantage. No calculations are required for students who attend past the 60 percent completion point. There will however be other consequences to consider. Withdrawing from classes will affect future eligibility for financial aid and possibly affect future scholarship disbursements. Students must meet Satisfactory Academic Progress (SAP) requirements to maintain eligibility for financial aid as defined by Student Financial Aid and Scholarships. Loan grace period will begin and repayment of loan funds begins six months after graduation or the last day of at least half-time enrollment.

Students who do not officially withdraw through the UNT Dean of Students Office/cease attending class are also subject to the federally mandated calculation described above. If the student's last date of attendance in an academically related activity is unknown to the school, then the student's last date of attendance used in the federally mandated calculation will be the midpoint of the payment period.

For full policy information, please view consumer information for Return of Title IV funds.

#### Unofficial withdrawal from UNT

Financial aid is awarded to students with the expectation that they will attend classes for the entire payment period and that they will make progress toward a degree. If the student fails to earn a passing grade in all of their classes, the student is considered an Unofficial Withdrawal. Student Financial Aid and Scholarships (SFAS) is required to calculate the amount of Federal Title IV funds (aid) earned during the term in which the student did not earn at least one passing grade. The student will be required to have at least one of the student's instructors e-mail SFAS the student's last date of attendance in an academically related activity. If the instructor provides SFAS with the student's last date of attendance by the prescribed deadline, then SFAS will use this date as the student's withdrawal date in the federally mandated calculation described above. If the student's last date of attendance in an academically related activity is unknown to the school by the prescribed deadline, then the student's last date of attendance used in the federally mandated calculation will be the midpoint of the payment period or the equivalent date for summer sessions of enrollment.

If it is determined that the student never attended any of the classes for which the student (or parent) was paid, then the funds (aid) are considered to have not been earned. As a result, all funds (aid) will be canceled and returned to the programs from which they were awarded. The student will then owe a complete repayment to the university.

If a student who began attendance, does not officially withdraw, and subsequently fails to earn a passing grade in at least one course offered over an entire period, the institution must assume, for Title IV purposes, that the student has unofficially withdrawn, unless the institution can document that the student completed the enrollment.

If a student receives Title IV (Federal) grant or loan assistance and does not begin attendance in a payment period or period of enrollment, the student is considered to be ineligible for any Title IV aid.

Unofficially withdrawing from classes, not beginning attendance or failing to complete and pass registered hours may affect future eligibility for financial aid. Satisfactory Academic Progress requirements must be met to maintain eligibility for financial aid as defined by SFAS.

#### Satisfactory academic progress

Federal and state regulations require that each student maintain Satisfactory Academic Progress (SAP) to be eligible for financial aid programs. Minimum standards must be achieved by the end of any given enrollment period at UNT. Satisfactory Academic Progress (SAP) is defined in both pace of progression and qualitative measures

- Students must successfully complete at least 67% of cumulative attempted credit hours to be meeting the pace of progression requirements. Pace is measured by dividing the cumulative number of hours successfully completed by the cumulative number of hours attempted.
- The minimum cumulative UNT grade point average for undergraduate students is 1.8 for the first term and a 2.0 for all subsequent terms/semesters.

## **Maximum hour limit**

In addition to meeting pace of progression and qualitative measures, undergraduate students cannot exceed hours above 150 percent of their required degree plan. The maximum includes all hours registered for, earned or attempted at any institution of higher education. This includes hours dropped, withdrawn from, failed, duplicated or never completed. It also includes hours earned in the Armed Forces.

All academic requirements are effective whether or not financial aid has ever been applied for or received. Students should visit financialaid.unt.edu for the latest information regarding satisfactory academic progress and the appeal process.

#### Minimum hour limit

Students in an academic program under the undergraduate career (major or concentration) are required to enroll in at least 6 undergraduate hours per term/semester to be considered for financial aid programs.

#### Failing grades

If a student fails to earn a passing grade in any of their classes within a term, attendance in all classes within that term will be reviewed. If attendance cannot be confirmed via official UNT records, or the last date the student participated in an academically related activity cannot be documented, Student Financial Aid and Scholarships personnel will apply the federally mandated calculation for the return of financial aid funds. Unearned Title IV funds (aid) will be returned to the programs from which the money was paid to the student (or parent), and it is possible that the student will owe a repayment to the university.

#### **Grant programs**

A grant is a type of need-based aid that does not require repayment. Financial need is determined by the Free Application for Federal Student Aid (FAFSA).

At UNT, the only application needed annually to be considered for federal, state and institutional aid is the Free Application for Federal Student Aid (FAFSA). However, eligibility for a grant program does not guarantee an award. Applicants are considered based on the date of their application while considering the FAFSA-determined Expected Family Contribution (EFC). The earliest applicants with a completed award file have the best opportunity to be considered for available grant funding. We encourage students to apply early, making sure to complete any requests for additional information so awards can be finalized.

For descriptions, amounts and eligibility requirements of federal, state and institutional grants offered at UNT, please visit *financialaid. unt.edu*.

## **Emerald Eagle Scholars**

The Emerald Eagle Scholars program provides access to higher education for academically talented students with high financial need, and connects them to campus resources while engaging them in activities that facilitate their intellectual engagement, academic success and, ultimately, the timely completion of their bachelor's degrees.

There are three program pillars that make the Emerald Eagle Scholars program a great benefit to new students. The Financial Support Pillar enables all Emerald Eagle Scholars to have the average cost of tuition and fees for 15 semester credit hours paid for through a combination of federal, state and institutional aid for a period of up to eight consecutive long semesters (or four years). The Academic Success Pillar sets high expectations for all Emerald Eagle Scholars requiring that all students maintain full-time enrollment and maintain a 2.5 cumulative UNT GPA per academic year, all while being supported by various academic readiness programs on campus. The Campus Connection Pillar allows students to connect and take part in the richness of university life, while being guided by both peer and faculty/staff mentors and advisors.

To be eligible for the Emerald Eagle Scholars program, a student must be a Texas resident and an incoming freshman from a household with an adjusted family income that does not exceed \$40,000 per year. Continued eligibility is contingent on the student earning no less than 12 semester credits and no less than a 2.5 UNT GPA each fall and spring term. For additional information, please visit the Emerald Eagle Scholars web site at financialaid.unt.edu/emerald-eagle or visit the Emerald Eagle Suite located in Sage Hall, Room 240.

#### **Benefits for veterans**

Students who have served in the military or who are currently serving or dependents/spouses of our veterans may be eligible to receive benefits from the federal Department of Veteran Affairs (VA). To find out what you may be entitled to receive, veterans will want to fill out and submit the VA online application at www.gibill.va.gov.

Current Educational Programs:

- Selected Reserves (Chapter 1606)
- Reserve Educational Assistance Program (Chapter 1607)
- Montgomery GI Bill® (Chapter 30)
- Post 9/11 GI Bill® (Chapter 33)
- Survivors and Dependents Assistance Program (Chapter 35)

VA Certifying Officials at UNT are located in Sage Hall, Suite 236 and can be reached at 940-369-8021. Veterans or dependents/spouses who have questions concerning the administration of benefits should contact the Regional VA Office at 1-888-442-4551.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at https://www.benefits.va.gov/gibill.

#### **Hazelwood Act for Texas veterans**

Information on tuition waivers for qualified veterans are available online at sfs.unt.edu or at Student Veteran Services, General Academic Building, Room 102.

#### **Employment**

# **Federal Work-Study Program**

Eligibility for the Federal Work-Study Program is determined by established financial need, availability of monies to make awards, at least half-time enrollment and maintaining Satisfactory Academic Progress (SAP) standards as defined by Student Financial Aid and Scholarships. Students awarded Federal Work-Study are eligible to earn the financial aid amount through a work-study job. Students may begin the job search process by visiting the Career Center web site at careercenter.unt.edu. Most positions require 15–20 hours of work per week. Students apply directly to the department with the

open position listed on the web site. The employing department will select students for interviews based on availability of funds, applicant's skills, educational background and interest. Eligibility must be confirmed each term/semester to continue in the Federal Work-Study Program.

#### **Career Center**

The Career Center, located in Room 202 of Sage Hall, provides a variety of employment opportunities on and off campus to currently enrolled students in order to help them offset their college expenses and develop good employment records. For information, call 940-565-2105 or e-mail careercenter@unt.edu. Information regarding on-and off-campus jobs can be accessed on each student's my.unt.edu web site. Simply log into Handshake for more information.

# Loan programs

# Federal Direct Subsidized and Unsubsidized Loans

Federal Direct Subsidized\* Loans are awarded based upon established financial need, cost of attendance, at least half-time enrollment and maintaining Satisfactory Academic Progress (SAP) standards as defined by Student Financial Aid and Scholarships (SFAS). Federal Direct Unsubsidized Loans, Federal Direct Parent PLUS Loan for the parents of dependent undergraduate students and Federal Direct Grad PLUS for graduate students are awarded based on the same terms and conditions with the exceptions of demonstrating financial need. The Free Application for Federal Student Aid (FAFSA) must be submitted before an award will be determined. Maximum annual and aggregate limits are imposed based upon classification and dependency status.

Repayment begins six months after graduation or the last day of at least half-time enrollment.

\*Effective Fall 2012, graduate and professional students are no longer eligible to receive subsidized loans.

# **Scholarships**

The University of North Texas offers competitive academic scholarships to entering freshmen, transfer and continuing students to assist with educational related expenses. Many students compete for scholarships, which are awarded on merit and on a first-come, first-served basis to students enrolling in the fall and spring term. We recommend students apply and complete admission to UNT as early as possible to compete for available scholarship opportunities.

The availability of all scholarship funding is affected by many factors such as the state's economy and the stock market's performance. The office of Student Financial Aid and Scholarships (SFAS) coordinates all scholarship awards once they have been submitted for processing.

#### **Incoming student scholarships**

Most UNT scholarships for incoming students (entering freshmen and transfer students) are administered by Student Financial Aid and Scholarships (SFAS), with students competing for a limited number of renewable scholarships. These scholarships are awarded based on a student's academic performance in high school or previous college or university using academic information from their Application for Admission.

Scholarships available for incoming students include:

- UNT Meritorious Scholarships for National Merit Finalists
- UNT Excellence Scholarship
- UNT Transfer Scholarships (including Phi Theta Kappa members)

In the case of the UNT Meritorious Scholarship for National Merit Finalists, National Merit Scholarship Corporation notification indicating UNT as the school of choice is required to be considered.

Please see the following webpage for additional details: https://financialaid.unt.edu/scholarships.

## **Continuing student scholarships**

The majority of scholarships for continuing students are awarded in academic departments. Student should check with specific departments for additional details.

Entering and continuing students may complete a scholarship profile by accessing the Eagle Scholarship Portal (https://unt. academicworks.com/) to be considered for a number of scholarship opportunities. The portal becomes available annually in late fall. Students are encouraged to complete their scholarship profile as early as possible. Students must use their campus credentials assigned during the admission process (active EUID and password) to access the portal.

We encourage students to visit the UNT Student Financial Aid and Scholarships' website for additional details at https://financialaid.unt.edu/scholarships.

#### **Room and board**

Room and board fees are subject to increase and decrease by action of the Texas Legislature and/or the Board of Regents of the University of North Texas. During 2021-2022, room and board based upon a double occupancy room with a seven-day meal plan cost \$10,026.08 per year. Rates for triple occupancy, single occupancy and private single occupancy rooms vary the room rate for the 2021 - 2022 academic year

For information concerning room and board charges, consult the Housing web site at housing.unt.edu.

# Campus resources

# **Division of Student Affairs**

The Division of Student Affairs (DSA) provides opportunities for students and the campus community to cultivate academic, personal and professional success. We enhance the student experience through a wide array of intentional programs, services and activities that support the life cycle of our students.

In addition, the division champions the overarching goals of the university by implementing programs essential to realizing UNT's mission and goals.

Departments and programs within the DSA include: Career Center, Center for Fraternity and Sorority Life, Center for Leadership and Service, Center for Student Affairs at Discovery Park, Coliseum and Gateway Center, Collegiate Recovery Program, Counseling and Testing Services, Dean of Students, Dining Services, Distinguished Lecture Series, Emerald Eagle Scholars, First Generation Success Center, Green Jackets, High School Career Connect, Housing and Residence Life, North Texas in D.C., Off-Campus Student Services, Office of Disability Access, Orientation and Transition Programs, Recreational Sports, Recovery and Intervention Support and Education Program, Spiritual Life Student Activities, Student Government Association, Student Health and Wellness Center, Student Legal Services, Student Money Management Center, Student Veteran Services, Substance Use Resource Education Program, Survivor Advocacy, TRIO Programs, University Union, UNT Food Pantry presented by Kroger, and We Mean Green Fund.

For more information, call 940-565-4909 or visit studentaffairs.unt.

#### **International Affairs**

International Affairs is guide and champion for internationalization at the University of North Texas. International Affairs supports international teaching, research, and service. We strive to enrich campus life by welcoming international students and scholars, cultivating global citizens among students, and fostering global connections between UNT and institutions, communities and people around the world.

International Affairs functions in a leadership and facilitation role to support the university's global endeavors and international initiatives. We provide expertise, assistance, and support to faculty, staff, students, and administration in all international activities.

All units are located in Marquis Hall (international.unt.edu).

The Global Engagement Office advises colleges on the development of global programs, manages UNT's international agreements and contracts, and oversees the division's data collection and analysis. Global Engagement acts as steward for campus internationalization by encouraging global scholarship, administering Fulbright and intramural grants, and promoting other global opportunities for faculty and students. Contact 940-369-5292 or international.unt.edu/globalengagement.

The Programming and Communications Office provides UNT students opportunities for cross-cultural learning and engagement via a full schedule of international events and activities, provides international student support programs to help new students adjust to life in the U.S., and manages and awards International Affairs scholarships and grants. Contact 970-369-7795 or international.unt. edu/student-activities

The Intensive English Language Institute, established in 1977, is the longest-standing program of its kind in North Texas and one of the most prestigious programs for learning academic English in the United States. IELI also conducts the International Teaching Assistants testing and training program for UNT. Contact 940-565-2003 or Marquis Hall, Room 223 or visit international.unt.edu/ieli.

The International Recruitment Office recruits well-qualified and diverse international students to UNT colleges and schools. Its core activities include converting international prospects to applicants via digital outreach and recruitment at feeder institutions both abroad and in the U.S. Office staff work regularly with high school

counselors, foreign faculty, U.S. higher education advisors and UNT alumni. Contact 940-369-7624 or Marquis Hall, Room 125 or visit international.unt.edu/futurestudents.

The International Student and Scholar Services Office provides immigration advising and support to international students and scholars engaged in academic activities at the University of North Texas System. The office serves as the primary campus and system resource on immigration matters pertaining to all non-immigrant visa types. Contact 940-565-2195 or Marquis Hall, Room 110 or visit international.unt.edu/advising.

The **Study Abroad Office** coordinates affiliate, exchange and faculty led programs for UNT students in collaboration with the university's colleges and schools. The office works to create programs that inspire global citizenship, enhance curriculum, and support the academic and personal goals of UNT students from all majors and backgrounds. The office also serves as a U.S. Passport Acceptance Facility and is open to the UNT and local Denton communities. Contact 940-565-2207 or Marquis Hall, Room 145 or visit studyabroad.unt.edu.

#### International student health insurance requirement

Since 1982, UNT has required all international students to have medical insurance. Consequently, international students are automatically charged a student health insurance fee to cover the premium for the UNT-offered health plan each semester after registration.

There are only three instances when a student may receive a waiver from the UNT-offered health care plan:

- an international student has a government sponsored plan (these waivers are processed in the Sponsored Student Office),
- an international student has insurance through a U.S. employer group policy, or
- an international student is a dependent on a parent or relative's U.S. employer group policy.

Students will be required to go to https://unt.myahpcare.com to either enroll or waive out of the Plan, underwritten by United Healthcare Student Resources. For students requesting an insurance waiver, supplemental insurance to cover medical evacuation and repatriation will also be required. This coverage may also be purchased from United Healthcare. A waiver will not be granted until proof of group insurance and medical evacuation and repatriation is provided. Enrollment into the Plan and waiver requests are processed up until the official 12th class day.

Questions about the UNT-offered health plan or about a waiver from the plan may be addressed to SHWCinsurance@unt.edu.

# **Tuberculosis (TB) screening requirement**

UNT requires all incoming international and IELI students from high-risk tubercular disease countries to be screened for TB. These students must be screened and/or tested for TB within the first three weeks after the 12th class day of their first term of study on the UNT campus or provide documentation of a previous TB test with results. For more information, please email askSHWC@unt.edu.

# Student services, activities and information

#### **Adaptive Computer Lab**

Any UNT student, faculty or staff member with a valid UNT ID card can use the Adaptive Computer Lab facilities. Students registered with UNT's Office of Disability Accommodation (ODA) have preemptive privileges when the lab is full or when specific adaptive equipment is needed. Students are encouraged to visit the lab early in the semester and become familiar with equipment and services. The lab has adaptive consultants on duty for hands-on help and training.

The Adaptive Computer Lab is located in Sage Hall, room 330. To contact the Adaptive Computer Lab, call 940-565-2324, TDD Access through Relay Texas: 800-735-2989, or e-mail the Adaptive Lab manager, Sharukh.Mithani@unt.edu.

Hours, additional info and remote access available at it.unt.edu/adaptivelab.

## Athletic organizations and activities

Intercollegiate Athletics and Recreational Sports at UNT offer a wide range of opportunities for recreation. Accessible sports facilities include the Pohl Recreation Center with two swimming pools, four gymnasiums, an indoor soccer court, 45-foot tall climbing wall, weight room and cardio area, 1/8 mile indoor track, group exercise rooms, Smoothie King and lounge area. The Waranch Tennis Complex has 12 lighted tennis courts.

The Physical Education Building also contains handball/racquetball courts.

#### **North Texas Athletics**

North Texas Athletics is a vital component of university life. The Mean Green athletics programs provide a rallying point for fans, friends and, most importantly, students of the University of North Texas. A student's collegiate experience would not be complete without having enjoyed the opportunity to: tailgate with friends and family; stand and cheer on the Mean Green as they take the field or court prior to competition; and sing "Glory to the Green" immediately following the conclusion of an athletic event.

Mean Green Athletics strives to be a university partner and works diligently with multiple aspects of the university in order to enhance students' participation and enjoyment of the collegiate experience. Students are admitted free to all athletic events with a valid student ID.

The University of North Texas competes at the Division 1 level of the National Collegiate Athletic Association and is a member of Conference USA. The university is represented by athletic teams in the following sports: men's and women's basketball, men's and women's cross country and track and field, football, men's and women's golf, women's soccer, softball, women's swimming and diving, women's tennis, and women's volleyball. North Texas Athletics resides in the 46,000-square-foot Athletics Center, which houses administrative offices, a football locker room, team meeting rooms, strength and conditioning facilities, and sports medicine facilities.

Apogee Stadium provides amenities that attract today's fans looking for the ultimate game-day experience, including 21 luxury suites, club level with chair back seating, giant video screens, unique concessions options and generous tailgating and staging areas. And in accordance with UNT's commitment to create a sustainable campus, strict Leadership in Energy and Environmental Design (LEED) standards were followed in making this the nation's first collegiate football stadium to earn platinum certification from the U.S. Green Building Council.

Mean Green athletics teams have captured numerous Conference championships as well as receiving national recognition by making recent appearances in postseason football bowl games and NCAA postseason championship tournaments for basketball, golf, soccer, and track and field. The 2020-21 men's basketball team became the first team in the history of the school to win an NCAA tournament game when it defeated Purdue in the first round of March Madness.

#### **Career Center**

Within the Career Center, **Student Employment (SE)** assists students in their job search by providing employment opportunities both on- and off-campus year round. Students who have been accepted to UNT and are currently enrolled or who have been enrolled within the previous year are eligible to access student employment services. The Career Center assists students in identifying local jobs on or off campus. Students with a preference working off-campus will find numerous opportunities in the Dallas–Fort Worth region posted through the Career Center. Some on-campus jobs may include:

- Food Services Worker, Barista, or Delivery Driver
- Rec Sports Referee, Lifeguard or Coordinator
- Computer Lab Assistant, Tech Support or Library Assistant
- Office Assistant or Research Assistant
- Tutor, Grader or Academic Assistant
- Resident Assistant

If students choose to work on campus, we recommend scheduling classes to have three to four hours available during the day. This allows students to work 15 to 25 hours per week. Some departments are flexible with schedules, but others may prefer a set schedule.

On- and off-campus job openings are advertised on Handshake, which is available to all students, or by visiting careercenter.unt. edu. The Career Center also hosts a part-time job fair in the fall for students seeking off-campus employment as well as positions available on campus. Once a student is hired for an on-campus position, the student is required to complete student employment orientation, which is offered both online and in-person. The student's supervisor may also request the student to attend a training offered through the Career Center.

Students may receive more information about Student Employment as well as learn how to log into Handshake by calling 940-565-2105 Monday through Friday, between 8 a.m. and 5 p.m. or by visiting the Career Center in Sage Hall, Suite 202.

The Career Center provides the following services to students in all degree programs and at every degree level: undergraduate, master's and doctoral.

In-class presentations and guest lectures are offered on career-related topics, including "Resume Writing," "Interviewing Skills," "Using Social Media in Your Job Search" and "What Can I Do with a Major In ...?"

Career planning and job search resources can be found at careercenter.unt.edu. These resources assist students and alumni in assessing their career interests, exploring career options and accessing relevant information for making career-related decisions.

Career advisors assist students and alumni in career exploration and research, resume writing, interview preparations, career transitions and general job search strategies through individual advising.

A web-based career services job listings system (Handshake) contains current job vacancy announcements from UNT-friendly employers. Students and alumni must formally register with the Career Center in order to utilize this service.

More than 1000 employers come to UNT each year to conduct on-campus employee recruiting and on-campus interviews. The Career Center links student and alumni job seekers with hiring professionals. More than 100 school districts and 900 business, industry, government and public service employers visit campus annually. Registration for on-campus interviewing is required through Handshake.

All services and resources the Career Center offers are provided at no cost to students and alumni.

Visit the Career Center in Sage Hall, Suite 202; Business Leadership Building (BLB), Room 136; or Discovery Park, Room C111. The Career Center also has an office at the UNT New College at Frisco campus in Room 145. For additional information, call 940-565-2105 or visit studentaffairs.unt.edu/career-center.

#### The Center for Leadership and Service

The Center for Leadership and Service provides opportunities and programs to assist students in becoming engaged leaders in the community. Programs include leadership workshops and conferences, short-and long-term service programs, and opportunities for students to engage in leadership positions on campus. The Center for Leadership and Service is located in the Union, Third Floor. For more information call 940-565-3021.

# The Coliseum

The Coliseum is a multipurpose facility with accommodations for center arena events (10,705), theater presentations (3,400–5,200), banquets (1,100), concerts (3,400–8,200), commencements, athletic events, workshops, dances, camps and competitions. For information regarding Coliseum reservations, contact the Coliseum director's office at 940-565-2557.

## **Off-Campus Student Services**

Part of Student Activities, Off-Campus Student Services (OCSS) functions as a resource for UNT's off-campus, commuter, graduate, online, and non-traditional students. Resources include an off-campus housing and roommate search database, babysitter clearinghouse, and information about transportation services (e.g., carpooling, bus schedules). OCSS also coordinates events for these populations, including the Non-Trad/Grad Student BBQ, Housing Fair, Family Fun Night, and Professional Picture Day.

For more information about OCSS, contact Student Activities in the University Union, Room 345; follow on Twitter or Facebook (@ UNToffcampus); visit offcampus.unt.edu; or call 940-565-3807.

# **Counseling and Testing Services**

The center provides short-term, confidential, professional psychological services to currently enrolled students. Individual counseling related to personal, social and emotional concerns; vocational counseling for help with selection of a major field of study or career plan; educational counseling; and couples counseling are offered at the center. Outreach programs and consultation are available for faculty/staff and student groups.

Counseling and Testing Services is also a national testing center and administers professional and academic testing (e.g., GRE, TSI, CLEP, Pearson Vue exams, and other proctored exams.

The Counseling center is in Chestnut Hall, Room 311, or call 940-565-2741.

Professional and Academic Testing is located in Gateway Center, Room 140, or call 940-369-7617; or visit studentaffairs.unt.edu/ testing-services.

#### **Dean of Students**

deanofstudents.unt.edu

The Dean of Students Office fosters the development of leadership, civility, accountability and responsibility in the University of North Texas student; builds community through service and involvement; and serves as an advocate for all students. This office is dedicated to supporting the UNT student who may need assistance in resolving complex social, personal, financial and academic matters. We strive to help all students achieve their academic and personal goals and enhance the UNT student experience.

One of the primary aspects of the Dean of Students Office is to help students resolve university-related issues. Through the SOS (Seeking Options and Solutions) Program, the office assists students and their families in navigating diverse concerns, as well as identifying resources for personal, academic, and social issues. We can assist students with absence verification, class absences, pregnancy assistance, medical withdrawals, military activation of enrolled students, temporary disabilities, and temporary illness.

Student Conduct: The Dean of Students (DOS) is responsible for addressing student conduct, enforcing university policies and procedures, and providing students with the resources necessary to resolve their own personal disputes. DOS administers student disciplinary procedures in accordance with the Code of Student Conduct and maintains official disciplinary records. However, emphasis is placed on educating students about their rights and responsibilities as members of the University of North Texas community. In addition, DOS seeks to educate the campus community through literature and training about the services it offers. The office provides policy interpretation and rights adjustment as well as handling complaints against students. DOS is committed to enhancing students' competencies as productive citizens and promoting life-long learning and community standards. Any member of the UNT Community can report alleged student misconduct at report.unt.edu.

The University of North Texas is committed to providing a safe environment for all community members. Dating violence, domestic violence, sexual harassment, sexual coercion, sexual exploitation, sexual violence, and stalking are prohibited. Please see deanofstudents.unt.edu/sexual-misconduct.

By Texas law UNT employees are mandated to report sexual misconduct, sexual assault, dating violence and stalking to the Title IX Coordinator or the Deputy Title IX Coordinator if they witnessed or information received while in the course and scope of their employment; that the employee reasonably believes constitutes an incident of sexual harassment, sexual assault, dating violence, or stalking; committed by or against a student who was enrolled at the institution at the time of the incident; an employee employed by the institution at the time of the incident. Reports can be made to report. unt.edu or to TitleIX@unt.edu.

Survivor Advocacy: The UNT Survivor Advocate's role is to connect students who have been impacted by violence to resources (counseling, health, safety, academics, legal, etc.), and act as their advocate. The Survivor Advocate can assist a student by filing protective orders, completing crime victim's compensation applications, contacting professors for absences, working with housing to facilitate a room change (if needed), and connecting students to the many other resources that are available, both on and off campus. You can contact them at survivoradvocate@unt.edu, at 940-565-2648 or by visiting Union 411.

Student Withdrawals: The Dean of Students Office is committed to helping students when they intend to withdraw for the semester. Students wishing to withdraw must do so in person at the Dean of Students Office during office hours. During their visit, students will obtain the official University Withdrawal form and meet with a staff member who will ensure students are informed of any pertinent implications related to their withdrawal. Students will also be informed of any obligations they may have with the university and items they may need to fulfill prior to withdrawing and/or upon returning to UNT.

Students may only withdraw from the first class day until the official last day to withdraw as indicated in the academic calendar. Please note that a withdrawal implies dropping ALL courses. Students wishing to drop classes but who will remain enrolled in at least one course can obtain the Request to Drop Class form from the Registrar's Office.

If by chance a student is incapacitated and the student cannot make the request on their own, the Dean of Students Office will assist. Verified documentation related to their condition will be required. For more information please contact the Dean of Students Office directly.

Student Complaints: The Student Standard Complaint Policy of the University of North Texas provides students with a procedure for resolving complaints against UNT faculty, staff, and agents of the university. Students with questions concerning discrimination, grade appeal, academic integrity, disability, financial aid, accommodations, or the Code of Student Conduct must contact the appropriate academic personnel or compliance officer and refer to the appropriate policies. Students can file complaints at report.unt.edu.

The Dean of Students Office will assist the student throughout the complaint process. UNT believes that most complaints can be resolved informally. All university contacts with the aggrieved student will stress the preferred mechanism of an informal resolution. A complaint filed, either formally or informally, will not be considered unless it is filed no later than 120 days after the event or occurrence giving rise to the complaint or knowledge of the event or occurrence. A student's complaint may be withdrawn at any point by the student, thereby halting the complaint.

Absence Verification: Students are expected to attend classes regularly and to abide by the attendance policy established by the professor. However, the university is aware that there will be times when a student is unable to attend class due to emergency situations, health or the death of a loved one. The Dean of Students Office is also available to assist you with documenting your absences. Students must provide the Dean of Students with official and verifiable documentation related to the reason for absence. Once the absences have been verified the decision to allow a student to make up course work is left to the discretion of the professor and/or the department.

**Authorized Class Absences/ Field Trips:** All travel by students off the campus for the purpose of participation in athletics, music groups, AFROTC activity, dramatics, exhibitions, debate, student

government, conventions and field trips must be authorized by the dean of the school or college of the sponsoring department. Absence lists must be approved by the department chair and sent to the office of the dean in advance of the travel date. Sponsors must report to the Dean of Students Office all students listed who did not make the trip.

Within three days after the absence, students must obtain authorized absence cards from the Dean of Students Office for presentation to instructors of classes missed. Students with authorized absence cards may make up the work missed when practicable or be given special allowance so that they are not penalized for the absence. Additional information regarding Authorized Class Absences may be found in the Faculty Handbook.

Military Activation of Enrolled Students: The University of North Texas is deeply committed to supporting students who serve in the military. A student who is a member of the National Guard, Reserve or other branch of the United States Armed Forces and is unable to complete classes because of military activation may request course withdrawals, incompletes or grades, depending on the timing of the activation and the individual needs of the students. This will ensure understanding and standardized guidelines for awarding grades to students called to active military duty during an academic semester.

The student will be required to provide documentation of military orders to the Dean of Students Office and follow procedures for withdrawal. This will ensure understanding and standardized guidelines for awarding grades to students called to active military duty during an academic semester. Dean of Students will meet with the student to discuss options and consider all areas that affect the student upon withdrawal. If incompletes or grades are requested, the student will be referred to the faculty member or academic department for assistance. The Dean of Students will send notification to faculty, academic department and Associate Dean of the verification of military orders and student's preference for incomplete or grade assigned.

Per Texas Education Code 54.0006 (f) 3, either grades are assigned or incompletes granted. If a student receives an incomplete they will have one year from the end of their active duty to complete the course. The Dean of Students office will complete the official withdrawal of the student and full refund of appropriate tuition and fees. If student opts for an incomplete or grades are assigned, no refund will be given.

Pregnant and Parenting Students: The U.S. Department of Education and Office for Civil Rights released new Title IX requirements regarding pregnant and parenting students in June 2013. Students can apply for possible accommodations at report.unt. edu for pregnancy and parenting.

The requirements and suggestions include:

Schools must excuse student's absences because of pregnancy or childbirth for as long as the student's doctor deems the absences medically necessary.

Absence policies in classes must accommodate pregnancy or childbirth related absences and allow for make-up work. "A teacher may not refuse to allow a student to submit work after a deadline that she missed because of absences due to pregnancy or childbirth. Additionally, if a teacher's grading is based in part on class attendance or participation, the student should be allowed to earn the credits she missed so that she can be reinstated to the status she had before the leave."

"A school may offer the student alternatives to making up missed work, such as retaking a semester, taking part in an online course credit recovery program, or allowing the student additional time in a program to continue at the same pace and finish at a later date, especially after longer periods of leave. The student should be allowed to choose how to make up the work."

The UNT Dean of Students Office will provide a Verified Absence slip for parenting students (both male and female) who need to take their children to doctors' appointments or to take care of their sick children as long as they provide proper documentation. Once the absence is verified, professors must accommodate these absences and allow for makeup work. Students needing this documentation should contact the Dean of Students Office.

Temporary Disabilities: Even temporary disabilities are not afforded the same consideration for accommodation and/or waivers that is provided under federal law for permanent disabilities. The Dean of Students Office can act as an advocate for students dealing with temporary disabilities. If a student has a temporary disability (i.e., broken leg, broken arm, pregnancy, etc.) and is in need of accommodation, they may contact the Dean of Students Office and request we advocate on their behalf. Student must submit proper documentation to the office. Upon receipt and verification, DOS will make contact with the student's professors confirming that the temporary disability exists. Ultimately, it is up to each individual instructor to make any accommodations pertaining to temporary disabilities.

CARE Team: The University of North Texas cares about our students' success, not only academically, but emotionally and physically as well. This commitment to the holistic development and well-being of our students is the fuel behind the hundreds of departments, services and resources across campus that seek to respond to their unique needs. Nevertheless, students do not always ask for help when they need it. In an effort to identify those students proactively, UNT has created a campus wide network of professionals who are committed to caring and responding to the unspoken needs of students. The CARE Team ensures a confidential program of identification, intervention and response in order to provide our students with the greatest chance of success and our community with the greatest level of protection.

Questions or concerns for the CARE Team regarding a student or an incident can be directed to a CARE Team Chair or another member through our web site at report.unt.edu.

Student Death: The Dean of Students Office is the main point of contact in the case of a student death. The dean's staff will notify all appropriate people and departments on campus. Information needed is the student's full name and the contact name and number for the student's family. A staff member will be identified by the Dean of Students to make direct contact with the family and serve as the university liaison to assist the family as needed. The names of the student's friends should be forwarded to the Dean of Students for the purpose of outreach to those affected by the death of their friend and fellow student.

The Dean of Students Office organizes the annual Flight Memorial, an event where the UNT community recognizes all students, faculty, staff members and alumni who have passed away over the past year. The Flight Memorial is usually held on a Wednesday in April. All family members of those who will be honored are welcome and encouraged to attend the memorial. Please contact the Dean of Students at deanofstudents@unt.edu or by calling 940-565-2648.

For more information, contact the Dean of Students Office, 940-565-2648; deanofstudents@unt.edu; or visit us on the web at deanofstudents.unt.edu.

#### Free Speech

The University of North Texas (UNT) recognizes that freedom of expression and public assembly are fundamental rights of all persons and are essential components of the education process. These activities promote debate and the sharing of ideas, which are the foundation of educational institutions.

The responsibility of the University to operate and maintain an effective and efficient institution of higher education requires regulation of the time, place and manner of assembly, speech, and other expressive activities on the grounds of the University. In keeping with this responsibility, students, faculty, staff and visitors are free to exercise the rights to assemble and engage in expressive activity in a constitutionally-protected manner subject only to the content-neutral regulations necessary to fulfill the mission and obligations of the University; preserve the rights of others, coordinate multiple uses of limited space; assure preservation of the campus facilities and grounds; and assure financial accountability for any damage caused by these activities.

The UNT Free Speech policy can be found at policy.unt.edu/policy/07-006.

#### **Annual Security and Fire Safety Report**

The personal safety and security of every member of the university community is of paramount concern to all at the University of North Texas. In keeping with this concern, each year the university publishes the Annual Security and Fire Safety Report informing the campus about programs and services to enhance campus security, crime statistics, fire safety, fire statistics, and student disciplinary referrals for certain crime-related conduct. The Annual Security and Fire Safety Report is available at clery.unt.edu.

The following notification is mandated by Texas Education Code Sec. 51.219.

#### Notification of Penalty for False Alarm or Report

A person commits an offense if he knowingly initiates, communicates or circulates a report of a present, past, or future bombing, fire, offense, or other emergency that he knows is false or baseless and that would ordinarily:

- (1) cause action by an official or volunteer agency organized to deal with emergencies;
- (2) place a person in fear of imminent serious bodily injury; or
- (3) prevent or interrupt the occupation of a building, room, place of assembly, place to which the public has access, or aircraft, automobile, or other mode of conveyance.

An offense under this section is a Class A misdemeanor unless the false report is of an emergency involving a public or private institution of higher education or involving a public primary or secondary school, public communication, public transportation, public water, gas or power supply or other public service, in which event the offense is a state jail felony.

A false threat can be communicated through any means (e-mail, phone, in writing, verbally, social media, etc.). An individual adjudged guilty of a state jail felony shall be punished by confinement in a state jail for any term of not more than two years or less than 180 days and, in addition to confinement, may be punished by a fine not to exceed \$10,000.

UNT students should be aware that the State of Texas takes these threats seriously, and the legal consequences, which are severe, go beyond anything that the University's Code of Student Conduct will address.

#### Hazing

The university wants to take this opportunity to inform the university community about the dangers and consequences of hazing.

Hazing is a criminal act under the state law of Texas.

By definition, hazing is any intentional, knowing or reckless act by one person alone or acting with others, directed against a student, that endangers the mental or physical health or safety of a student for the purpose of pledging, being initiated into, affiliating with, holding office in or maintaining membership in an organization" whose members are or include UNT students.

Examples of hazing include but are not limited to:

- Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing a harmful substance on the body, or similar activity.
- involves sleep deprivation, exposure to the elements, confinement in a small space, calisthenics, or other similar activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student;
- Any type of physical activity that subjects a student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of a student, such as sleep deprivation, exposure to the elements, confinement in a small space or calisthenics.
- Any activity involving consumption of alcoholic beverages, liquor, drugs, food, liquid or any other substance that exposes a student to unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.

- Any activity that intimidates or threatens a student with ostracism or that subjects the student to extreme mental stress, shame or humiliation that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered at UNT, or that may reasonably be expected to cause the student to leave the organization or UNT rather than submit to hazing whether the act is committed in person or communicated by other media including social networking.
- Any activity that induces, causes or requires a student to perform a duty or task that requires commission of an illegal act

Hazing occurs regardless of whether the act is committed on or off the university campus and regardless of whether the student victim may have consented to or acquiesced in the activity.

A person engages in hazing not only by directly engaging in hazing activity, but also by soliciting, directing, encouraging, directing, aiding or attempting to aid another in hazing; or by recklessly allowing hazing to occur; or by knowingly failing to report firsthand knowledge that a specific hazing incident is planned or has occurred; any person reporting a specific hazing incident involving a student to the dean of students or other appropriate university official is immune from civil or criminal liability that might otherwise be incurred as a result of the report.

Students may be prosecuted for committing an act of hazing or for failing to report first-hand knowledge of hazing.

Incidents or planned incidents of hazing must be reported in writing to any one of the following:

- Dean of Students Office, 940-565-2648 or 940-565-2039
- UNT Police Department, 940-565-3000
- UNT Hazing Hotline, 940-369-STOP (7867)

Amnesty: The university may elect not to pursue disciplinary sanctions for a violation of this policy against persons who voluntarily and in good faith provide information to the Dean of Students or an appropriate university official related to hazing.

The UNT Hazing policy can be found at policy.unt.edu/policy/07-013.

#### **Dining Services**

It's about the food. UNT Dining Services serves up affordable great-tasting food, made fresh daily from whole ingredients in our on-campus kitchens. With our 22+ retail restaurants, five dining halls, upscale dining restaurant, central bakery, hydroponic garden and catering department, you're never far from a great meal. Our award-winning food service program is part of the Menus of Change University Research Collaborative. As the largest employer on campus, Dining Services provides resume-building job opportunities to more than 1,000 student employees. Learn more and find hours of operation—including late-night and weekend options — at dining. unt.edu, 940-565-2462 or dining@unt.edu.

## Meal Plans for On-campus living

All freshman residence hall rooms and select upperclassman rooms are bundled with an Unlimited Everyday or Unlimited Weekday Meal Plan Membership. These plans include unlimited meals in any of our 5 dining halls as well as Flex to use at your favorite on-campus retail restaurants, including Starbucks, Chick-Fil-A, The Campus Chat Food Court and more. Choose your plan when you apply for housing or purchase at dining.unt.edu.

#### Meal Plans for Off-campus Living

Students living off campus can save big by purchasing a Student Meal Plan designed with you in mind. Preparing your own hearty meals can be costly in time and money. Our plans allow you to supplement or completely replace your home cooking with convenient, freshly-prepared meals on campus. We do the hard work of cooking - and our culinary teams actually do *cook* - so you can focus on your university experience.

There's a Plan for every appetite and budget, whether you want to enjoy our dining halls, retail restaurants or both. Meal Plan purchases are routed through your MyUNT account for payment with financial aid, scholarships, installments and other methods. Find the right Meal Plan for you at dining.unt.edu.

## Office of Disability Access

The Office of Disability Access (ODA) is the campus resource for students who qualify for disability accommodations as defined by the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 as Amended. Part of the mission of the ODA is to provide reasonable accommodations and auxiliary aids to eligible students and assist with the resolution of student disability-related access issues. In order to administer this process, ODA works with faculty and campus partners to facilitate accommodations and services. Students who are approved for accommodations are responsible for presenting to their instructor a Letter of Accommodation, which is generated on ODA letter-head and emailed to the instructor by the ODA.

ODA staff members are available to counsel and advise students regarding disability related matters and can assist in devising academic success strategies, including referral to other campus and community services. ODA arranges classroom auxiliary aids such as sign language interpreters, Computer Aided Real Time Transcriptionists (CART), textbooks in alternative accessible formats, and various forms of adaptive equipment and technologies. ODA also houses a test center for the administration of accommodated course examinations and works closely with academic departments and course instructors in making such arrangements. For more information, call 940-565-4323, visit Sage Hall room 167; or go to studentaffairs.unt.edu/office-disability-access.

# Distance Education (web-based and digital communication)

The University of North Texas offers a selection of undergraduate and graduate courses, degree programs, and certificate programs via distance education, primarily through the web. Most 100% webbased courses can be taken from any location worldwide that has Internet access and the appropriate computer equipment available. For more information, visit online unt.edu.

#### **Distinguished Lecture Series**

The UNT Distinguished Lecture Series was organized and chartered as a university wide program in 2004 with the assistance of the UNT Student Government Association and the Division of Student Affairs. The series is administered by a committee composed of students, faculty and staff, with a student member serving as chairperson. The objective of the series is to provide the university and greater communities with a variety of distinguished, world-class lecturers and speakers who will bring significant interest, visibility and added prestige to UNT. The series is dedicated to complement the educational process and to add significantly to the quality of life for the university community and communities of the Dallas-Fort Worth region. Programs have featured President George W. Bush, author Sherman Alexie, former Secretary of Defense Robert Gates, former Secretary of State Condoleezza Rice, financial planner Suze Orman, television hosts Jamie Hyneman and Adam Savage, author Eric Schlosser, activist Cornel West, former Mexican President Vicente Fox, TV scientist Bill Nye, environmentalist Robert F. Kennedy Jr., and more. For more information, visit studentaffairs.unt.edu/dls.

#### **Eagle Ambassadors**

UNT Eagle Ambassadors are student recruiters/tour guides with various majors and backgrounds who are interested in promoting the university. In addition to conducting well-organized, friendly tours of the university for prospective students, parents and other visitors, Eagle Ambassadors represent the student body at various events for the President's Office. They also serve as positive role models for prospective students while assisting the Office of Admissions at college nights and at UNT Preview. The Eagle Ambassadors are responsible for operating the information desk in the Eagle Student Services Center.

The program, started in 1998, offers students an opportunity for personal and professional growth. Following a competitive application and interview process, Eagle Ambassadors are trained extensively. These students receive a \$2,500 scholarship as well as an hourly wage and are required to maintain a minimum grade point average and full-time student status.

## **Eagle Alert**

Eagle Alert is an automated system that allows UNT administrators to notify the campus community by phone in the event of an emergency. Eagle Alert sends voice and text messages to phones of everyone with an active EUID account who has registered with the system

All students, faculty and staff are automatically enrolled in the Eagle Alert system using the telephone numbers provided to UNT during the registration or hiring process.

You should check your contact information regularly and update it as soon as it changes by logging in at my.unt.edu and following the "Update your information" link under the Eagle Alert banner. For more information on UNT Eagle Alert, visit www.unt.edu/eaglealert.

# **EagleConnect**

UNT has designated email as an official form of communication between the university and students. UNT provides email accounts to all students registered at the university through EagleConnect, it.unt.edu/eagleconnect. Students automatically are assigned email accounts to support a reasonable volume of email. Students are responsible for reading their email frequently enough to receive important communications from the university.

## **Early Alert Response System**

The UNT Early Alert Response System seeks to ensure that every student has knowledge of and access to all available campus resources. Our office maintains and monitors the Early Alert Response System, and through this system we identify struggling students and connect them with appropriate on- and off-campus resources.

It is the mission of the Early Alert Program to facilitate campus-wide collaboration through the Early Alert Response System in an effort to increase student retention and persistence by identifying struggling students and actively provide a link to academic support services, advising, and campus referrals in a timely way.

#### **Facilities use policy**

The term *facilities* describes all structures on the campus or otherwise under the control of the university. Use of such facilities is governed by the university's "Facilities Use" policy and "Off-Campus Speakers" policy. Requests may be made through the University Union Event Planning and Scheduling Services One Stop Shop at 940-565-3804.

Student organizations wishing to reserve facilities should contact the Student Activities Center, Stovall Temporary Union Building, Room 155, 940-565-3807.

#### **Fine Arts Series**

The UNT Fine Arts Series began as the Lyceum Series in 1924 during the Normal College era. The series has continued to provide a wide variety of the visual, performing and literary arts for the university and communities in the greater Dallas—Fort Worth region. Coordinated by a committee comprised of students, faculty and staff, the Fine Arts Series provides students with leadership opportunities, arts management skills, participation in the selection of artists and their works, and evaluation skills to discern among various artists.

UNT students may receive free tickets to non-food performances by presenting a current UNT ID to the ticket seller. Faculty and staff are admitted at a discounted price. For more information, call 940-565-3805 or visit www.unt.edu/fas.

## **Gateway Center**

The Gateway Center is a multipurpose facility housing class and conference rooms, the Club at Gateway Center, offices for the Vice Chancellor and General Counsel, the Office of Development, the UNT Alumni Association, the UNT Foundation Inc., and a banquet facility which caters to both on-and off-campus events. For banquet/conference scheduling, reservations and pricing, call Union Scheduling at 940-565-3804 or e-mail unionscheduling@union. admin.unt.edu.

#### **Graduate Student Council**

The Graduate Student Council assures formal avenues of communication between representatives of the graduate student body and both the dean of the graduate school and the Graduate Council. It serves as an advisory council to facilitate an interchange of views and information between these groups. Two members of the Graduate Student Council are elected annually to serve as voting members of the Graduate Council. For additional information, contact the Toulouse Graduate School or visit tgs.unt.edu/gsc.

#### **Student Health and Wellness Center**

The Student Health and Wellness Center, located on the second floor of Chestnut Hall, is equipped with examination and treatment rooms, a clinical laboratory and digital x-ray machine. Medical services are available when classes are in session to enrolled students paying the medical service fee. Medical care is not available on official university holidays. The Student Health and Wellness Center operates on an appointment system. Call 940-565-2333 or go online to myosh.unt.edu to make an appointment. Forms, hours and additional information are available online at healthcenter.unt.edu.

Services available to students include routine visits for injuries and illness, as well as monitoring of chronic conditions and referrals to outside specialists. Charges are assessed for office visits, medications, supplies for procedures and treatments, laboratory testing, vaccinations and allergy injections. Specialty services include limited psychiatric services, dietitian consultations, massage therapy, travel medicine consultation, and gynecological services. The Student Health & Wellness Center accepts some major insurance plans and will file claims on behalf of the patient. Students may pay for charges assessed with cash, check, credit card, or make billing arrangements. The Student Health and Wellness Center must have prior parental consent on file to treat patients under 18 years of age. Anyone with a complex medical condition is urged to meet with a medical provider to review their medical history within the first few weeks of attending UNT.

Allergy injections can be administered at the Student Health and Wellness Center. Patients must have allergy serum and orders from their outside allergist prior to receiving allergy injections in the clinic. For more information, obtain a current "Allergy Policy" from the Student Health and Wellness Center.

If you are having a medical emergency, call 911. If a student needs medical care when the Student Health and Wellness Center is closed, they have different options based on their insurance coverage. Students enrolled in the student insurance plan may use a 24-hour Telehealth Line listed in their insurance benefits. Students enrolled in other health insurance should consult their carrier for medical advice options. All students may call Parkland's Nurse Call Line at 214-266-8777 free of charge.

Medical information is confidential and is not provided to others without a release signed by the patient. If a parent or guardian requests information on a patient under 18 years of age, the Student Health and Wellness Center provides the information as allowed under the law.

The UNT Pharmacy, located on the first floor of Chestnut Hall, fills prescriptions for the UNT Student Health and Wellness Center and outside providers. Patients needing medications filled should speak with a pharmacist about their options by calling 940-565-2790. Over-the-counter medications are available at the UNT Pharmacy as well as first aid supplies, hygiene products and other personal care items.

Dental and optical services are available for UNT students and their families through contracted partnerships. These services are not covered by student fees, but can be covered under some insurance policies. Please contact the UNT Dental Office at 940-273-2184 and College Optical Express at 940-369-7441 for pricing, information on services, and other questions.

The Meadows Center for Health Resources provides individual health education, and outreach programs for students and campus groups as well as special programs for specific health needs. Go online to healthcenter.unt.edu/meadows-center for information about services and programs. Contact the Meadows Center for Health Resources at 940-565-2787 to request information or schedule a program. Wellness consultations are provided from a certified health education specialist.

The Student Health and Wellness Center recommends that all students have current immunizations for diphtheria, pertussis, tetanus, rubella, mumps, measles and hepatitis B. Effective October 1, 2013, a bacterial meningitis vaccination is required by Texas state law for any new or transfer student under the age of 22 who is attending UNT for the first time, or for any returning students who have not been continuously enrolled for the previous long semester. Additional information on this requirement, including forms, submission process and other issues relating to possible exemptions, is available at healthcenter.unt.edu/immunization-requirements. The UNT Health Center recommends that all UNT students consider receiving the bacterial meningitis vaccination, even if not required by state law.

#### Health insurance program

A group student health insurance plan is offered for students enrolled at UNT. Interested students can enroll online at https://unt.myahpcare.com.

International students should refer to "International Student Health Insurance Requirement" elsewhere in this section.

## Homecoming

Each fall, Homecoming activities offer a full week of events sponsored by various campus departments and student organizations. Annual events include a picnic, spirit march, bonfire, Golden Eagle reception to honor 50-year alumni and tailgating before the football game. Additionally, departmental receptions and student organization gatherings welcome alumni and friends returning to the campus.

For more information, contact Student Activities in the University Union, Room 345; follow on Instagram, Twitter, or Facebook (@ UNThomecoming); visit homecoming.unt.edu; or call 940-565-3807.

#### **Honors Day**

For more than half a century–since 1950–the University of North Texas has observed the tradition of coming together each academic year to honor our most accomplished and distinguished students, faculty and staff. Honors Day is an important event in the life of the institution and occurs each spring semester, usually in April.

For more information, call 940-565-4909 or visit studentaffairs.unt. edu/honors-day.

# **University Scholars Day**

The purpose of Scholars Day is to celebrate the work of undergraduate researchers at UNT. Students do not need to be members of the Honors College to present. Undergraduate students are invited to submit abstracts for a poster or paper based on original research or artist statement for creative work conducted under the guidance of a faculty mentor at UNT during the past year.

#### Housing

All unmarried undergraduate students who have graduated from high school the semester prior to enrolling at UNT, who have completed fewer than 30 semester hours of university work (pre-college hours not included) and who enroll for 12 or more hours are required to reside in university-operated residence halls under a contractual room and board plan as long as space is available. Exemption may be granted by the director of housing in accordance with an established

policy statement, which is available from the Department of Housing and Residence Life. Honors Hall, Legends Hall, Mozart Square, Santa Fe Square and Traditions Hall are available for upperclassmen students and allow for a no-meal plan selection.

#### **Residence halls**

The University of North Texas' 15 residence halls provide students with a wide range of living environments. Coed, freshmen and upperclassmen halls offer a variety of learning opportunities. All halls have rooms specifically modified to meet ADA accommodation requests.

Hall guidelines are set forth in the *Housing Handbook*, which is available at housing.unt.edu. It is a student's responsibility to be familiar with these regulations.

#### **Residence hall applications**

The Housing application, available online at housing.unt.edu must be accompanied by an administrative application fee and a prepayment in order to receive a room assignment. Room assignments are made primarily on the basis of the date contracts are completed and the residence hall and room type selected via the online application. The online application includes a digitally acknowledged Housing License Agreement. A person who is not accepted to UNT must contact the Housing Assignment Office within 10 days- to receive a full application payment refund. For those accepted to UNT but electing not to attend, a schedule of application payment refund dates can be found in the terms and conditions of the Housing License Agreement.

For those accepted and attending UNT, there is a 10-businessday period after completing the contract in which to cancel for a full refund. Cancelation of an application beyond 10 days after completion can be subject to a loss of application payment and \$500 termination fee upon cancelation.

Students that move into on-campus housing are expected to complete the full term of the application period. Termination of housing after move-in is subject to terms outlined in the Housing License Agreement.

Room and board rates are subject to approval by the Board of Regents. A list of current rates is available online. For housing information, write to University of North Texas, Housing Department, 1155 Union Circle #311310, Denton, TX 76203-5017 or by e-mail to housinginfo@unt.edu. The housing application is available by accessing the eHousing portal through the Housing web site—housing.unt.edu.

#### Off-campus housing

Students who are not required to live in university housing under the terms of the housing policy may live where they choose. The university does not assume any responsibility in off-campus housing arrangements but does support the federal housing policies that housing owners not discriminate because of race, color, sex, age, religion, disability, veteran status or national origin.

#### **Learning Center**

Location: Sage Hall, Suite 170 Phone: 940-565-7006

Fax: 940-369-8394

Web site: learningcenter.unt.edu

The Learning Center (LC) was created to supplement and support academic excellence and life-long learning. A wide range of individual, group and self-help programs and materials are provided to maximize the academic potential of all University of North Texas students. Programs and services housed within the center include: GRE course prep help, tutoring (one-on-one and online), Supplemental Instruction, Academic Coaching, academic-based workshops, Graduate Student Services and the Academic Resource. For additional information see learningcenter.unt.edu.

The Learning Center offers advising, placement, support and assessment for students completing their university and state readiness TSI requirements.

# **Living Learning Communities**

Location: Welcome Center, 1417 Maple Street

Phone: 940-565-2610

Web site: housing.unt.edu/livinglearning

Living Learning Communities at the University of North Texas offer students the opportunity to live together to succeed based upon majors, general areas of study, and general interests. Living Learning Communities include Academic and Themed Communities:

#### **Academic Communities**

Various academic units have collaborated with Housing and Residence Life to offer LLCs with dedicated faculty or staff support and/or a required course component. Students should select the academic LLC that aligns with their major field of study in order.

#### **Themed Communities**

Themed LLCs are opportunities for students with common interests or majors to live together and help each other succeed. These LLCs offer access to amenities that foster study and creativity, and freedom for students to design their own class schedules.

## **Multicultural Center**

Location: University Union, Room 335

Phone: 940-565-3424

Web site: ied.unt.edu/multicultural-center

Serving the UNT community for more than 25 years, the center is committed to cultivating a campus environment where people of all identities and experiences can thrive. It fosters the success and awareness of historically underrepresented student populations with an emphasis on disability, ethnicity, gender, interfaith, race and sexual orientation. The Center provides culturally relevant programs and services that increase the awareness, understanding, and intersectionality of the various identities in the UNT community.

#### **UNT Alumni Association**

The UNT Alumni Association is a member-driven organization organization that creates networking and engagement opportunities for alumni in every stage of life. The organization also operates a Student Alumni Association and offers scholarships to support UNT students and build a strong alumni legacy. For more information, visit UNTalumni.com or call 940-565-2834.

#### Student organizations policy

The University of North Texas recognizes the right of any group of students to form a voluntary organization for purposes not forbidden by local, state or federal law, or university policy. All organizations that wish to obtain certain benefits (e.g., room reservations) must register each long semester with Student Activities.

Policies regulating the approval, functioning, and privileges of registered organizations are available from Student Activities, University Union, Room 345; studentactivities.unt.edu/orgs; or 940-565-3807.

#### **Parking**

Parking regulations, maps detailing parking facilities, parking office hours, contact information, and the links to paying parking citations online or to purchasing a parking permit online may be obtained at transportation.unt.edu. All student, staff and faculty parking permits (except TF permits) are sold online based on availability.

#### **Pohl Recreation Center**

Located at the corner of North Texas Boulevard and Chestnut Street, the Pohl Recreation Center, managed by Recreational Sports, is open daily to provide a variety of facility space and programming for the recreation and fitness needs of the students, faculty and staff at UNT.

The Rec Center has a 14,500 sq. ft. weight and cardio area, 3 multipurpose courts for basketball, volleyball, and badminton, an indoor soccer gymnasium, a 45 ft. climbing wall and 10 ft. bouldering wall, an 8 lane lap pool and 5,510 sq. ft. leisure pool with a hot tub, and an 1/8 mile indoor track. Also located in the facility are locker rooms,

Smoothie King, a lounge and seating areas, meeting rooms, two group exercise rooms, lighted outdoor sand volleyball and basketball courts, and the Recreational Sports office.

The Rec Center is open to all currently enrolled UNT students with a valid UNT ID who pay the recreation fee included in tuition. Current and retired faculty, staff and their families may purchase memberships. Memberships are also available to alumni. Current and retired faculty and staff employees who are members of the Rec Center and students with an active Rec Center membership may sponsor one individual over the age of 18 living in the same residence for membership. Members can sponsor up to two guests per day for a fee.

The Rec Center is a result of a project initiated by a UNT student group in 1997, which gained momentum through student involvement and was approved through a student referendum in 2000. The Rec Center is funded primarily through the recreation fee.

For more information about the Pohl Recreation Center, contact Recreational Sports by calling 940-565-2275 or emailing recsports@unt.edu. Information is also available on the UNT Rec Sports app and on the Rec Sports web site at recsports.unt.edu.

#### **Recreational Sports**

Recreational Sports is located in the state-of-the-art 138,000 square-foot Pohl Recreation Center and offers an incredible array of programs and experiences designed to support and inspire the wellness of the UNT Community. We also pride ourselves on being a welcoming and engaging family, committed to helping students, faculty, and staff live happy, healthy, and active lives by participating in our seven different program areas:

#### Fitness

The fitness program offers fitness assessments, personal training, RMR testing, body composition testing and specialty fitness classes. The group exercise program offers students exciting, instructor-led aerobic activities like cycle, kickboxing, Pilates, yoga, Zumba and others. Group exercise class schedules and registration can all be done through the UNT Rec Sports app. The fitness staff also oversee the 14,500 square foot weight room, located in the Rec Center, and offer a variety of cardio machines including treadmills, ellipticals, free weights, and a functional training space.

## Intramural Sports

UNT students versus UNT students! Any student who pays the recreation fee may participate in intramurals through one of three divisions that have men's, women's and co-recreational teams: Residence Hall, Greek or Open. Team sports are arranged on a roundrobin basis, and individual and dual sports are set up by elimination tournaments, meets and special events. Major sports include flag football, outdoor soccer, basketball, softball, volleyball, and indoor soccer while single-day events can include sand volleyball, table tennis, dodgeball, flag football and basketball tournaments, as well as PS4 and Xbox tournaments.

#### Esports

Esports at UNT is a varsity program dedicated to developing, guiding, and encouraging our varsity players to compete at the highest level within the collegiate arena, as well as training and facilitating the competitive growth of each player and team. The esports program also supports our students in the gaming community through club and intramural sports competitions. Varsity teams include League of Legends, Rocket League, and Overwatch.

#### Outdoor Pursuits

The Outdoor Pursuits program offers a 45-foot indoor climbing wall, 10-foot bouldering wall, rental of outdoor equipment like tents, sleeping bags, coolers, stoves, canoes and kayaks. Outdoor Pursuits also oversees an adventure trip program that takes members out on day, weekend, and even extended trips within Texas and beyond. Free clinics are also offered throughout the year that give instruction on various topics like stargazing, survival, campfires and kayak roll. The outdoor staff also oversee the Outdoor Pursuits Center, located behind the climbing wall, which rents high-quality outdoor equipment including tents, sleeping bags, canoes, kayaks, coolers and more.

#### Sport Clubs

The sport club program provides an opportunity for UNT students to compete against other colleges and universities in the Texas region and nationally. The 36 clubs compete recreationally and competitively and welcome all those interested in the sport, regardless of skill level. Club leader information and club practice times can be found on the UNT Rec Sports app or by visiting the Rec Sports web site.

#### Aquatics

The aquatics staff oversee an indoor lap pool and indoor leisure pool and spa. The program offers private swim lessons and instructional classes for adults and children, as well as American Red Cross certification courses for lifeguards and water safety instructors. The aquatics program also hosts free special events throughout the semester like dive-in movies and swim challenges.

#### **Informal Recreation**

Informal recreation offers drop-in activity at the Rec Center for basketball, indoor soccer, swimming, badminton, volleyball and more, and can check out equipment to you at no charge. Informal Recreation also oversees the Waranch Tennis Complex. This facility offers 12 lighted tennis courts and equipment checkout, and is home to the Mean Green women's tennis team. For more information about the Waranch Tennis Complex, please call 940-565-2275.

#### **Employment**

Recreational Sports is one of the largest employers of students on the UNT campus. Rec Sports offers a wide range of job opportunities for students throughout the seven program areas including membership services, weight room, personal training, group exercise instruction, lifeguarding, outdoor pursuits, or officiating their favorite intramural sports.

For more information and program details, download the UNT Rec Sports app or visit the Rec Sports web site at recsports.unt. edu. Follow @UNTRecSports on social media for the latest news, program reminders, and special giveaway events.

## **Spiritual Life**

Spiritual Life is an initiative within the Division of Student Affairs that serves and supports members of UNT community as they explore and engage deeply-held beliefs and religious practices during their college experience. Through a variety of programs and events focused on interfaith engagement, improving religious/spiritual literacy, and cultivating practices for spiritual health and wellness, Spiritual Life provides opportunities for students to engage the impact, significance, and value of religion and spirituality in the world today. Spiritual Life is also here to help students find and get connected to spiritual resources, provide assistance to religiously affiliated student organizations looking for more ways to connect to the campus and the student body (including a registration process for faith leaders from non-UNT organizations), and more. For more information, please call 940-565-3288 or visit studentaffairs.unt.edu/office-of-spiritual-life.

#### Speech and Hearing Center

The University of North Texas Speech & Hearing Center offers services to adults and children in the Denton-Dallas-Fort Worth areas with speech, language, reading, swallowing, and hearing disorders. Audiology services include hearing testing, dispensing and repair of hearing aids, management of cochlear implants, assessment of auditory processing disorders, assessment of tinnitus, and aural (re) habilitation programs. Speech-Language Pathology services include evaluation and treatment of language, articulation, fluency, voice, resonance, and swallowing disorders.

The Speech and Hearing Center offers many services designed to meet the needs of UNT students, including testing and support for students with language-learning disabilities or social/pragmatic difficulties. The Center also provides assessment and treatment services to students in the performing arts, including a hearing conservation program for musician's ear protection, tinnitus management for musicians, and voice evaluation and treatment for performance-related disorders.

The Speech and Hearing Center accepts payment through cash, credit card, and we are in network for most major insurance plans. A sliding fee scale is available for clients from the community who meet income qualifications and free or reduced-fee services are available for UNT students. To schedule an appointment or inquire about fees and payment options, please call 940-565-2262. Additional information can be found at aslp.hps.unt.edu/clinic.

#### **Student Activities**

One of the goals of Student Activities is to help students get involved on campus, to maximize their college experience. Student Activities promotes a sense of community and UNT pride while enhancing the social, intellectual, and developmental growth of students as individuals or members of student organizations. We do this through three areas: campus-wide events and traditions, including Mean Green Fling and Homecoming; Off-Campus Student Services, which includes events and services for off-campus, commuter, non-traditional, graduate, and online students; and student organization services, including programs for new and existing organizations.

For more information or help contacting any of the 450 registered student organizations, contact Student Activities in the University Union, Room 345; follow on Instagram, Twitter, or Facebook (@ UNTactivities); visit studentactivities.unt.edu; or call 940-565-3807.

## **Student Financial Aid and Scholarships**

Student Financial Aid and Scholarships (SFAS) at the University of North Texas offers a variety of options to assist students in financing their education. For more information on financial aid and scholarships at UNT, please visit financialaid.unt.edu; come by our offices in the Eagle Student Services Center; or call 940-565-2302.

#### **Student Government Association**

The Student Government Association (SGA) strives to promote the interests and opinions of the undergraduate student body. As the official voice of the undergraduate student body, SGA represents students in matters of policy and student welfare. SGA sponsors programs and projects that enhance students' educational and collegiate experience.

To learn more about services or becoming a member, visit SGA in the University Union, Room 344; follow on Instagram or Twitter (@ UNTSGA); visit sga.unt.edu or call 940-565-3850.

#### **Student Legal Services**

Student Legal Services provides free legal advice and assistance to currently enrolled students. This office also maintains a variety of legal publications for student use. Students are encouraged to meet with an attorney during Open Legal Clinic hours or contact the department to schedule an appointment. Please refer to the web site for details (unt.edu/legal) or call 940-565-2614.

# **Student Money Management Center**

The Student Money Management Center provides tools and solutions UNT students need to achieve financial independence during their college experience. Free services include private consultations with professionals or peer counselors. The center sponsors free workshops, seminars and clinics covering a wide variety of personal financial and money management topics. Some of the workshops are based in theory, some are based in methodology—but all of the training opportunities include plenty of tips and strategies that students can apply to their personal financial situations. All educational opportunities are open to all members of the UNT community. For information, visit moneymanagement.unt.edu, call 940-369-7761 or stop by Suite 313 in Chestnut Hall.

# **Orientation and Transition Programs**

Orientation and Transition Programs seeks to provide resources and services to help students establish and attain their educational goals. Beginning with first-year students, the office serves as a central location to help students transition to the UNT campus, but also connect with their peers, faculty, staff and parents. These connections help guide and direct students throughout their educational

experience at UNT and facilitate their success. For more information on Orientation and Transition Programs, stop by our office, located in the University Union, Room 377, call 940-565-4198, or visit us on the web at transition.unt.edu.

#### **Student Veteran Services**

Student Veteran Services, in collaboration with a diversity of university departments, aims to serve as a safe place to help student veterans navigate university resources for academic success. Our focus is simply three pillars: to help remove barriers for student veterans through an emphasis on transition support through campus life; to provide connection to resources both on and off campus to assist student veterans; and to give due recognition of the service members in our UNT community through programs and scholarship. For more information, please visit the center in the General Academic Building, Rooms 102 and 119, call 940-369-8021, or e-mail veteranscenter@unt.edu for further assistance.

# **UNT TRIO Programs**

TRIO develops, implements and administers programs specifically designed to meet the educational needs of unique student populations, such as the financially and educationally disadvantaged, minorities and disabled individuals. UNT TRIO currently administers four programs that provide services to students from middle school level through undergraduate level. Projects administered by TRIO have involved numerous school districts in the state of Texas, as well as many community colleges throughout the state. These four programs provide services for more than 1,700 participants yearly, ranging from 6th graders to upper-division undergraduate UNT students. Contact TRIO at 940-565-4754 or trio@unt.edu. The McNair Scholars Program is a fifth TRIO program at UNT, located in the Honors College under Academic Affairs. See honors.unt.edu/mcnair-scholars for more information on this program

## **UNT Police Department**

The UNT Police Department serves an integral role in campus life as the university's principal provider of safety and security for students, faculty, staff and visitors. Located at 1700 Wilshire in the Sullivant Public Safety Center, the department operates 24 hours a day.

University Police officers are licensed by the State of Texas and enforce state and local laws as well as university rules and regulations. The department offers numerous programs and services available to the university community.

For more information, contact the UNT Police Department at 940-565-3000, or visit their web site at police.unt.edu.

#### **University Union**

The Union provides services and programs that members of the campus community need in their daily lives and creates an environment for getting to know and understand others through formal and informal associations.

The Union is home to many different offices, services and student organizations. These groups include: Barnes & Noble at UNT, Union Administration, Student Activities, Student Affairs, Dean of Students, Student Legal Services, banking services, post office, Design Works, Multicultural Center, Center for Leadership and Service, University Program Council (UPC), Orientation and Transition Programs, Eagle Images, Substance Abuse Resource Center (SARC), PRIDE Alliance, Student Government Association (SGA) and Graduate Student Council (GSC). The Union is also home to many dining options, including Starbucks, Jamba Juice, Chick-Fil-A, Taco Bueno, Burger King, Fuzzy's Taco Shop, Which Wich, and much more.

For the most up-to-date information regarding the Union, please visit union.unt.edu or contact the Union at 940-565-3805. Like us at facebook.com/UNTUnion and follow us on Twitter and Instagram @ UNT\_Union. Contact Union Scheduling Services for catering, event planning and facility use at 940-565-3804 or visit union.unt.edu/scheduling.

# **University Program Council**

The University Program Council (UPC) is a student-run programming board that coordinates fun and exciting programs around the UNT campus. UPC is dedicated to providing programs that are entertaining, educational, diverse and almost always free for students. UPC is comprised of several student executive positions and a student volunteer board that plan and implement events on campus. Students have the opportunity to join UPC at the beginning of each semester and assist in developing new ideas for future events as well as promote and organize events. All of our UPComing events can be found by liking our Facebook page at "UNT University Program Council" or following @UNT\_UPC on Twitter.

# **Writing Center**

The UNT Writing Center offers free tutoring to all UNT students in all disciplines and at all stages of their academic careers—from English composition students to graduate students writing theses and dissertations.

Our hours are from 9:00-9:00, Monday – Thursday and from 9:00-3:00 on Fridays. We offer walk-ins at Willis Library on Sunday – Thursday evenings from 5:00 to 9:00. You can stop by at 5:00 when the tutor arrives to sign up for a slot that night – first come, first served.

Students may have up to 1 hour of instruction total per day. Graduate students working with our graduate tutors can schedule 1 hour of instruction per week, either online or in-person.

We have online appointments in our main center from 9:00-9:00, Monday –Thursday, and from 9:00-3:00 on Fridays. Please call 940-565-2563 or e-mail us at writingcenter@unt.edu to schedule an online conference.

Our graduate tutors also offer online appointments for graduate students. Please e-mail gradwriting@unt.edu to schedule.

To learn more, visit our website writingcenter.unt.edu.

# **Policies**

# **Equal opportunity and inclusion statement**

The University of North Texas values diversity, inclusion, and identity as part of advancing ideals of human worth, dignity, belonging, and inclusive excellence. Diverse viewpoints and lived experiences enrich open discussion, foster cultural humility and the examination of values and exposure of biases, help cultivate rational conflict resolution and responsive leadership, and prepare us for the complexities of a pluralistic global society. As such, UNT is committed to maintaining an open, welcoming, intentionally inclusive environment that attracts high-performing students, staff, and faculty from all identities to support their success.

# Americans with Disabilities Act

The University of North Texas does not discriminate on the basis of an individual's disability and complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act of 1990, as amended (ADA). In accordance with the requirements of the ADA, the University will not exclude any individual with a disability from the full and equal enjoyment of its services and facilities. The University will make reasonable modifications in its policies, practices, or procedures to ensure that people with disabilities have an equal opportunity to enjoy all of its programs, services, and activities.

The University provides reasonable accommodations in the form of academic adjustments and auxiliary aids to qualified students with disabilities, and provides reasonable accommodations to qualified individuals with disabilities who are employees or applicants for employment. For information about student accommodations, contact the Office of Disability Access at 940-565-4323. Faculty and staff should contact the Office of Human Resources at HRAdministration@unt.edu.

# **Student Standards of Academic Integrity**

A strong university is built upon the academic integrity of its members. As an intellectual enterprise, it is dependent upon trust, honesty, and the exchange of ideas in a manner that gives full credit and context to the sources of those ideas. UNT's policy on the Student Standards of Academic Integrity is designed to uphold these principles of academic integrity. It protects the rights of all participants in the educational process and validates the legitimacy of degrees awarded by the university.

The policy covers categories of academic dishonesty such as cheating, plagiarism, forgery, fabrication, facilitating academic dishonesty and sabotage. It includes descriptions of infractions, penalties and procedures. In the investigation and resolution of all allegations of student academic dishonesty, the university's actions are intended to be corrective, educationally sound, fundamentally fair, and based on reliable evidence. The full policy (18.1.16) is available online at policy.unt.edu, where it can be located by searching for either title or number.

# Changes of address

It is the responsibility of the student to provide correct permanent and local mailing address information at all times and on all documents at the university. Students who change their mailing address must notify the Registrar's Office immediately by calling 940-565-2111 or update their address at my.unt.edu.

# **Identification card regulations**

The official UNT ID provides access to several on-campus amenities such as: Library access, events on campus, access to the recreational center and athletic events, access to on-campus dining and residence halls, and more.

There is no charge for your **first** UNT ID card. Replacement ID cards are subject to a \$10 replacement fee.

The card is void upon termination or interruption of enrollment. Students are asked to retain their ID cards, even though they may not be enrolled. The cards are reactivated upon subsequent enrollment.

# **Liability for personal loss**

The university is not responsible for and does not assume any liability for loss of or damage to personal property, including vehicles. Students are encouraged to obtain personal insurance coverage for loss of or damage to possessions on campus, including possessions in dormitories and vehicles.

# Motor vehicle regulations

Persons who operate motor vehicles and bicycles on the UNT campus must comply with the Texas Transportation Code and published university regulations regarding vehicle and bicycle use, parking, display of decals and penalties for violation. The regulations are available online at transportation.unt.edu.

# **Paying bills**

State law does not permit the university to extend credit; bills must be paid when due. Check and credit card payments are accepted online at my.unt.edu. Checks paid in person must be made payable to the University of North Texas for the exact amount to be paid. Checks on which money must be advanced and postdated checks are not accepted.

# **Emergency Closures**

Weather conditions may temporarily disrupt university operations in that university administration may determine it is necessary to delay opening time, close early or close for the day.

Courses taught online via Web CT are unaffected by inclement or severe weather closings unless instructors inform students otherwise. Those students should continue course work as regularly scheduled.

Closings due to inclement or severe weather are posted on the UNT web site (www.unt.edu) and are released to Dallas–Fort Worth news media outlets. Registered students, faculty and staff will be notified via the Eagle Alert system as appropriate. Students can update their Eagle Alert contact numbers by going to www.my.unt.edu. Updates on inclement or severe weather can also be found by checking Facebook (@northtexas) following Twitter (@UNTEagleAlert) and listening to local media outlets.

Detailed information, guidelines, safety tips and resources pertaining to inclement weather can be found at www.unt.edu/weather.

## **Transportation services**

The UNT Shuttle serves the Denton campus including Discovery Park, Eagle Point, and various off-campus student housing complexes. Additionally, students can access the Denton local bus service fare free by presenting a valid UNT ID.

During the fall and spring semesters the e-ride service provides transportation around the UNT campus and Eagle Point for areas not served by the campus shuttle. Between the hours of 2am and 7am, a late night service operated by Lyft is available to students. Visit transportation.unt.edu for current e-ride information.

Alternative transportation options, including car sharing, bicycling and ridesharing, are supported by Transportation Services as well.

For information regarding hours of operation, route schedules and alternative transportation options, visit their web site at transportation.unt.edu.

## Other policies

Additional policies and guidelines pertaining to particular subjects or for specific publics are listed in other publications, such as the Housing Handbook, available in the Housing and Residence Life Office; the Code of Student Conduct, available at studentaffairs.unt. edu/dean-of-students/conduct; Parking Regulations, available from the Parking Office and the UNT Bookstore in the University Union. International students should consult the International Admissions and Advising Center for information regarding policies and procedures required by federal regulation agencies.

All university policies are subject to change throughout the year.

# **Notice of complaint**

The university may issue an official request or notice of complaint to a student to appear before a university administrator when a student's conduct or behavior is reasonably believed to be in violation of a published university policy. A student who receives a notice of complaint should always consider it important and respond immediately. Failure to respond to a notice of complaint can result in disciplinary action up to and including involuntary withdrawal from the university and a block on enrollment.

#### **Code of Student Conduct**

# **Purpose of the Code of Student Conduct**

The University of North Texas is deeply committed to advancing educational excellence and preparing students to become thoughtful, engaged citizens of a diverse, global community. The University has established the Code of Student Conduct to promote the wellbeing, honor and dignity of all who live, learn and work in our educational community. The Code of Student Conduct is intended to foster a safe environment conducive to learning and development, as well as to hold students accountable through an educational process that balances the interests of individual students with the interests of the University. Students and student groups are expected to conduct themselves in a manner that demonstrates respect for the rights and property of others and upholds the integrity and values of the University community.

The most up-to-date Code of Student Conduct is available online at deanofstudents.unt.edu.

# University of North Texas Drug-Free Schools and Communities Act

Pursuant to the Drug-Free Schools and Communities Act Amendments of 1989, the University of North Texas is required to establish a drug and alcohol prevention program for its students and employees. UNT is also required to provide this information to students, faculty, and staff upon entry and annually. Following is a description of UNT's program. A biennial review of this program is done to determine its effectiveness, to implement changes to the program if they are needed and to ensure that the university's disciplinary sanctions described are consistently enforced. The DFSCA report can be found at deanofstudents.unt.edu.

# **Standards of conduct**

University of North Texas regulations prohibit the unlawful possession, use, distribution and sale of alcohol and illicit drugs by university students and their guests and for employees on university-owned or controlled property and at university-sponsored or supervised activities.

#### **University discipline**

Violation of these university regulations can result in disciplinary action up to and including expulsion for students and discharge for employees.

## **Legal sanctions**

Local, state and federal laws also prohibit the unlawful possession, use, distribution and sale of alcohol and illicit drugs. Criminal penalties for violation of such laws range from fines up to \$20,000 to imprisonment for terms up to and including life.

#### **Health risks**

Specific serious health risks are associated with the use of alcohol and illicit drugs. Some of the major risks are listed below. For more information contact the Substance Abuse Resource Center at 1800 Chestnut, Chestnut Hall, Suite 301, or by calling 940-565-2787.

 Alcohol and other depressants (barbiturates, sedatives, and tranquilizers) – addiction, accidents as a result of impaired ability and judgment, alcohol poisoning, overdose when used with other depressants, damage to a developing fetus, heart and liver damage and death.

- Marijuana impairs short-term memory, thinking, and physical coordination. Can cause panic reaction and increase the risk of lung cancer and emphysema. Can interfere with judgment, attention span, concentration, and overall intellectual performance. Impairs driving ability. May cause psychological dependence and compromise the immune system.
- Cocaine addiction, cardiovascular system damage including heart attack, brain damage, seizures, lung damage, severe depression, paranoia, psychosis. Similar risks are associated with other stimulants, such as speed and uppers.
- Nicotine tobacco smoke contains thousands of chemical compounds, many of which are known to cause cancer. Nicotine, which is a central nervous system stimulant, produces an increase in heart and respiration rates, blood pressure, adrenaline production and metabolism. People can rapidly become physically and psychologically dependent on tobacco. Compromises the immune system.
- Inhalants inhalants are a diverse group of chemicals that easily evaporate and can cause intoxication when their vapors are inhaled. Most inhalants are central nervous system depressants. Use of these drugs slows down many body functions. High doses can cause severe breathing failure and sudden death. Chronic abuse of some of these chemicals can lead to irreversible liver damage and other health problems.
- Prescription drug abuse adverse reactions, dependency, withdrawal, and overdose.

#### **Resources**

A variety of resources exist for alcohol and other drug prevention education, counseling and referral. For detailed information concerning these resources available from the university and community agencies, students may contact the Meadows Center for Health Resources and the Substance-use and Resource Education Center at University Union 376C, 940-565-2787. Faculty and staff members may contact the Employee Assistance Program at 800-343-3822 or Human Resources at 940-565-4817.

# **Contacts at UNT**

General university number Switchboard 940-565-2000

**University metro number** Switchboard 817-267-3731

General university Internet address

www.unt.edu

Academic calendar www.unt.edu/catalog

Schedule of classes registrar.unt.edu

Web registration my.unt.edu

Campus tour information

940-565-4104

Web site: tours.unt.edu/

## **Admissions Offices**

# Office of Admissions (undergraduate)

Eagle Student Services Center, Room 305

Mailing address: 1155 Union Circle #311277 Denton, TX 76203-5017 940-565-2681 800-868-8211

Fax: 940-565-2408

Admissions web site: admissions.unt.edu

#### **Toulouse Graduate School**

# Graduate Admissions and Graduate Student Services

Eagle Student Services Center, Room 354

Mailing address:

1155 Union Circle #305459 Denton, TX 76203-5017 940-565-2383 888-UNT-GRAD (868-4723)

Fax: 940-565-2141

E-mail: graduateschool@unt.edu

Web site: tgs.unt.edu

Admission information, application and status for **new** and **former** graduate students (U.S. citizens and permanent residents).

# Schools and colleges

The academic dean's office of each college or school handles academic counseling, degree audits, graduation evaluation, adds/drops, concurrent enrollment, incompletes and overloads. All individuals holding a bachelor's degree should consult with the dean of the Toulouse Graduate School. Additional services are indicated below.

# **Honors College**

Main Departmental Office Sage Hall, Room 320

Mailing address: 1155 Union Circle #310529 Denton, TX 76203-5017 940-565-3305 Fax: 940-369-7370

## **College of Business**

Udergraduate Programs Office Business Leadership Building, Room 110

Mailing address: 1155 Union Circle #311160

Denton, TX 76203-5017

940-565-2110

Web site: www.cob.unt.edu

# **College of Education**

Student Advising Office Matthews Hall, Room 117

Mailing address:

1155 Union Circle #311337 Denton, TX 76203-5017

940-565-2736 Fax: 940-565-2728

Web site: www.coe.unt.edu/SAO

The office handles admission to teacher education; teacher certification; degree audit advising; information and assistance with THEA; undergraduate registration and schedule changes; graduation checks; administration of department competency tests; state teacher certification test permission.

# **College of Engineering**

Office of the Dean Discovery Park, Room A140

Mailing address:

1155 Union Circle #310440 Denton, TX 76203-5017 940-565-4300

Advising: 940-565-4201 Web site: engineering.unt.edu

# College of Health and Public Service

Undergraduate Advising Chilton Hall, Suite 112

Mailing address:

1155 Union Circle #305248 Denton, TX 76203-5017 940-565-4115

Fax: 940-565-2352 Web site: www.hps.unt.edu

# **College of Information**

Office of the Dean

Discovery Park, Room E290

Mailing address:

1155 Union Circle #311068 Denton, TX 76203-5017

940-369-8164 Fox: 940-891-677

Fax: 940-891-6773

E-mail: ci-advising@unt.edu

Web site: ci.unt.edu

For degree audits and graduation applications, students should see the undergraduate advisor.

## Frank W. and Sue Mayborn School of Journalism

Office of the Dean Sycamore Hall, Room 206H

Office of the Associate Dean Sycamore Hall, Room 206C

Mailing address:

1155 Union Circle #311460 Denton, TX 76203-5017

940-565-2205 Fax: 940-565-2370

Web site: journalism.unt.edu

## **College of Liberal Arts and Social Sciences**

Dean's Office for Undergraduates and Student Advising General Academic Building, Room 220

Mailing address:

1155 Union Circle #305189 Denton, TX 76203-5017

940-565-2051 Fax: 940-565-4529

Web site: www.class.unt.edu

# College of Merchandising, Hospitality and **Tourism**

Office of the Dean Chilton Hall, Room 331

Mailing address:

1155 Union Circle #311100 Denton, TX 76203-5017

940-565-2436 Fax: 940-565-4348

Web site: www.cmht.unt.edu

Reservations for The Club at Gateway Center student-operated restaurant may be made by calling 940-565-4144.

# **College of Music**

Office of the Dean Music Building, Room 247

Mailing address:

1155 Union Circle #311367 Denton, TX 76203-5017

940-565-2791 Fax: 940-565-2002

Web site: www.music.unt.edu

# **College of Science**

Mailing address:

1155 Union Circle #311365 Denton, TX 76203-5017

Web site: cos.unt.edu Advising Center

Web site: cos.unt.edu/advising

#### College of Visual Arts and Design

Office of Student Services Art Building, Room 232

Mailing address:

1155 Union Circle #305100 Denton, TX 76203-5017

940-565-4001 Fax: 940-565-4717

E-mail: cvad.dean@unt.edu Web site: www.cvad.unt.edu

#### **Toulouse Graduate School**

Office of the Dean

Eagle Student Services Center, Room 354

Mailing address:

1155 Union Circle #305459

Denton, TX 76203-5017

940-565-2383

Fax: 940-565-2141

Web site: tgs.unt.edu

Information regarding graduate admission, general policies, regulations and degree requirements; GRE and GMAT score recording; final approval of graduate degree audits.

#### **General offices**

#### **The Career Center**

Sage Hall, Room 202

Discovery Park, Room C111

Business Leadership Building, Room 136

UNT New College at Frisco, Room 145

Mailing address:

1155 Union Circle #310859

Denton, TX 76203-5017

940-565-2105

Fax: 940-565-4376

Web site: careercenter.unt.edu

Student Employment: Part-time employment listings for on- and off-campus; job fairs; customer service training; supervisor conflict assistance.

## **Counseling and Testing Services**

Chestnut Hall, Room 311

Mailing address:

1155 Union Circle #310968 Denton, TX 76203-5017

940-565-2741

#### Professional and Academic Testing

Gateway, Room 140

Mailing address:

1155 Union Circle #311333

Denton, TX 76203-5017

940-369-7617

Web site: studentaffairs.unt.edu/counseling-and-testing-services

#### **Dean of Students**

University Union, Room 409

Mailing address:

1155 Union Circle #305008

Denton, TX 76203-5017

940-565-2648

Fax: 940-369-8440

E-mail: deanofstudents@unt.edu Web site: deanofstudents.unt.edu

#### **Office of Disability Access**

Sage Hall, Room 167

Mailing address:

1155 Union Circle #310770

Denton, TX 76203-5017

940-565-4323

Assistance with provision of auxiliary academic aids for students who request reasonable accommodations under the Americans with Disabilities Act (ADA) as Amended and Rehabilitation Act of 1973.

# **Institutional Equity and Diversity**

Hurley Administration Building, Room 175

Mailing address:

1155 Union Circle #310937

Denton, TX 76203-5017

940-565-2711

Email: equity.diversity@unt.edu

# **Housing Office**

UNT Welcome Center, 1st Floor

Mailing address:

1155 Union Circle #311310 Denton, TX 76203-5017 940-565-2610

Fax: 940-369-8764 Web site: housing.unt.edu

Residence hall contracts, payments, room assignments and problems; residence hall disciplinary action and appeals.

#### **International Affairs**

Marquis Hall, Room 105

Mailing address:

1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2197

Fax: 940-565-4822

Web site: international.unt.edu

International Affairs supports international teaching, research and service. We strive to enrich campus life by welcoming international students and scholars, cultivating global citizens among students, and fostering global connections between UNT and institutions, communities and people around the world.

International Affairs is guide and champion for campus internationalization at the University of North Texas. It is our mission to support the university's global endeavors and international initiatives. We provide expertise, assistance, and support to faculty, staff, students and administration in all international activities, and direct and support the activity of six constituent units: Global Engagement, Programming and Communications, Intensive English Language Institute, International Recruitment, International Student and Scholar Services, and the Study Abroad Office.

# **Global Engagement Office**

Marquis Hall, Room 105

Mailing address:

1155 Union Circle #311067 Denton, TX 76203-5017

940-369-5292

Website: international.unt.edu/globalengagement

The Global Engagement Office advises colleges on the development of global programs, manages UNT's international agreements and contracts, and oversees the division's data collection and analysis. Global Engagement acts as steward for campus internationalization by encouraging global scholarship, administering Fulbright and intramural grants, and promoting other global opportunities for faculty and students.

## **Intensive English Language Institute**

Marquis Hall, Room 223

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2003

Fax: 940-565-4822

E-mail: ielimainoffice@unt.edu Web site: international.unt.edu/ieli

The Intensive English Language Institute, established in 1977, is the longest-standing program of its kind in North Texas and one of the most prestigious programs for learning academic English in the United States. IELI also conducts the International Teaching Assistants testing and training program for UNT.

#### **International Recruitment**

Marquis Hall, Room 114

Mailing address:

1155 Union Circle #311067 Denton, TX 76203-5017

940-369-7624 Fax: 940-369-7342

E-mail: studyatunt@unt.edu

Web site: international.unt.edu/futurestudents

The International Recruitment Office recruits well-qualified and diverse international students to UNT college and schools. Its core activities include converting international prospects to applicants via digital outreach and recruitment at feeder institutions both abroad and in the U.S. Office staff work regularly with high school counselors, foreign faculty, U.S. higher education advisors and UNT alumni

# International Student and Scholar Services

Marquis Hall, Room 105

Mailing address:

1155 Union Circle #311067 Denton, TX 76201

940-565-2197 Fax: 940-565-4145 Email: I20@unt.edu

Website: international.unt.edu/content/international-student-scholar-

services

International Student and Scholar Services is committed to providing top-notch, culturally sensitive services to UNT's international communities. Our staff is here to help students navigate U.S. immigration regulations throughout their time at UNT.

#### Office of Sponsored Student Programs

Marquis Hall, Room 106

Mailing address:

1155 Union Circle #311067

Denton, TX 76203-5017

940-565-2196

Fax: 940-565-4822

E-mail: sspc@unt.edu

Web site: international.unt.edu/ssp

The Office of Sponsored Student Programs maintains relationships with sponsoring agencies around the world to place fully and partially funded international students into undergraduate, graduate and academic English language programs at UNT. In addition, the office coordinates a variety of special programs for undergraduate and graduate international students including the 1+2+1 China Transfer program.

# **Learning Center**

Sage Hall, Room 170

Mailing address: 1155 Union Circle #305038 Denton, TX 76203-5017

940-369-7006 Fax: 940-369-8394

# Registrar's Office

Eagle Student Services Center, Rooms 147 and 209

Mailing address:

1155 Union Circle #311400 Denton, TX 76203-5017

940-565-2111 Fax: 940-565-4463 Web site: registrar.unt.edu

Registration; transcripts; grade reports; academic status information; residency determination for continuing and former students; military waivers; enrollment verification/certification; services for veterans; notary service; and athletic eligibility and graduation.

## **Study Abroad Office**

Marquis Hall, Room 145

Mailing address:

1155 Union Circle #311067 Denton, TX 76203-5017

940-565-2207 Fax: 940-565-4822

E-mail: studyabroad@unt.edu Web site: studyabroad.unt.edu

The Study Abroad Office coordinates affiliate, exchange and faculty-led programs for UNT students in collaboration with the university's colleges and schools. The office works to create programs that inspire global citizenship, enhance curriculum, and support the academic and personal goals of UNT students from all majors and backgrounds. The office also serves as a U.S. Passport Acceptance Facility and is open to the UNT and local Denton communities.

#### **Student Financial Services**

Eagle Student Services Center, Room 105

Mailing address:

1155 Union Circle #310620 Denton, TX 76203-5017 940-565-3225

Fax: 940-565-3877 Web site: sfs.unt.edu Payments: my.unt.edu

Information and assistance regarding tuition and fee charges, waivers, installment payment of tuition and special fees; refunds; returned checks; identification cards.

# **Student Financial Aid and Scholarships**

Eagle Student Services Center, Rooms 134 and 228

Mailing address:

1155 Union Circle #311370 Denton, TX 76203-5017

940-565-2302

Toll free: 877-881-1014 Fax: 940-565-2738

Web site: financialaid.unt.edu

#### **Student Government Association**

University Union, Room 344

940-565-3850 Web site: sga.unt.edu

Student government; student elections, Raupe Travel Grants; Eagle's

Nest funding; Intern Program.

#### **Student Health and Wellness Center**

Chestnut Hall, Second Floor

Mailing address:

1155 Union Circle #305160 Denton, TX 76203-5017 Main phone: 940-565-2333

Fax: 940-565-4559

Email: askSHWC@unt.edu Web site: www.healthcenter.unt.edu Online appointments: myosh.unt.edu

See web site for care options when the clinic is closed.

#### The Center for Leadership and Service

Union, Suite 345

Mailing address:

1155 Union Circle #305007 Denton, TX 76203-5017 Phone: 940-565-3021

Web site: studentaffairs.unt.edu/center-for-leadership-and-service

## **Student Legal Services**

University Union, Room 411

Mailing address:

1155 Union Circle #305058 Denton, TX 76203-5017

940-565-2614 Fax: 940-369-7251

Web site: www.unt.edu/legal

Legal advice (landlord/tenant, immigration, consumer, debt and credit, etc.) for currently enrolled students.

# **Transportation Services Office**

Highland Street Parking Garage 620 Central Avenue Denton, TX 76201

Transportation Services: 940-565-3020 E-ride Transportation: 940-565-3014 E-mail: transportation.services@unt.edu

# **University Police Department**

Sullivant Public Safety Center 1700 Wilshire St. Denton, TX 76201-6572

Police Department: 940-565-3000

Fax: 940-369-8788

# **Honors College**

Main College Office Sage Hall, Room 320

Mailing address: 1155 Union Circle #310529 Denton, TX 76203-5017 940-565-3305 Fax: 940-369-7370

E-mail: honorscollege@unt.edu Web site: honors.unt.edu

#### Glênisson de Oliveira, Dean

Bethany Blackstone, Associate Dean for the Honors College James Duban, Associate Dean for Research and National Scholarships

Eric Gruver, Associate Dean for TAMS

The Honors College is dedicated to enriching the undergraduate academic experience for talented, motivated and well-prepared students. Honors College membership is open to all qualified students, whatever their major. Upon joining the Honors College, students find that they are part of an exciting community of talented scholars pursuing academic and intellectual growth. The goal of the Honors College is to help these students build an excellent foundation, via research-based curricula, thereby preparing them to study at the graduate level, establish a career, and meet the demands of responsible citizenship.

# The benefits of Honors College membership

#### **Honors classes**

Honors faculty and staff work to design, implement and support learning opportunities for students, both in and beyond the classroom. The primary benefit of Honors College membership is the right to enroll in honors classes, which are taught by faculty members with a strong commitment to undergraduate education. Honors classes offer a supportive environment conducive to intellectual growth. The small enrollment of honors classes opens up opportunities for active participation in learning, including projects, presentations and class discussions. In addition, many honors classes can be substituted for non-honors classes in the University Core Curriculum. Honors students also enjoy priority registration each semester.

#### Undergraduate research

Many honors students elect to participate in undergraduate research. Students may take courses to learn about research, develop their research projects, and write an honors thesis, all under the guidance of a faculty mentor in their major. Honors research courses include HNRS 1500 - Introduction to Research: An Interdisciplinary Perspective; HNRS 3500 - Honors Thesis Proposal Development; XXXX 3996 – Honors Mentored Research; and XXXX 4951-Honors College Capstone Thesis. Students have opportunities to present their research at regional and national conferences and may submit their work for publication in the North Texas Journal of Undergraduate Research, or in other scholarly journals.

# Special programming and housing

Members are invited to participate in many programs sponsored by the Honors College, including welcome back events, professional development programs, and events sponsored by the Honors College Programming Council and Honors College interest communities. Members are also eligible to live in Rawlins Hall or Honors Hall, depending on their class year. Both Honors residence halls feature a faculty-in-residence.

## Honors College membership and participation

Honors College membership is open to students completing their first Bachelor's degree and is compatible with every undergraduate major and program at UNT. Membership in the Honors College is secondary to membership in the college of the student's major, and the program's flexibility allows students to decide each semester on the combination of honors, non-honors and major classes that best suits their needs.

#### **Eligibility for membership**

Freshmen, transfer, and continuing students are invited to apply for membership to the Honors College. All applicants submit a personal statement, resume, and appropriate academic records. Applications are reviewed holistically. Interested students can review application deadlines and complete the application at honors.unt.edu

# Programs for participation and recognition in the Honors College

#### **Honors College Scholar Award**

The Honors College Scholar Award requires students to complete 18 honors credit hours with a cumulative and Honors GPA of at least 3.25. Students may use two Honors contracts and six hours of study abroad credit to fulfill a portion of the 18 required credit hours. Students who complete the Honors College Scholar Award receive the Honors College medallion.

# Advanced Honors College Scholar Award (transfer students only)

Designed specifically for transfer students matriculating to UNT with a substantial number of credit hours, the Advanced Honors College Scholar Award requires these students to complete the following: two Honors courses, HNRS 3500, and an Honors thesis in any department course numbered 4950/4951. Students may use one Honors contract as well as a study abroadcourse at UNT to satisfy the two Honors courses. The student must maintain a cumulative and Honors GPA of at least 3.25. Students who complete the Advanced Honors College Scholar Award receive the Honors College medallion.

## **Distinguished Honors College Scholar Award**

The highest recognition available to students through the Honors College is the Distinguished Honors College Scholar Award. For this award, the student must complete the following: 21 honors credits, including HNRS 3500 and an Honors thesis in any department course numbered 4950/4951. Students must also maintain a cumulative and Honors GPA of at least 3.25. Students may use two Honors contracts and six hours of study abroad credit at UNT to satisfy part of their 21-hour requirement. Students who complete the Distinguished Honors College Scholar Award receive the Honors College medallion.

# **Honors College Engagement Recognition**

This recognition is for students who are particularly active in attending Honors College events and/or campus activities. These students can receive the Honors College Engagement Recognition in addition to an Honors College award. Program requirements are posted at honors.unt.edu.

If you have any questions regarding the Honors College Distinctions or what catalog year you fall under, please contact Honors College Academic Advising.

#### **Honors courses**

Specific objectives have been adopted for honors courses, including the following.

- Honors courses emphasize development of analytical and evaluative skills through readings from primary sources, journal articles and other supplementary materials.
- Honors courses encourage students to engage in high-level thinking and learning through activities such as intensive discussion; writing in small, collaborative learning settings; and research papers and projects.

- Honors courses promote independent thinking by making students accountable for important aspects of their learning.
- Honors courses place material in a conceptual context that illustrates the importance of that material and its relationship to other knowledge.
- Honors courses provide enhanced opportunities for students to develop research skills and produce independent, original research or creative products as part of the course requirements.

## Honors courses that meet University Core Curriculum requirements

Honors courses that meet University Core Curriculum requirements

# Requirements

# Honors Courses that meet University Core Curriculum requirements

# Communication, 6 hours

- ENGL 1311 Honors First-Year Writing I
- ENGL 1321 Honors First-Year Writing II
- TECM 2700 Technical Writing (special section)

# Mathematics, 3 hours

- MATH 1710 Calculus I (special section)
- MATH 1720 Calculus II (special section)

# Life and physical sciences, 6 hours

- BIOL 1132 Environmental Science (special section)
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1722 Honors Biology for Science Majors II (special section)
- CHEM 1412 General Chemistry for the Honors College or
- CHEM 1422 General Chemistry for the Honors College

# American History, 6 hours

- HIST 2675 Honors United States History to 1865
- HIST 2685 Honors United States History Since 1865

# Government/Political Science, 6 hours

- PSCI 2316 Honors U.S. and Texas Constitutions and Institutions
- PSCI 2315 Honors US Political Behavior and Policy

# Creative arts, 3 hours

- ART 1301 Honors Art Appreciation
- MUMH 2040 Music Appreciation

# Language, philosophy and culture, 3 hours

- PHIL 1050 Introduction to Philosophy (special sections)
- PHIL 2070 World Religions (special sections)
- PHIL 2600 Ethics in Science (special sections)

# Social and Behavioral Sciences, 3 hours

- HDFS 1013 Human Development (special section)
- PSYC 1630 General Psychology I (special section)
- PSYC 1650 Biological Psychology (special section)
- SOCI 1510 Introduction to Sociology (special section)

# Component Area Option, 6 hours

- ART 1301 Honors Art Appreciation
- COMM 1440 Honors Classical Argument
- HNRS 1100 The Good Society
- HNRS 1500 Introduction to Research: An Interdisciplinary Perspective

# Division of International Affairs

Main Office Marquis Hall, Room 105

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2197 Fax: 940-565-4822

E-mail: <u>international.events@unt.edu</u> Web site: https://international.unt.edu/

#### Pia Wood, Vice Provost and Dean

International Affairs is guide and champion for internationalization at the University of North Texas. International Affairs supports international teaching, research, and service. We strive to enrich campus life by welcoming international students and scholars, cultivating global citizens among students, and fostering global connections between UNT and institutions, communities and people around the world.

International Affairs functions in a leadership and facilitation role to support the university's global endeavors and international initiatives. We provide expertise, assistance, and support to faculty, staff, students, and administration in all international activities.

All units are located in Marquis Hall (international.unt.edu).

#### Global Engagement Office

Marquis Hall, Room 105

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-369-5292

Website: international.unt.edu/globalengagement

The Global Engagement Office advises colleges on the development of global programs, manages UNT's international agreements and contracts, and oversees the division's data collection and analysis. Global Engagement acts as steward for campus internationalization by encouraging global scholarship, administering Fulbright and intramural grants, and promoting other global opportunities for faculty and students. Global Engagement manages UNT's special programs with partner institutions abroad, such as the China Undergraduate Transfer Program, undergraduate/graduate transfer program, short-term programs, and others. Contact 940-369-5292 or international.unt.edu/globalengagement.

#### **Programming and Communications**

Marquis Hall, Room 105

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-369-7795

Web site: international.unt.edu/student-activities

Programming and Communications provides UNT students opportunities for cross-cultural learning and engagement via a full schedule of international events and activities, provides international student support programs to help new students adjust to life in the U.S., and manages and awards International Affairs scholarships and grants.

#### **Intensive English Language Institute**

Marquis Hall, Room 223

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2003

Fax: 940-565-4822

E-mail: ielimainoffice@unt.edu Web site: international.unt.edu/ieli

The Intensive English Language Institute, established in 1977, is the longest-standing program of its kind in North Texas and one of the most prestigious programs for learning academic English in the United States. IELI also conducts the International Teaching Assistants testing and training program for UNT. Contact 940-565-2003 or Marquis Hall, Room 223 or visit international unt.edu/ieli.

#### **International Recruitment Office**

Marquis Hall, Room 125

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017

940-369-7624 Fax: 940-565-4822

E-mail: studyatunt@unt.edu

Web site: https://international.unt.edu/content/international-

recruitment-office

The International Recruitment Office recruits well-qualified and diverse international students to UNT colleges and schools. Its core activities include converting international prospects to applicants via digital outreach and recruitment at feeder institutions both abroad and in the U.S. Office staff work regularly with high school counselors, foreign faculty, U.S. higher education advisors and UNT alumni. Contact 940-369-7624 or Marquis Hall, Room 125 or visit https://international.unt.edu/content/international-recruitment-office.

#### International Student and Scholar Services Office

Marquis Hall, Room 106

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2195

Fax: 940-565-4145

E-mail: internationaladvising@unt.edu

Web site: https://international.unt.edu/content/international-student-scholar-services

The International Student and Scholar Services Office provides immigration advising and support to international students and scholars engaged in academic activities at the University of North Texas System. The office serves as the primary campus and system resource on immigration matters pertaining to all non-immigrant visa types. Contact 940-565-2195 or Marquis Hall, Room 110 or visit https://international.unt.edu/content/international-student-scholar-services

#### Study Abroad Office (SAO)

Marquis Hall, 145

Mailing address: 1155 Union Circle #311067 Denton, TX 76203-5017 940-565-2207 Fax: 940-565-4822

E-mail: studyabroad@unt.edu

Web site: studyabroad.unt.edu

The **Study Abroad Office** coordinates affiliate, exchange and faculty led programs for UNT students in collaboration with the university's colleges and schools. The office works to create programs that inspire global citizenship, enhance curriculum, and support the academic and personal goals of UNT students from all majors and backgrounds. The office also serves as a U.S. Passport Acceptance Facility and is open to the UNT and local Denton communities. Contact 940-565-2207 or Marquis Hall, Room 145 or visit studyabroad.unt.edu.

# G. Brint Ryan College of Business

Undergraduate Programs Office Business Leadership Building, Room 110

Mailing address: 1155 Union Circle #311160 Denton, TX 76203-5017 940-565-2110

Web site: www.cob.unt.edu

## Marilyn Wiley, Dean

Terry Pohlen, Senior Associate Dean Anna Sidorova, Academic Associate Dean Tracy Dietz, Academic Associate Dean for Assessment and Academic Reporting

#### Mission

To prepare global business leaders and scholars in an intellectually stimulating and engaging community through preeminent teaching, research, and service.

#### Vision

To be an agile institution that transcends national and international standards of excellence in research and education.

# **Programs of study**

The college offers programs leading to the Bachelor of Business Administration (BBA) or Bachelor of Science (BS). A minimum of 50 percent of the business credit hours required for any undergraduate business degree must be completed at UNT. BBA and BS degree programs are offered through the following departments:

#### College of Business

- BBA Business Integrated Studies
- BS in General Business
- Business Foundations Minor
- International Business Certificate

#### Department of Accounting

- BBA Accounting
- BS Accounting (BS/MS combined degree programs)

#### Department of Finance, Insurance, Real Estate and Law

- BBA Economics
- BBA Finance
- BBA Finance, with a grad track option leading to Finance, MS
- BBA Risk Insurance and Financial Services
- BBA Real Estate
- BBA Real Estate with a concentration in residential property management

#### Department of Information Technology and Decision Sciences

- BBA Business Analytics
- BBA Business Analytics, with grad track option leading to Business Analytics, MS
- BS Business Computer Information Systems

#### **Department of Management**

- BBA Entrepreneurship and Enterprise Management
- BBA Organizational Behavior and Human Resource Management

# Department of Marketing, Logistics and Operations Management

BBA — Marketing

- BBA Marketing with a concentration in professional selling
- BBA Operations and Supply Management
- BS Aviation Logistics
- BS Logistics and Supply Chain Management

#### Accreditation

The college is accredited by the AACSB International—The Association to Advance Collegiate Schools of Business (777 South Harbour Island Blvd., Suite 750, Tampa, FL 33602; 813-769-6500) at both the undergraduate and graduate levels.

# Degree requirements and the University Core Curriculum

The University of North Texas core curriculum is listed in the "University Core Curriculum" in the Academics section of this catalog. Each program within the Ryan College of Business requires specific courses to satisfy particular degree requirements (see Bachelor of Business Administration and specific BS and BBA degree sections of this catalog). Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree requirements and core requirements should consult an academic advisor.

# Ryan College of Business tiered academic progression plan and academic standards

All students pursuing a BBA or BS degree at RCOB must follow the tiered academic progression plan and conform to the academic standards outlined below.

# Undergraduate tiered academic progression plan and admission policy

#### Tier One: Pre-business (PBUS)

- All students entering the Ryan College of Business, whether for a BBA or BS degree, are admitted under prebusiness (PBUS), including new, transfer and continuing students. PBUS students must meet with an advisor in the RCOB Undergraduate Programs Office. In addition to the requirements listed below, all pre-business prerequisite courses require a minimum grade of C.
- In order to progress to Tier Two (BUND), PBUS students must have the following:
  - a) completion of three of the following prebusiness prerequisite courses: college-level math (3 hours), ACCT 2010, ACCT 2020, ECON 1100, ECON 1110, DSCI 2710
  - b) students must earn a minimum of two Bs and one C in the three courses completed under (a) above
- Once the above eligibility requirements are met, students can apply online or meet with an academic advisor for admission into Tier Two (BUND).
- 4. Tier One students who are unable to progress to Tier Two at the completion of 45 UNT attempted hours (this includes all attempts of all UNT courses) are subject to dismissal from the Ryan College of Business. Advisors will consult with each student prior to and at the time of dismissal, and will refer to resources and other UNT programs which can better serve the student's needs.
- 5. UNT continuing students changing to PBUS from another UNT major, and students transferring from another institution with 45 or more hours, must progress to BUND within two semesters, or will be subject to dismissal from the College of Business.
- PBUS students are restricted to lower-level (1000/2000) business courses.

#### Tier Two: Business Undergraduate (BUND)

- 1. Tier Two students who have met the requirements of Tier One and have applied to Tier Two status (BUND) must meet the following requirements to progress to Tier Three:
  - a) completion of at least 45 semester hours
  - b) completion of the following pre-business and communication courses with a minimum grade of C and a GPA of 2.7 on these nine courses (or equivalents): ENGL 1310; ENGL 1320 or TECM 2700 (TECM 2700 required for BS/MS accounting); MATH 1190 or MATH 1710; ECON 1100 and ECON 1110; ACCT 2010 and ACCT 2020; BCIS 2610; and DSCI 2710.
- Once above eligibility requirements are met, BUND students must meet with an advisor to file for an official degree plan and move to Tier Three.
- 3. Tier Two (BUND) students are restricted to lower-level (1000/2000) business courses.

#### Tier Three: Official BBA/BS declared major with professional field

- Students who meet all requirements for Tier Three receive clearance into upper level (3000/4000) business courses (business foundation and professional field) after meeting with an advisor to file for the official degree plan (BBA or BS with declared professional field).
- Students in Tier Three are strongly encouraged to meet with their departmental advisor when possible. Tier Three students must meet degree and graduation requirements as outlined under Ryan College of Business Academic Standards
- Tier Three students must apply for graduation by the deadline posted in the Academic Calendar.

#### College of Business academic standards

- Students must complete the tiered academic progression plan as outlined above.
- A grade of C or above must be earned in each business foundation course and each professional field or supporting field course completed in residence or transferred to UNT.
- 3. Degree progress and major dismissal:
  - Students who have been accepted to a business degree program must maintain satisfactory progress. Declared business majors are subject to dismissal from a business degree program and may not be permitted to enroll for additional courses in that major if they receive any combination of grades of D or F in two attempts of the same course in the professional field and supporting courses in their degree plan.
- Academic requirements for graduation with a BBA or BS from the Ryan College of Business include:
  - a minimum of 2.0 UNT cumulative GPA (all courses completed at UNT)
  - o a minimum 2.0 overall GPA (combined UNT and transfer GPA)
- Individual departments may have higher graduation and/or entrance standards (see departmental sections of catalog).

#### **Course listings**

Individual courses of instruction are subject to change or withdrawal at any time and may not be offered each term/semester or every year. Any course may be withdrawn from current offerings if the number of registrants is too small to justify conducting it.

Enrollment in advanced courses requires successful completion of the pre-business requirements.

WARNING: It is the student's responsibility to meet all course prerequisites listed in the current catalog prior to enrollment in any course. Courses numbered 4900-4910 are offered under limited circumstances to advanced undergraduate students who are capable of developing a problem independently. These courses require approval by the department chair. A project is chosen by the student and instructor, developed through conferences and approved activities under the direction of the instructor, and may require a term paper. These courses are not open to graduate students.

All Courses of Instruction are located in Course descriptions.

# **Academic advising**

Undergraduate academic advising is available through the RCOB UG Programs Office. Through a collaborative relationship, RCOB advising staff assists students through the tiered progression process. Advisors support students in developing and accomplishing personal educational goals as well as advise on matters relating to selecting degree programs and courses, preparing degree plans, obtaining advising clearance forms, changing majors, and understanding policies and procedures. Departmental advisors are available to serve the needs of RCOB students in Tier III status who have declared a specific major within RCOB on matters pertaining to professional and supporting field courses required for a specific RCOB degree.

While RCOB advising staff and departmental advisors offer academic advice and assistance to students, the students are expected to take responsibility for their education and personal development. Students must know and abide by the academic and disciplinary policies given in the undergraduate catalog. Students must also know and meet the requirements of their selected degree program, including the University's Core; the RCOB tiered academic progression plan and academic standards outlined above; pre-business, business foundation, professional development requirements; professional field and supporting field requirements for specific RCOB BBA or BS degrees (see Bachelor of Business Administration and specific BS and BBA degree sections of this catalog). Students must enroll in courses appropriate to the program, meet prerequisites and take courses in the proper sequence to ensure orderly and timely progress. Students should seek advice from college or departmental advisors in the major about degree requirements and other college and university policies when necessary. Students must also know and adhere to all college and university deadlines. Students will not be relieved of their responsibility to know the policies, deadlines and business practices of the university on the grounds that they were not told. If students have questions regarding these materials, it is the university's expectation that the student will consult their academic advisor for guidance and resolution.

## **Student Services and Resources**

## **RCOB Undergraduate Programs Office**

The RCOB Undergraduate Programs Office serves undergraduate students as they progress toward timely degree completion - from the time they are admitted to the RCOB to graduation. Our services include undergraduate academic advising, student services, student engagement and professional development services, and prospective student services. Our services are available throughout the year in the Business Leadership Building, Room 110.

RCOB academic advisors assists students through the tiered progression process, support students in developing and accomplishing personal educational goals as well as advise on matters relating to selecting degree programs and courses, preparing degree plans, obtaining advising clearance forms, changing majors, and understanding policies and procedures. We also review and apply transfer credits and monitor graduation requirements. Our office serves as the generalists for each degree in the undergraduate curriculum and have advisors trained to work uniquely with students. Once a student is declared in a major, they should also connect with a departmental advisor. Undergraduate departmental advisors in each department must be consulted concerning any changes in the professional or supporting field requirements and offer expertise in professional and career growth and development.

Our student services team assists students who may encounter difficulties during their academic career. This may include instances where extenuating circumstances lead them to request adding a course after registration, requesting a late drop or a backdated withdrawal from a term, or when students may experience certain insecurities that are prohibiting them to be successful. These are reviewed internally by our team and may require additional review by a university committee.

Engagement outside of the classroom is vital to student success and is key in gaining soft skills that are necessary for career success. We offer various programs, including 26 business-focused student organizations, our Professional Leadership Program, Student Ambassadors, the Distinguished Speaker Series, and a peer mentor program for first-year students.

Professional development and career-readiness is a major focus for our college. As part of their degree program, all business students are required to complete professional development courses that cover topics such as business communication, career/major exploration, resume writing, interviewing, diversity and inclusion, networking and Excel certification. Business students have an array of opportunities to attend events focused career preparation. Our in-house Career Center offers dozens of workshops, webinars and trainings to assist students in their journey toward a successful career.

Our recruitment team works collaboratively with the university's Admissions Teams to reach out and provide information assistance to prospective business students to attend UNT. They oversee outreach initiatives including tours of the Business Leadership Building, College Day programming and Business Leadership Academy. They build partnerships with community colleges and high schools to make the transition to UNT a seamless one. Prospective students are invited to meet with our recruiter to learn more about our programs and requirements.

## Ryan College of Business Information Technology Services

### Terry Pohlen, Senior Associate Dean

The Business Information Technology Services department manages Business Leadership Building IT infrastructure and supports the IT needs of the Ryan College of Business students, faculty and staff, providing access to desktop computing, research computation space and VMware-based remote learning environment.

Business Leadership Building is equipped with more than 300 Dell OptiPlex Desktop and 220 Dell Latitude Laptops systems, networked together with a multi-node, high-availability server infrastructure. The Ryan College of Business provides 200+ of the above systems in a combination of the Student Computer Lab, Security Lab, Behavioral Lab, and Trading Lab, all conveniently located between the 1st and 2nd floors of the Business Leadership Building. The Student Computer Lab located on the 1st floor is open more than 100 hours per week and staffed by 14+ student lab monitors. All other labs are access-as-needed for the specialized RCOB classes.

The Student Computer Lab consists of more than 123 desktop systems and is designed for the general business student who is required to use computers but may also be used by all currently enrolled UNT students. As an extension of the Student Computer Lab, several public access charging stations are provided on Level G of the Business Leadership Building for walk-up device charging and personal laptop use. The Student Computer Lab includes course-related software for such courses as Introduction to Database Applications; Distributed Systems and Teleprocessing; Data Communications and Networking; Information Resource Management; Decision Support Systems; Visual Display; and Fundamentals of Information Technology Security.

Students can use their own notebook computers or check out thin mobile clients to take to the work spaces adjacent to the labs for team and group work. Also, there are seven study rooms available by reservation and informal seating areas throughout the Business Leadership Building. The Ryan College of Business' virtual desktop lab is open to all RCOB majors: this environment provides remote access to all major Ryan College of Business applications from anywhere. There are also several "Virtual Classrooms" utilizing the same virtual desktop environment for hands-on instruction when

needed.

The Business Information Technology Services department of the Ryan College of Business is housed in the Business Leadership Building. It comprises the Senior Associate Dean, an IT manager, a desktop/computer lab manager, a desktop/computer lab technician, one system administrator, and two web developers. A technical support team of part-time student assistants aids the full-time staff in software installations and troubleshooting, web development, and working with faculty and staff when problems or questions arise concerning software and hardware.

### **Beta Gamma Sigma**

This national honorary society of business administration students was founded in 1913. The UNT chapter was established in 1962. The primary objective of Beta Gamma Sigma is to encourage and honor high academic achievement by students of business and management through chapters in all American Assembly of Collegiate Schools of Business accredited schools. Membership is a signal honor and is limited to outstanding students who show promise of success in the field of business and who rank in the upper 10 percent of their junior, senior or graduate class.

### **Majors**

## **Bachelor of Business Administration**

The following requirements must be satisfied for a Bachelor of Business Administration.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Business Administration degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the G. Brint Ryan College of Business requirements.

## Pre-business requirements

## University Core Curriculum requirements

See "University Core Curriculum Requirements" in the Academics section of this catalog.

### Required courses

- ECON 1100 Principles of Microeconomics (with a grade of C or higher)
- ECON 1110 Principles of Macroeconomics (with a grade of C or higher)
- MATH 1190 Business Calculus (with a grade of C or higher)

or

- MATH 1710 Calculus I (with a grade of C or higher)
- COMM 1010 Introduction to Communication \* or
- TECM 2700 Technical Writing \*
- BCIS 2610 Introduction to Computers in Business \*\* (with a grade of C or higher)
- ACCT 2010 Accounting Principles I (Financial Accounting) \*\* (with a grade of C or higher)
- ACCT 2020 Accounting Principles II (Managerial Accounting) \*\* (with a grade of C or higher)
- DSCI 2710 Data Analysis with Spreadsheets \*\* (with a grade of C or higher)

## Professional Development requirements

- BUSI 1200 Professional Development I-Strategies for Business (with grade of C or higher)
- BUSI 3100 Professional Development II-Critical Thinking and Decision Making in Business (with grade of C or higher)
- BUSI 3200 Professional Development III (with grade of C or higher)

BUSI 1200, BUSI 3100 and BUSI 3200 all require a grade of C or higher. All professional development requirements must be taken prior to BUSI 4940, with the exception of BUSI 3200 which may be taken concurrently with BUSI 4940.

#### Notes

\*Communication requirements for the degree require one of the following combinations:

 a) ENGL 1310, ENGL 1320 or TECM 2700 (preferred), and COMM 1010

OR

b) ENGL 1310, ENGL 1320 and TECM 2700

\*\*BCIS 2610, ACCT 2010, ACCT 2020 and DSCI 2710 are part of both the pre-business requirements and the business foundation requirements.

#### **Electives**

Hours required for electives may vary based on course placement or University Core Curriculum course selection. Some professional field programs may designate specific courses in place of elective hours (see individual College of Business departmental sections). Students are responsible for completing the total minimum hours required for the degree.

## Admission to program

See the tiered academic progress plan and academic standards section of the G. Brint Ryan College of Business section of this catalog.

## Business foundation requirements

In addition to BCIS 2610, ACCT 2010 - ACCT 2020 and DSCI 2710, each BBA degree plan requires the following 24 semester hours of basic foundation courses in business administration.

- BCIS 3610 Basic Information Systems
- BLAW 3430 Legal and Ethical Environment of Business
- BUSI 3660 Professional Speaking, Writing, and Presentation in a Global Environment
- BUSI 4940 Business Policy
- DSCI 3710 Business Statistics with Spreadsheets
- FINA 3770 Finance
- MGMT 3720 Organizational Behavior
- MKTG 3650 Foundations of Marketing Practice

## Note

BUSI 4940. (All business foundation courses and professional development requirements must be completed with a grade of C or better prior to taking this course [see lists above]; senior standing required; must be taken during the last term/semester of course work.) BUSI 3200 may be taken concurrently with BUSI 4940.

## Professional field requirements

See individual College of Business departmental sections.

## Supporting field

See individual College of Business departmental sections.

### **Electives**

See individual College of Business departmental sections. Only free electives may be taken under the pass/no pass option.

## Other requirements

- A candidate for the degree must complete 33 hours of business administration courses in residence, of which 15 hours must be in the professional field of study.
- The College of Business will not grant upper-division (3000–4000 level) degree credit for any transfer course taken at the lower division. Upper-division course work transferred from a regionally accredited four-year institution will be evaluated on an individual course basis to determine applicable degree credit.
- Registration for any junior- or senior-level course should be authorized by an advising clearance form or a formal degree plan.
- The applicability to a degree plan of all credits being transferred and/or awarded by placement or credit by examination must be determined in the dean's office either prior to enrollment at UNT or during the first term/semester of residence.
- It is the student's responsibility to meet all course prerequisites listed in the current catalog prior to enrollment in any course.
- A grade of C or above must be earned on each business administration foundation course completed in residence or transferred to UNT.
- Individual departments may have higher graduation and/or entrance standards (see departmental sections of catalog).
- An application for a formal degree plan must be submitted after 60 hours of course work (including the pre-business requirements) have been completed.

## Professional fields for the BBA degree

The terms *professional field* (BBA degree programs) and *major* (BS degree programs) are used to designate the primary area of study.

For specific course and professional field/major requirements, see the respective departmental sections.

## **Business Integrated Studies, BBA**

A Bachelor of Business Administration in business integrated studies helps you develop the capabilities, knowledge and character needed for a successful business career.

The Ryan College of Business offers a Bachelor of Business Administration degree with a professional field in business integrated studies. Students pursuing the professional field in business integrated studies have the option to pursue a dual degree with the Burgundy School of Business in Dijon, France. See your advisor for more information.

This degree has a required supporting field in business administration. This degree is designed to prepare students for a variety of generalist positions in business and industry. Some flexibility is allowed to accommodate the student's career objectives.

General requirements for the BBA are listed in the "University Core Curriculum," "Requirements of this catalog" in the Academics section of this catalog and under "Bachelor of Business Administration" in the Ryan College of Business.

In addition to the University Core Curriculum, Pre-Business and Business Foundation requirements, students must complete the following professional and supporting field courses. A grade of C or better must be earned in each professional field and supporting course completed in residence or transferred to UNT.

## Professional field

- 12 hours from Business Subject Area 1 (courses must be pre-approved by program advisor)
- 12 hours from Business Subject Area 2 (courses must be pre-approved by program advisor)
- 6 hours of Business Integrated Study electives (3000/4000 level business courses)

\*Some Subject Areas contain more than 12 hours. This will not increase the number of hours required for the degree but will reduce the number of free electives

## Additional requirements

- The above hours must encompass a total of at least three business subject areas
- 3 hours must be completed from the creation of goods and services requirement (DSCI 3870, LSCM 3960, OPSM 3830, ECON 4140 or other approved creation of goods and services courses)
- 3 hours must be completed from international business (MKTG 4280, MGMT 4660, FINA 4500 or other approved international business courses)
- At least 15 hours must be completed at the 4000 level

### Academic standards

Refer to "College of Business Academic Standards" in the G. Brint Ryan College of Business section and "Bachelor of Business Administration" for General Degree Requirements.

## **General Business, BS**

The BS in General Business is a flexible program designed for students who may have earned an Associate's degree in an area outside of business but wish to complete a bachelor's degree in business. The BS in General Business provides a solid foundation of essential business skills in the functional areas of business (accounting, finance, marketing and management) that can enhance previous areas of study

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the Ryan College of Business requirements.

## Major Requirements

In addition to completion of the University Core Curriculum (42 hours) students must complete the following:

## Pre-Business/Lower Level Foundation Requirements (21 hours)

Students must complete the following courses with a grade of C or higher.

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- MATH 1190 Business Calculus
   or
- MATH 1710 Calculus I
- BCIS 2610 Introduction to Computers in Business
- ACCT 2010 Accounting Principles I (Financial Accounting)
- ACCT 2020 Accounting Principles II (Managerial Accounting)

DSCI 2710 - Data Analysis with Spreadsheets
 All of the above courses can be substituted with an approved course if equivalent course is completed prior to enrollment at UNT.

## Professional Development courses, 3 hours

- BUSI 1200 Professional Development I-Strategies for Business
- BUSI 3100 Professional Development II-Critical Thinking and Decision Making in Business
- BUSI 3200 Professional Development III

## Basic Business Foundation Requirements. 21 hours

- BCIS 3610 Basic Information Systems
- BLAW 3430 Legal and Ethical Environment of Business
- BUSI 3660 Professional Speaking, Writing, and Presentation in a Global Environment
- DSCI 3710 Business Statistics with Spreadsheets
- FINA 3770 Finance
- MGMT 3720 Organizational Behavior
- MKTG 3650 Foundations of Marketing Practice

## Advanced level business courses, 15 hours

- 12 hours of upper level business courses from approved list
- Applied Business Project Course or Internship (3 hrs)

## **Electives**

Minimum of 18 hours of free electives or enough free elective hours to reach required total of 120 hours for the degree. Number of electives varies depending on course selection for University Core.

## Other requirements

- A candidate for the degree must complete 33 hours of business administration courses in residence, of which 15 hours must be in the professional field of study.
- The Ryan College of Business will not grant upper-division (3000–4000 level) degree credit for any transfer course taken at the lower division. Upper-division course work transferred from a regionally accredited four-year institution will be evaluated on an individual course basis to determine applicable degree credit.
- Registration for any junior- or senior-level course should be authorized by an advising clearance form or a formal degree plan.
- The applicability to a degree plan of all credits being transferred and/or awarded by placement or credit by examination must be determined in the dean's office either prior to enrollment at UNT or during the first term/semester of residence.
- It is the student's responsibility to meet all course prerequisites listed in the current catalog prior to enrollment in any course.
- A grade of C or above must be earned on each business administration foundation course completed in residence or transferred to UNT.

#### **Minors**

### **Business Foundations minor**

The business foundations minor is designed to provide a foundation in business concepts, operations and practice. The program consists of six courses (18 hours) that may be taken by non-business students in good academic standing.

Students may select from one of two tracks within the minor, but may not combine courses across tracks.

## General prerequisites for both tracks

Completion of the university core mathematics and economics requirements. ACCT 2010 and ACCT 2020 are prerequisites for all upper-division (3000- and 4000-level) business courses. ECON 1110 is strongly recommended.

### General business track

This track is directed toward students who desire a broad grounding in the various business disciplines. Required courses include:

- ACCT 2010 Accounting Principles I (Financial Accounting)
- ACCT 2020 Accounting Principles II (Managerial Accounting)
- MKTG 3650 Foundations of Marketing Practice or
- MKTG 3651 Foundations of Marketing Practice for Non-Business Majors
- MGMT 3720 Organizational Behavior
   or
- MGMT 3721 Essentials of Organizational Behavior for Non-Business Majors
- MGMT 3820 Management Concepts
- FINA 3770 Finance
- Three hours chosen from any 3000- or 4000-level business courses (subject to all course prerequisites)

## MBA preparation track

This track is designed for students who are considering continuing their studies in an MBA program. The courses on the list will meet many of the leveling requirements required of non-business majors entering an MBA program. Required courses include:

- ACCT 2010 Accounting Principles I (Financial Accounting)
- ACCT 2020 Accounting Principles II (Managerial Accounting)

#### Plus four courses chosen from

- BCIS 3610 Basic Information Systems
- BLAW 3430 Legal and Ethical Environment of Business
- DSCI 3710 Business Statistics with Spreadsheets
- FINA 3770 Finance
- OPSM 3830 Operations Management
- MKTG 3650 Foundations of Marketing Practice
   or
- MKTG 3651 Foundations of Marketing Practice for Non-Business Majors

#### Note

BCIS 3610, DSCI 3710 and OPSM 3830 have prerequisites not included in the minor.

## **Undergraduate Academic Certificates**

### **International Business certificate**

Undergraduate students enrolled in the Ryan College of Business may document their training in international business by obtaining a certificate in international business.

Students must complete 12 semester hours of organized business courses as specified in Part 1 below and must present evidence of proficiency in a foreign language as specified in Part 2.

## Part 1, International core, 12 hours

Select four courses from the following list (minimum grade of C required in each course):

- ACCT 4420 International Accounting
- BLAW 4480 International Business Law
- BUSI 4700 Topics in International Business Practices and Policies
- ECON 4850 International Trade
- FINA 4500 International Finance
- LSCM 4360 Global Alliances and International Supply Chain Management
- MGMT 4660 International Management Perspectives
- MKTG 4280 Global Marketing Issues and Practice

#### Note

A course taken through a Ryan College of Business–sponsored study abroad program may substitute for up to 3 hours of the international core.

Students may be able to satisfy the international core within the course requirements of a concentration by using these international core courses as electives, subject to approval by the academic advisor. Thus, international core courses completed for the certificate need not necessarily increase the total hours required for graduation.

## Part 2, Foreign language requirement

Students must present evidence of minimum proficiency in a foreign language. This requirement may be satisfied in either of these ways:

- Completing formal foreign language study through the level of LANG 1020 or its equivalent.
- Submitting evidence of foreign language proficiency through the level of LANG 1020. For example, students may document proficiency with results from a foreign language course above the level of LANG 1020 or with the College Level Examination Program (CLEP) subject examinations. These examinations are administered by the College Board.

Courses are available in Business French, German and Spanish, and students may also earn a Certificate in Professional French or Certificate in Professional Spanish. For more information, visit the Department of World Languages, Literatures and Cultures page in this catalog.

## **Department of Accounting**

Main Office

Business Leadership Building, Room 213

Mailing address:

1155 Union Circle #305219 Denton, TX 76203-5017 940-565-3080

Fax: 940-565-4234

Student Advising Office Business Leadership Building, Suite 110 940-369-8978

Web site: www.cob.unt.edu/acct

Ananth Seetharaman, Department Chair

Faculty

### Mission in brief

The mission of the professional programs in accounting at the University of North Texas is to prepare a diverse student body for careers in industry, public accounting and the nonprofit sector.

The mission of the doctoral program in accounting at the University of North Texas is to prepare students to conduct discipline-based research, appreciate a variety of research methods, and engage in quality instructional activities.

#### Statement of commitment

The faculty of the Department of Accounting is committed to extending the body of knowledge in the areas of both discipline-based and practice-oriented research and to participating in the intellectual discourse in the field in general. The faculty is further committed to the dissemination of knowledge through high-quality teaching and other curricula-related endeavors. The faculty values service activities that contribute to the advancement of the profession and the academy and that provide opportunities for professional interaction and faculty development.

The department serves a diverse student body that is largely nontraditional and employed. The faculty is committed to providing an accommodating and supportive learning environment, including flexible class scheduling, office hours, modes of student-teacher communication and course delivery.

The faculty of the department is committed to preparing students for career development, life-long learning, and a global work environment. The faculty strives to produce graduates who are technically competent, think independently, critically appraise situations, act in a responsible and ethical manner, and contribute positively and cooperatively to their employers and communities.

#### **Majors**

### Accounting, BBA

In the BBA program with a professional field in accounting, students learn to appraise situations critically, act responsibly and ethically, as well as become strategic thinkers and problemsolvers. Our "learn today, apply tomorrow" classroom philosophy is achieved within an accommodative and supportive learning environment.

The following requirements must be satisfied for a Bachelor of Business Administration with a professional field in accounting:

#### Bachelor of Business Administration

The department offers the Bachelor of Business Administration with a professional field in accounting. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

## Professional field in Accounting, 25 hours

The following courses are required for the professional field in accounting.

- ACCT 3110 Intermediate Accounting I (see note below)
- ACCT 3120 Intermediate Accounting II
- ACCT 3270 Cost Accounting
- ACCT 3405 Professional Development
- ACCT 4100 Accounting Systems
- ACCT 4140 Advanced and Not-for-Profit Accounting Principles
- ACCT 4300 Federal Income Taxation
- ACCT 4320 Federal Income Taxation II
- ACCT 4400 Auditing Professional Responsibilities

Note: All students entering ACCT 3110 (Intermediate Accounting I) are required to complete and pass an entrance exam. This policy applies to both UNT students and transfer students. The exam will be administered at least three times a year and the student must obtain a passing grade of at least 70%. The exam will be composed by the full-time financial accounting faculty and administered by the Department of Accounting.

## Approved supporting courses, 12 hours

The following courses selected by the student and approved in advance by the faculty advisor include one 3 hour course from each group.

## International business course, 3 hours

Choose one from the following:

- MGMT 4660 International Management Perspectives
- MKTG 4280 Global Marketing Issues and Practice
- FINA 4500 International Finance
- BLAW 4480 International Business Law
- BCIS 4730 International Issues of Information Technology

#### Approved Elective, 3 hours

- DSCI 4520 Introduction to Data Mining
- or other approved elective.

## Advanced economics, 3 hours

Any 3000- or 4000-level ECON course.

## Creation of goods and services, 3 hours

Choose from:

- DSCI 3870 Management Science
- LSCM 3960 Logistics and Supply Chain Management
- OPSM 3830 Operations Management

# Accounting, BS (dual degree; may not be earned without completion of the MS)

The Bachelor of Science with a major in accounting is offered as part of a dual-degree program with the Master of Science with a major in accounting or the Master of Science with a major in taxation.

### **Dual Degrees**

## Accounting, BS and MS

Applies to Bachelor of Science with a major in accounting and Master of Science with a major in either accounting or taxation.

The combined Bachelor of Science with a major in accounting and Master of Science with a major in either accounting or taxation is a 153-semester-hour program designed to provide an appropriate base of knowledge for entry into the accounting profession, as well as a broad-based general educational background. Students awarded the Master of Science with a major in accounting or a major in taxation are simultaneously awarded the Bachelor of Science with a major in accounting. (The Bachelor of Science with a major in accounting is not awarded separately.)

Students who earn these degrees complete an educational program consistent with recommendations of professional accountants and accounting educators, and are prepared for entry into careers as public accountants, management accountants, or internal auditors within either the public or private sector.

The BS/MS program meets the 153-hour requirement for the Certified Public Accountant exam in Texas and other states.

## **Continuation requirements**

Undergraduate students must meet the minimum standards of the Bachelor of Business Administration with a major in accounting to be admitted automatically to the undergraduate portion of the professional program. Students who have at least 60 hours of college credit but who lack credit in certain courses in the preprofessional program may be admitted provisionally with deficiencies. Students granted such provisional admission must proceed immediately to remove the deficiencies.

In addition to the departmental graduate admission requirements, a student must have a minimum overall program GPA of 2.8 and a minimum advanced accounting GPA of 3.0 (GPA of 3.25 for the IMAPP concentrations under the accounting and taxation majors) in order to be admitted to the MS-Accounting or MS-Taxation program.

Students seeking admission who already hold a baccalaureate or higher degree should see the *Graduate Catalog* for information regarding the one-year (33-hour) Master of Science with a major in accounting or Master of Science with a major in taxation program.

The final decision regarding admission to the Master of Science with a major in accounting or Master of Science with a major in taxation programs rests with the Department of Accounting. Students enrolled in the BS/MS programs that are unable to complete all degree requirements may elect to change to the BBA in accounting degree program. Students will be required to complete all remaining degree requirements for the BBA degree, which may be as little as 6 semester credit hours. See undergraduate advisor for details.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in accounting/Master of Science with a major in either accounting or taxation.

## Hours required and general/college requirements

A minimum of 153 semester hours (including a minimum of 120 undergraduate hours, of which 42 must be advanced) and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog, fulfillment of degree requirements for the Master of Science as specified below, and the G. Brint Ryan College of Business requirements.

## Business foundation requirements

See "Professional program" requirements.

## Professional field requirements

See "Professional program" (undergraduate/graduate accounting courses).

## Other course requirements

- Completion of at least 33 semester hours of graduate work (at least 33 semester hours for MS with a major in either accounting or taxation).
- At least 30 semester hours in 5000-level accounting courses at UNT.

## **Electives**

See individual degree plan.

## Other requirements

- A GPA of 3.0 on all work taken beyond the 90th semester credit hour. For the IMAPP program, a GPA of 3.3 is required for all undergraduate work.
- IMAPP students must maintain a GPA of 3.25 at the completion of their first full-time graduate semester (or nine semester credit hours).
- After 9 graduate semester credit hours, an overall GPA of 3.0 (IMAPP GPA 3.5) must be maintained throughout the program.

## Preprofessional program

## University Core Curriculum requirements

See "University Core Curriculum requirements" as listed in the Academics section of this catalog.

## Pre-business requirements

- To enroll in upper-division courses in the Ryan College of Business, the student must have:
- completion of at least 45 semester hours with a 2.0 UNT GPA
- completion of the following pre-business prerequisites with a minimum grade of C and a GPA of 2.7 on these nine courses (or equivalents): ENGL 1310; TECM 2700; MATH 1190 or MATH 1710; ECON 1100 and ECON 1110; ACCT 2010 and ACCT 2020; BCIS 2610; and DSCI 2710.
- 4. First-term/semester transfer students who have completed at least 45 semester hours at another institution must have a minimum 2.0 overall GPA on all transfer work accepted by UNT and a 2.7 pre-business GPA to be admitted to the Bachelor of Science program and to enroll in upper-division courses.

#### Required courses

Each of the following courses must be completed with a grade of C or higher.

- ACCT 2010 Accounting Principles I (Financial Accounting) \*\*
- ACCT 2020 Accounting Principles II (Managerial Accounting) \*\*
- BCIS 2610 Introduction to Computers in Business \*\*
- DSCI 2710 Data Analysis with Spreadsheets \*\*
- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- MATH 1190 Business Calculus
- or
- MATH 1710 Calculus I

- COMM 1010 Introduction to Communication \* or
- TECM 2700 Technical Writing \*

#### **Notes**

- \* Communication requirements for the degree require one of the following combinations
- a) ENGL 1310; ENGL 1320 or TECM 2700 (preferred); COMM  $1010\,$

OR

b) ENGL 1310, ENGL 1320 and TECM 2700

This requirement does not apply to accounting majors. Accounting majors are required to take TECM 2700.

#### Note

Some of these requirements may be taken as part of the University Core Curriculum requirements.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Students are responsible for completing the total minimum hours required for the degree.

## Preprofessional program

The 90 hours making up the professional program are subject to the prior approval of an accounting advisor. Courses include the following:

### Business foundation, 18 hours

- BCIS 3610 Basic Information Systems
- FINA 3770 Finance
- DSCI 3710 Business Statistics with Spreadsheets
- MGMT 3720 Organizational Behavior
- MKTG 3650 Foundations of Marketing Practice
- BLAW 3430 Legal and Ethical Environment of Business

### Other courses, 12 hours

- DSCI 4520 Introduction to Data Mining
  - or other approved course
- Advanced Economics, 3 hours
  - O Any 3000 or 4000 level Economics course
- Approved Elective, 3 hours choose one from:
  - Any 3000/4000 level BCIS course
  - DSCI 3870 Management Science
  - OPSM 3830 Operations Management
  - OPSM 4810 Purchasing and Materials Management
- Business Communications course, 3 hours
  - BUSI 3660 Professional Speaking, Writing, and Presentation in a Global Environment

## Undergraduate accounting courses, 25 hours

- ACCT 3110 Intermediate Accounting I (see note below)
- ACCT 3120 Intermediate Accounting II
- ACCT 3270 Cost Accounting
- ACCT 3405 Professional Development
- ACCT 4100 Accounting Systems

- ACCT 4140 Advanced and Not-for-Profit Accounting Principles
- ACCT 4300 Federal Income Taxation
- ACCT 4320 Federal Income Taxation II
- ACCT 4400 Auditing Professional Responsibilities

**Note:** All students entering ACCT 3110 (Intermediate Accounting I) are required to complete and pass an entrance exam. This policy applies to both UNT students and transfer students. The exam will be administered at least three times a year and the student must obtain a passing grade of at least 70%. The exam will be composed by the full-time financial accounting faculty and administered by the Department of Accounting.

## Graduate accounting and required courses, 33 hours

Either graduate accounting degree (the Master of Science with a major in accounting or the Master of Science with a major in taxation) requires 33 hours of accounting and other required courses.

Note: The student must be admitted to the Toulouse Graduate School before registering for these courses. The student should take the Graduate Management Admissions Test (GMAT) after completing approximately 90 semester hours of credit and prior to the term/ semester during which the undergraduate program of 120 semester hours is completed. As soon as the test results are available, the student should contact the College of Business Graduate Programs Office regarding application to the graduate school.

The 33-hour program varies with the major and concentration chosen. However, a minimum of 30 hours of 5000-level accounting courses must be taken. General requirements include the following:

- An Accounting or Tax Research course (depending on the student's major)
- ACCT 5120, Using Information Systems in Accounting
- An Accounting or Tax capstone class (depending on the student's major)
- ACCT 5800, Internship (MS with a major in accounting and MS with a major in taxation when concentration chosen is IMAPP)
- Accounting Concentration (to be determined in consultation with advisor)
- Approved Electives (to be determined in consultation with advisor)

At present, the department offers concentrations under the Master of Science with a major in accounting as follows:

- Audit concentration
- Audit in IMAPP concentration
- Management and Entrepreneurial concentration
- Management and Entrepreneurial in IMAPP concentration

Detailed information on requirements of each concentration is available from the College of Business Graduate Programs Office. Students with areas of interest not represented above are invited to consult with an accounting faculty advisor.

## Professional Development Requirements

- BUSI 1200 Professional Development I-Strategies for Business (with a grade of C or higher)
- BUSI 3100 Professional Development II-Critical Thinking and Decision Making in Business (with a grade of C or higher)
- ACCT 3405 Professional Development (with a grade of C or higher)

#### **Minors**

## **Accounting minor**

An 18-hour minor in accounting is available to non-accounting majors.

Variation of the minor in accounting may be granted with approval from the Department of Accounting. It is the student's responsibility to satisfy required course prerequisites where applicable.

## Students who minor in accounting must take

- ACCT 2010 Accounting Principles I (Financial Accounting)
- ACCT 2020 Accounting Principles II (Managerial Accounting)
- ACCT 3110 Intermediate Accounting I
- ACCT 3120 Intermediate Accounting II
- ACCT 3270 Cost Accounting
- ACCT 4300 Federal Income Taxation

## Department of Finance, Insurance, Real Estate and Law

Main Office Business Leadership Building, Room 212

Mailing address: 1155 Union Circle #305339 Denton, TX 76203-5017 940-565-3050

Web site: www.cob.unt.edu/firel

#### John Puthenpurackal, Chair

#### **Faculty**

The Department of Finance, Insurance, Real Estate and Law trains professionals to manage successfully all financial aspects of a firm and to manage and work within financial institutions, their regulatory bodies, investment firms and mortgage banks. It prepares students for careers in life insurance marketing, brokerage, underwriting and risk management in the insurance industry. The department educates individuals in real estate finance and investment, brokerage, property management, and appraisal. The business law curriculum prepares business managers to function in the increasingly complex legal and ethical environment of business.

Instruction in the financial services field provides the expertise needed to achieve the Certified Financial Planner® (CFP) designation and to assist clients with investment decisions, taxation issues, estate and trust planning, and retirement. Study of economics teaches students how to make business decisions based on analysis of governmental policies, industry changes, technological advances and a myriad of other factors in careers such as banking, communications, trade or manufacturing, to name just a few.

All programs within the department prepare the student for more advanced professional work or schools and/or a successful career in business.

#### **Scholarships**

The Department of Finance, Insurance, Real Estate and Law offers a variety of competitive scholarships for full-time students majoring in finance, financial services, risk management and insurance, and real estate who have completed at least one or more terms at UNT and have a high overall GPA. A complete listing of scholarships with eligibility requirements and the application form are available online at cob.unt.edu/scholarships.

### **Majors**

## **Economics, BBA**

A Bachelor of Business Administration with a professional field in economics helps students develop a clear understanding of how to apply economic theory to real-world policy issues. The Department of Finance, Insurance, Real Estate and Law administers a rigorous curriculum leading to the BBA.

### **Bachelor of Business Administration**

The department offers the Bachelor of Business Administration in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

## Professional field in Economics, 18 hours

The following courses are required for the professional field in economics.

- ECON 3550 Intermediate Micro-Theory
- ECON 3560 Intermediate Macro-Theory
- ECON 4140 Managerial Economics
- 9 advanced hours approved in advance by the economics department chair

## Approved supporting courses, 12 hours

FINA 4500, plus 9 hours approved in advance by the department chair or professional field advisor. Courses in the College of Liberal Arts and Social Sciences may be counted as professional courses in business administration when authorized on a degree plan. ECON 4630 may not be used as an elective or a supporting course.

## Finance, BBA

A Bachelor of Business Administration with a professional field in finance trains you to manage all financial aspects of a firm successfully, understand its regulatory rules and understand how it fits into the financial market.

## Bachelor of Business Administration

The department offers the Bachelor of Business Administration in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

## Finance professional field, 18 hours

The following courses are required for the professional field in finance.

- FINA 4200 Investments
- FINA 4300 Financial Statement Analysis and Liquidity Management
- FINA 4310 Valuation and Financial Decisions
- FINA 4400 Financial Markets and Institutions
- FINA 4500 International Finance

#### Plus 3 hours from

3 hours selected by the student from the following courses:

- FINA 4210 Introduction to Derivatives
- FINA 4410 Advanced Topics in Financial Institutions and Markets
- FINA 4650 Special Topics in Finance
- BLAW 4450 Corporation Law
- RMIN 4600 Corporate Risk Management
- REAL 4000 Real Estate Finance
- REAL 4300 Real Estate Investments

## Approved supporting courses, 12 hours

## Required course, 3 hours

ACCT 3110 - Intermediate Accounting I

#### Choose one course from

- ACCT 3120 Intermediate Accounting II
- ACCT 3270 Cost Accounting
- ACCT 4300 Federal Income Taxation
- ECON 3550 Intermediate Micro-Theory
- ECON 4030 Economic Cycles and Forecasting
- ECON 4550 Law and Economics
- ECON 4850 International Trade
- RMIN 3100 Introduction to Risk Management and Insurance \*

#### Choose one from

- RMIN 2500 Personal Risk Management \* or
- REAL 2100 Principles of Real Estate
   (May not take both RMIN 2500 and RMIN 3100)
- Any 3000- or 4000-level College of Business or ECON course (Suggested course: FINA 4610 - Comprehensive Financial Planning)
- Any 2000-level or higher foreign language or foreign literature course.
- Any 3 hours of 3000- or 4000-level courses approved by the department chair

#### Choose one from

- DSCI 3870 Management Science
- LSCM 3960 Logistics and Supply Chain Management
- ECON 4140 Managerial Economics
- OPSM 3830 Operations Management
- Or any course approved by the College of Business for coverage of creation of goods and services

### Note

\*Student may not take both RMIN 2500 and RMIN 3100.

# Real Estate with a concentration in Residential Property Management, BBA

A Bachelor of Business Administration with a professional field in real estate and a concentration in residential property management will help you prepare for the state licensing exam and provide you with practical experience with locally owned properties.

### **Bachelor of Business Administration**

The department offers the Bachelor of Business Administration in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section

## Professional field, 18 hours

The following courses are required for the concentration in residential property management.

- REAL 2100 Principles of Real Estate
- REAL 4000 Real Estate Finance
- REAL 4200 Property Management
- REAL 4300 Real Estate Investments

- REAL 4400 Real Estate Valuation
- BLAW 4770 Real Estate Law and Contracts

## Approved supporting courses, 12 hours

- BLAW 4790 Property Management Law
- REAL 4210 Advanced Property Management

#### And one course chosen from

- BLAW 4480 International Business Law
- FINA 4500 International Finance
- MGMT 4660 International Management Perspectives
- MKTG 4280 Global Marketing Issues and Practice

#### Plus one course chosen from

- DSCI 3870 Management Science
- ECON 4140 Managerial Economics
- LSCM 3960 Logistics and Supply Chain Management
- OPSM 3830 Operations Management
- Or any course approved by the College of Business for coverage of creation of goods and services

### Real Estate, BBA

A Bachelor of Business Administration with a professional field in real estate will help you prepare for the state licensing exam and will provide you with practical experience with locally owned properties.

## Bachelor of Business Administration

The department offers the Bachelor of Business Administration in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

## Professional field, 18 Hours

The following courses are required for the professional field in real estate.

- REAL 2100 Principles of Real Estate
- REAL 4000 Real Estate Finance
- REAL 4200 Property Management or
- REAL 3100 Real Estate Agency
- REAL 4300 Real Estate Investments
- REAL 4400 Real Estate Valuation
- BLAW 4770 Real Estate Law and Contracts

## Approved supporting courses, 12 hours

#### One course from:

- FINA 4500 International Finance
- BLAW 4480 International Business Law
- MGMT 4660 International Management Perspectives
- MKTG 4280 Global Marketing Issues and Practice

#### One course from:

- DSCI 3870 Management Science
- LSCM 3960 Logistics and Supply Chain Management
- ECON 4140 Managerial Economics
- OPSM 3830 Operations Management
- Or any course approved by the College of Business for coverage of creation of goods and services.

#### Plus 6 hours

Plus 6 hours approved by the faculty advisor from:

- ECON 4650 Urban Economics
- MGMT 3850 Foundations of Entrepreneurship
- MKTG 4120 Consumer Behavior
- REAL 3100 Real Estate Agency
- REAL 4800 Internship
- BLAW 4790 Property Management Law
- FINA 4200 Investments
- FINA 4400 Financial Markets and Institutions
- RMIN 2500 Personal Risk Management \*
  or
- RMIN 3100 Introduction to Risk Management and Insurance \*
- RMIN 4300 Property/Liability Risk Management and Insurance
- Other courses as approved by the faculty advisor

#### Note

\*Student may not take both RMIN 2500 and RMIN 3100.

## Risk, Insurance and Financial Services, BBA

A Bachelor of Business Administration with a professional field in risk, insurance and financial services gives you an in-depth understanding of areas related to life and property insurance and financial services. Armed with this knowledge, you will have a competitive advantage over other new hires and be on the fast track into an upper-level position.

### **Bachelor of Business Administration**

The department offers the Bachelor of Business Administration in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section

#### Professional Field Courses

(No substitutions)

## Group 1, Risk and Insurance Track, 12 hours

- RMIN 2500 Personal Risk Management \*
  or
- RMIN 3100 Introduction to Risk Management and Insurance \*
- RMIN 4300 Property/Liability Risk Management and Insurance

- RMIN 4310 Insurance Company Operations
- RMIN 4600 Corporate Risk Management

## Supporting Field Courses for Group 1, Risk and Insurance Track, 18 hours

### Choose two courses from the following:

- RMIN 4200 Life Insurance
- RMIN 4400 Employee Benefit Programs
- RMIN 4500 Estate Planning
- RMIN 4800 Internship
- RMIN 4900 Special Problems

#### Choose two courses from the following:

Any 3000 or 4000 level CoB courses approved in advance by the RMIN Faculty Adviser.

Any 3000 or 4000 MATH or ECON courses approved for actuarial certificate.

### Choose one course from the following:

- DSCI 3870 Management Science
- ECON 4140 Managerial Economics
- LSCM 3960 Logistics and Supply Chain Management
- OPSM 3830 Operations Management
   Or any course approved for coverage of Creation of Goods and Services.

## Choose one course from the following:

 FINA 4500 - International Finance
 Or an international business course approved in advance by the RMIN Faculty Adviser.

## Group 2, Financial Planning Track, 18 hours

- ACCT 4300 Federal Income Taxation
- FINA 4200 Investments
- FINA 4610 Comprehensive Financial Planning
- RMIN 4200 Life Insurance
- RMIN 4400 Employee Benefit Programs
- RMIN 4500 Estate Planning

## Supporting Field Courses for Group 2, Financial Planning Track, 12 hours

#### (No substitutions)

- FINA 4500 International Finance
- RMIN 2500 Personal Risk Management \*
   or
- RMIN 3100 Introduction to Risk Management and Insurance \*
- REAL 2100 Principles of Real Estate or
- FINA 4400 Financial Markets and Institutions or
- FINA 4800 Internship
   or
- RMIN 4800 Internship

### Choose one course from the following:

- DSCI 3870 Management Science
- LSCM 3960 Logistics and Supply Chain Management
- ECON 4140 Managerial Economics
- OPSM 3830 Operations Management
- Or any course approved by the College of Business for coverage of Creation of Goods and Services

#### Note

\*Student may not take both RMIN 2500 and RMIN 3100.

## **Grad Track Options**

## Finance, BBA with grad track option leading to Finance, MS

Students will be required to hold a 3.5 GPA at the time of application and be identified by the department as an exceptional candidate for the Grad Track Pathway. Final admission will demand a 3.5 GPA at the time of application, which will qualify the student for a GMAT waiver, successful completion of all GradTrack Pathway courses with a GPA of 3.5 or higher, 3 letters of recommendation, essay, resume and official application submitted and approved by the Toulouse Graduate School.

### 6 hours selected from:

- FINA 5310 Adv. Topics in Financial Management (replacing FINA 4310 FINA 4310 - Valuation and Financial Decisions)
- FINA 5400 -Financial Markets and Institutions (replacing FINA 4400 FINA 4400 Financial Markets and Institutions)
- FINA 5500 -International Financial Management (replacing FINA 4500 FINA 4500 - International Finance)

#### **Minors**

### Finance minor

A minor in finance requires 18 hours:

## Required courses

- FINA 3770 Finance
- FINA 4200 Investments
- FINA 4400 Financial Markets and Institutions
- FINA 4500 International Finance

## One course selected from

- FINA 4300 Financial Statement Analysis and Liquidity Management
- FINA 4310 Valuation and Financial Decisions

#### One course selected from

- FINA 4210 Introduction to Derivatives
- FINA 4300 Financial Statement Analysis and Liquidity Management
- FINA 4310 Valuation and Financial Decisions
- REAL 4000 Real Estate Finance
- RMIN 4600 Corporate Risk Management

## **Financial Planning minor**

A minor in financial planning requires 18 hours, including:

## Required courses

- ACCT 4300 Federal Income Taxation
- FINA 4200 Investments
- FINA 4610 Comprehensive Financial Planning
- RMIN 2500 Personal Risk Management
- RMIN 4400 Employee Benefit Programs
- RMIN 4500 Estate Planning

## **Legal Studies in Business minor**

A minor in legal studies in business requires 18 hours.

## 18 hours selected from the following

- BLAW 2000 Personal Law
- BLAW 3430 Legal and Ethical Environment of Business
- BLAW 4450 Corporation Law
- BLAW 4480 International Business Law
- BLAW 4770 Real Estate Law and Contracts
- BLAW 4790 Property Management Law
- ECON 4550 Law and Economics
- LGAV 3150 Transportation Regulation and Trade Compliance
- MGMT 3880 Business Ethics and Social Responsibility
- MGMT 4890 Legal Aspects of Employment Practices
- RMIN 4500 Estate Planning

### **Real Estate minor**

A minor in real estate requires 18 hours, including:

## Required courses, 9 hours

- REAL 2100 Principles of Real Estate
- REAL 3100 Real Estate Agency
- BLAW 4770 Real Estate Law and Contracts

#### 3 hours selected from

- REAL 4000 Real Estate Finance
- REAL 4200 Property Management
- REAL 4300 Real Estate Investments
- REAL 4400 Real Estate Valuation

### 6 hours selected from

- BLAW 3430 Legal and Ethical Environment of Business
- FINA 2770 Personal Finance
   or
- FINA 3770 Finance
- MKTG 3010 Professional Selling
- REAL 4200 Property Management
- RMIN 2500 Personal Risk Management or
- RMIN 3100 Introduction to Risk Management and Insurance

 Any upper-level business course approved by the department.

## Residential Property Management minor

A minor in residential property management requires 18 hours, including:

## Requirements

- REAL 2100 Principles of Real Estate
- REAL 4200 Property Management
- REAL 4210 Advanced Property Management
- BLAW 4790 Property Management Law

#### Plus 3 hours from

One course chosen from the following:

- REAL 4000 Real Estate Finance
- RFAL 4300 Real Estate Investments
- REAL 4400 Real Estate Valuation
- BLAW 4770 Real Estate Law and Contracts

### And 3 hours from

One course chosen from the following:

- MGMT 3820 Management Concepts
- MGMT 3860 Human Resource Management
- MGMT 4470 Leadership
- MGMT 4860 Organizational Design and Change
- MKTG 3720 Digital Marketing Fundamentals
- MKTG 4120 Consumer Behavior

#### Note

FINA 3770 is a prerequisite or corequisite for REAL 4000, REAL 4300, and REAL 4400.

#### Risk and Insurance minor

A minor in Risk and Insurance requires 18 hours.

## Required courses

- RMIN 2500 Personal Risk Management or
- RMIN 3100 Introduction to Risk Management and Insurance

(Choose RMIN 2500 or RMIN 3100. May not take both.)

RMIN 4600 - Corporate Risk Management

#### Plus 6 hours selected from

- RMIN 4200 Life Insurance
- RMIN 4300 Property/Liability Risk Management and Insurance
- RMIN 4310 Insurance Company Operations
- RMIN 4400 Employee Benefit Programs
- RMIN 4500 Estate Planning
- RMIN 4800 Internship
- RMIN 4900 Special Problems

#### Plus 6 hours selected from

3000/4000 level MATH, ECON, EADP or any CoB courses approved in advance by the RMIN Faculty Adviser.

#### Certificates

### **Risk and Insurance Certificate**

A risk and insurance certificate requires a total of 12 credit hours and is open to students in any major. There are two required courses plus two elective courses. This program is designed to expand students' knowledge in risk management and insurance and career options in the insurance industry. Examples of career options include risk analyst, underwriter, risk manager, claim adjuster, broker or agent.

## Required courses

- RMIN 2500 Personal Risk Management or
- RMIN 3100 Introduction to Risk Management and Insurance

(Choose RMIN 2500 or RMIN 3100. May not take both.)

• RMIN 4600 - Corporate Risk Management

## Plus 6 hours selected from the following

- RMIN 4200 Life Insurance
- RMIN 4300 Property/Liability Risk Management and Insurance
- RMIN 4310 Insurance Company Operations
- RMIN 4400 Employee Benefit Programs
- RMIN 4500 Estate Planning
- RMIN 4800 Internship
- RMIN 4900 Special Problems

## **Undergraduate Academic Certificates**

## Residential Property Management certificate

## Requirements, 12 hours

A grade of C or better is required.

- REAL 4200 Property Management
- REAL 4210 Advanced Property Management
- BLAW 4790 Property Management Law

### Plus 3 hours selected from

- REAL 2100 Principles of Real Estate
- REAL 4000 Real Estate Finance
- REAL 4300 Real Estate Investments
- REAL 4400 Real Estate Valuation

#### Note

FINA 3770 is a prerequisite or corequisite for REAL 4000, REAL 4300 and REAL 4400.

## Department of Information Technology and Decision Sciences

Main Office

Business Leadership Building, Room 208

Mailing address:

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#### Leon Kappelman, Chair

Faculty

The Department of Information Technology and Decision Sciences educates business computer information systems designers, systems and business analysts for careers in industry and government. Two strong undergraduate programs are available for students who intend to pursue careers in the growing business computing and analytics fields

### **Majors**

## **Business Analytics, BBA**

A Bachelor of Business Administration with a professional field in business analytics provides you the background needed to make confident, successful decisions in today's competitive marketplace. You will gain an understanding of accounting, manufacturing, finance, management, supply chain management, marketing and information technology through a comprehensive curriculum.

#### Bachelor of Business Administration

General requirements for the BBA are listed in the University Core Curriculum in the Academics section of this catalog and under Bachelor of Business Administration in the College of Business section.

## Business analytics professional field

The professional field in business analytics requires 18 hours of the following courses.

- BCIS 4660 Introduction to Data Warehousing
- DSCI 3870 Management Science
- DSCI 4330 Enterprise Applications of Business Intelligence/Analytics
- DSCI 4510 Modeling for Business Intelligence
- DSCI 4520 Introduction to Data Mining
- DSCI 4700 Analytics for Decision Making

## Approved supporting courses, 12 hours

 BCIS 4730 - International Issues of Information Technology

(or MKTG 4280, FINA 4500, or MGMT 4660, if approved in advance by departmental undergraduate coordinator)

#### Remaining hours

The remaining hours are selected from 3000- or 4000-level business courses. The following are suggested elective sequences.

- BCIS 3630 Object-Oriented Programming for Business
- BCIS 3680 Enterprise-Oriented Programming

- BCIS 4620 Introduction to Database Applications
- BCIS 4650 Visual Programming for Business Applications
- BCIS 4750 Blockchain for Business
- MKTG 3700 Marketing Metrics
- MKTG 3710 Marketing Research and Analytics
- MKTG 4620 E-Commerce Marketing Tools and Applications
- OPSM 3830 Operations Management
- OPSM 4810 Purchasing and Materials Management
- OPSM 4820 Manufacturing Planning and Control
- OPSM 4880 Management of Projects and Systems

#### Note

Up to 3 credit hours of DSCI 4800 may be substituted for one Supporting Field course with consent of the department.

## Additional Requirements

A candidate for the degree must complete 33 hours of business administration courses in residence, of which 15 hours must be in the professional field of study. Students are encouraged to use free electives to meet professional goals.

Students interested in the theoretical and mathematical science of computing should see the Department of Computer Science and Engineering.

#### Academic Standards

- It is recommended that students selecting business analytics as a professional field for the BBA degree meet at least one of the following standards:
  - a. Be in the top 25 percent of their high school graduating class; or
  - Attain a minimum score of 920 recentered on the SAT or 20 on the ACT.
- It is required that students entering the business analytics
  professional field for the BBA degree have a GPA of at least
  2.7 in all courses completed at UNT. First term/semester
  transfer students must have a transfer GPA of at least 2.7 in
  order to take professional field courses.
- A grade of C or above must be earned in each professional field or supporting field course completed in residence or transferred to UNT.
- 4. Academic requirements for graduation with a professional field in business analytics include:
  - A minimum 2.7 GPA in all hours attempted in the professional field and supporting courses, with minimum grades of C required in each professional and supporting field course;
  - b. A minimum 2.0 GPA in all courses completed at UNT; and
  - c. A grade of C or above in each BCIS/DSCI course taken in the professional field, supporting decision sciences courses or career track.

## **Business Computer Information Systems, BS**

A Bachelor of Science with a major in business computer information systems provides you with a thorough understanding of how information systems fit the business needs of an organization or company. Developed in consultation with world business leaders in the region, successful completion of this program ensures that you will have the knowledge and skill set that the market demands.

The faculty of the Department of Information Technology and Decision Sciences believes that there is a need in industry and government for systems analysts who have a thorough understanding of both a functional area of business and computer-based information systems.

The following requirements must be satisfied for a Bachelor of Science with a major in business computer information systems.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the G. Brint Ryan College of Business requirements.

## Business foundation requirements

See "Business foundation requirements."

## Professional program requirements

See "Professional Program," below.

#### Minor

See individual degree plan.

#### **Electives**

See individual degree plan.

## Other requirements

- a. It is required that students entering the business computer information systems major for the BS degree have a grade point average of at least 2.7 in all courses completed at UNT. First term/semester transfer students must have a transfer grade point average of 2.7 in order to take professional program courses.
- A grade of C or above must be earned in each professional program course completed in residence or transferred to UNT.
- Academic requirements for graduation with a major in business computer information systems for the BS degree:
  - A minimum 2.7 grade point average in all hours attempted in the professional program course, with minimum grades of C required in each professional program course:
  - A grade of C or above in each BCIS course taken in the professional program.

## Preprofessional program

See Pre-business requirements in Bachelor of Business Administration in this catalog

## University Core Curriculum requirements

See "University Core Curriculum Requirements" in the Academics section of this catalog.

#### **Electives**

Hours required for electives may vary based on course placement or University Core Curriculum course selection. Some professional field programs may designate specific courses in place of elective hours. Students are responsible for completing the total minimum hours required for the degree.

## Upper-level business foundation

- BCIS 3610 Basic Information Systems
- BCIS 3615 Visual Display of Business Information
- DSCI 3710 Business Statistics with Spreadsheets or
- DSCI 3870 Management Science
- BLAW 3430 Legal and Ethical Environment of Business
- MGMT 3720 Organizational Behavior
- MKTG 3650 Foundations of Marketing Practice
- FINA 3770 Finance
- BUSI 4940 Business Policy

## Professional program

Business Computer Information Systems, 33 hours:

- BCIS 3630 Object-Oriented Programming for Business
- BCIS 3680 Enterprise-Oriented Programming
- BCIS 4610 Analysis of Business Information Systems
- BCIS 4620 Introduction to Database Applications
- BCIS 4630 Fundamentals of Information Technology Security
- BCIS 4680 Business Data Communications and Networking
- BCIS 4690 Information Technology Management
- BCIS 4720 Web-Based Information Technologies
- Three BCIS elective courses

## **Grad Track Options**

# Business Analytics, BBA with grad track option leading to Business Analytics, MS

## Admission requirements and program policies

Students will be required to hold a 3.5 GPA at the time of application and be identified by the department as an exceptional candidate for the Grad Track Pathway. Final admission will demand a 3.5 GPA at the time of application, which will qualify the student for a GMAT waiver, successful completion of all Grad Track Pathway courses with a GPA of 3.5 or higher, 3 letters of recommendation, essay, resume and official application submitted and approved by the Toulouse Graduate School.

## Program requirements

- BCIS 5610 Enterprise Data Warehousing (replaces BCIS 4660 - Introduction to Data Warehousing)
- DSCI 5240 Data Mining (replaces DSCI 4520 -Introduction to Data Mining)
- DSCI 5330 Enterprise Applications of Business Intelligence (replaces DSCI 4330 - Enterprise Applications of Business Intelligence/Analytics)

#### Minors

## **Business Analytics minor**

A minor in business analytics is open to non-business analytics majors.

Variation of the minor in business analytics may be granted with approval from the Department of Information Technology and Decision Sciences. It is the student's responsibility to satisfy required course prerequisites where applicable.

## 18 hours selected from the following:

- BCIS 4660 Introduction to Data Warehousing
- DSCI 2710 Data Analysis with Spreadsheets
- DSCI 3710 Business Statistics with Spreadsheets
- DSCI 3870 Management Science
- DSCI 4330 Enterprise Applications of Business Intelligence/Analytics
- DSCI 4510 Modeling for Business Intelligence
- DSCI 4520 Introduction to Data Mining
- DSCI 4700 Analytics for Decision Making
- OPSM 3830 Operations Management

## **Business Computer Information Systems minor**

A minor in business computer information systems is available to non-business computer information systems majors.

Variation of the minor in BCIS may be granted with approval from the Department of Information Technology and Decision Sciences. It is the student's responsibility to satisfy required course prerequisites where applicable.

## 18 hours, including

- BCIS 3630 Object-Oriented Programming for Business
- BCIS 4610 Analysis of Business Information Systems
- BCIS 4620 Introduction to Database Applications

#### Plus three courses selected from

- BCIS 4630 Fundamentals of Information Technology Security
- BCIS 4640 Administrative Problems in Information Systems
- BCIS 4650 Visual Programming for Business Applications
- BCIS 4660 Introduction to Data Warehousing
- BCIS 4680 Business Data Communications and Networking
- BCIS 4690 Information Technology Management
- BCIS 4720 Web-Based Information Technologies
- BCIS 4740 Administration and Policy in Information Security

## **Department of Management**

Main Office

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940-565-3140

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Mark A. Davis, PhD, Chair

Faculty

#### Mission/vision statement

The mission of the Department of Management is to provide quality management education leading to bachelor's, master's and doctoral degrees; to conduct relevant basic and applied research; to engage in instructional development; and to provide professional expertise and service to the department's constituent communities. Our mission is accomplished with a primary focus on the undergraduate and master's degrees, while maintaining a small, high-quality doctoral program in keeping with the mission of the College of Business. This mission reflects our firm belief in the importance of teaching, supported by intellectual contributions and service.

The vision of the Department of Management, as leading educators, is to work together as a team of professionals with a singular focus — student learning. Central to the implementation of this vision is that students are our first priority. Their success is our success. We further believe that we are accountable as educators to display academic leadership. Finally, our success is enhanced by the business community as partners in developing cutting-edge education.

#### **Professional field**

The terms "professional field" (BBA degree programs), "concentration" (MBA degree programs) and "major" (BBA, PhD degree programs) are used to designate the primary area of study.

#### Career opportunities

For information on career opportunities for graduates of the Department of Management, visit our web site (www.cob.unt.edu/mgmt).

### **Majors**

## Entrepreneurship and Enterprise Management, BBA

From home-based businesses to venture capital start ups, entrepreneurs work in all types of jobs and industries and are a driving force behind economic growth. The Bachelor of Business Administration with a professional field in entrepreneurship gives you maximum flexibility and preparation to chart your own future.

#### Bachelor of Business Administration

The department offers the Bachelor of Business Administration degree in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

#### Academic standards

Refer to the "College of Business Academic Standards" and the "Bachelor of Business Administration General Degree Requirements" sections.

# Entrepreneurship and Enterprise Management professional field, 18 hours

The following courses are required for the professional field in entrepreneurship.

A C or higher is required in all Professional and Supporting courses and students must maintain an overall 2.00 GPA in professional and supporting field courses.

## Required courses

- MGMT 3850 Foundations of Entrepreneurship
- MGMT 4100 Business Planning for Entrepreneurs

### Four courses from the following

- MGMT 3810 Principles of Family Business
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4220 Entrepreneurial Growth and Strategy
- MGMT 4235 Social Entrepreneurship
- MGMT 4335 Technology and Innovation Management
- MGMT 4710 Family Entrepreneurship

## Approved supporting courses, 12 hours

## Supporting Course Required

- OPSM 3830 Operations Management
- MGMT 4660 International Management Perspectives
- MGMT 4860 Organizational Design and Change

## Supporting Course - Choose 1 from:

- MKTG 3700 Marketing Metrics
- MGMT 3860 Human Resource Management
- MGMT 3880 Business Ethics and Social Responsibility
- MGMT 4470 Leadership
- MGMT 4560 Topics in Entrepreneurship
- MGMT 4800 Internship
- ACCT 3270 Cost Accounting
- FINA 4300 Financial Statement Analysis and Liquidity Management
- RMIN 4300 Property/Liability Risk Management and Insurance

## **Human Resource Management, BBA**

A Bachelor of Business Administration with a professional field in organizational behavior and human resource management gives you the skills to help an organization develop a competitive advantage by managing, employing, developing and implementing workplace policies, people and structures.

### **Program requirements**

### **Bachelor of Business Administration**

The department offers the Bachelor of Business Administration degree in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

#### Academic standards

Refer to the "College of Business Academic Standards" and the "Bachelor of Business Administration General Degree Requirements" sections.

# Human resource management professional and supporting field courses, 30 hours

## Professional field courses, 18 hours

- MGMT 3820 Management Concepts
- MGMT 3860 Human Resource Management

### Plus four courses

Plus four additional courses selected from the following:

- MGMT 4130 Human Resource Information Systems and Analytics
- MGMT 4150 Power, Influence and Politics in Organizations
- MGMT 4180 Workplace Health and Safety
- MGMT 4300 Talent Acquisition and Management
- MGMT 4790 Comprehensive Talent Management
- MGMT 4840 Strategic Rewards and Performance Management
- MGMT 4890 Legal Aspects of Employment Practices

## Supporting courses, 12 hours

- MGMT 4470 Leadership
- MGMT 4660 International Management Perspectives
- OPSM 3830 Operations Management

#### Plus 3 hours

Select one course from the following.

- MGMT 3850 Foundations of Entrepreneurship
- MGMT 3880 Business Ethics and Social Responsibility
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4800 Internship
- MGMT 4860 Organizational Design and Change
- RMIN 4400 Employee Benefit Programs

#### Minors

## Entrepreneurship and Enterprise Management minor

Requires 18 hours (6 courses, as follows):

## Required courses

- MGMT 3820 Management Concepts
- MGMT 3850 Foundations of Entrepreneurship

#### Plus four courses from

- MGMT 3720 Organizational Behavior \* OR
- MGMT 3721 Essentials of Organizational Behavior for Non-Business Majors \*

- MGMT 4100 Business Planning for Entrepreneurs
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4220 Entrepreneurial Growth and Strategy
- MGMT 4235 Social Entrepreneurship
- MGMT 4335 Technology and Innovation Management
- MGMT 4560 Topics in Entrepreneurship
- MGMT 4710 Family Entrepreneurship

#### Note

Student should check prerequisites and scheduled course offerings in order to satisfy course prerequisites and to register for courses in the appropriate sequence.

\*Student must select either MGMT 3720 or MGMT 3721 as approved by the student's major.

## **Management minor**

A minor in management is open to non-business majors and requires 18 hours.

## Organizational behavior, 3 hours

 MGMT 3721 - Essentials of Organizational Behavior for Non-Business Majors

### Plus 15 hours from

- MGMT 3820 Management Concepts
- MGMT 3850 Foundations of Entrepreneurship
- MGMT 3860 Human Resource Management
- MGMT 3870 Management Research Methods
- MGMT 3880 Business Ethics and Social Responsibility
- MGMT 4170 Employee and Labor Relations
- MGMT 4180 Workplace Health and Safety
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4235 Social Entrepreneurship
- MGMT 4300 Talent Acquisition and Management
- MGMT 4460 Topics in Organizational Behavior
- MGMT 4470 Leadership
- MGMT 4660 International Management Perspectives
- MGMT 4840 Strategic Rewards and Performance Management
- MGMT 4860 Organizational Design and Change

#### Note

Students should check prerequisites and scheduled course offerings in order to satisfy course prerequisites and to register for courses in the appropriate sequence.

## **Undergraduate Academic Certificates**

## Entrepreneurship and Enterprise Management certificate

Students must remain in good academic standing at the University of North Texas and receive a grade of C or higher in each course required for the certificate.

## Required courses, 12 hours

MGMT 3850 - Foundations of Entrepreneurship

#### Plus 3 courses from

- MGMT 3810 Principles of Family Business
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4220 Entrepreneurial Growth and Strategy
- MGMT 4235 Social Entrepreneurship
- MGMT 4335 Technology and Innovation Management
- MGMT 4560 Topics in Entrepreneurship

#### Note

Students should check prerequisites and scheduled course offerings so that they register for courses in appropriate sequence.

## Department of Marketing, Logistics and Operations Management

Main Office

Business Leadership Building, Room 215

Mailing address: 1155 Union Circle #311396 Denton, TX 76203-5017

940-565-3120 Fax: 940-565-3837

Web site: www.cob.unt.edu/mktg

Jeffrey Ogden, Chair

Faculty

The Department of Marketing, Logistics and Operations
Management offers professional education programs to prepare
individuals for the pursuit of marketing and logistics careers with
manufacturers, transportation and logistics firms, retail and wholesale
middlemen, profit and nonprofit service organizations, governmental
agencies and academic institutions.

#### **Academic Standards**

- It is required that students entering the professional fields/ majors in the Department of Marketing, Logistics and Operations Management have a grade point average of at least 2.7 on all courses completed at UNT. First semester transfer students must have a transfer grade point average of 2.7 in order to take professional field/major courses.
- A grade of C or above must be earned in each professional field/major or supporting field course completed in residence or transferred to UNT.
- Academic requirements for graduation with a professional field/major within the Department of Marketing, Logistics and Operations Management include:
  - a minimum 2.0 grade point average in the professional field/major and supporting field, with minimum grades of C required in each professional field/major and supporting field course; and
  - b. a minimum 2.0 grade point average in all courses completed at UNT.

### **Professional field**

The terms "professional field" (BBA, MBA degree programs) and "major" (BS, PhD degree programs) are used to designate the primary area of study.

#### **Certificates**

The department offers undergraduate academic certificates in customer relationship management, logistics and supply chain management, new product development, retailing, and e-commerce marketing. For additional details, please contact the department.

### **Majors**

## **Aviation Logistics, BS**

The bachelor's program with a major in aviation logistics takes a unique approach to creating the next generation of aviation industry leaders. While many aviation programs focus on the operations or manufacturing aspects of aviation, our curriculum focuses on the value of integrating aviation and aerospace activities to move people and cargo.

The following requirements must be satisfied for a Bachelor of Science with a major in aviation logistics.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section of this catalog and the G. Brint Ryan College of Business requirements.

## Business foundation requirements

In addition to ACCT 2010, ACCT 2020, BCIS 2610, and DSCI 2710, the BS degree requires the following 27 semester hours of basic foundation courses in business administration:

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- MATH 1190 Business Calculus
- COMM 1010 Introduction to Communication OR TECM 2700 Technical Writing
- BLAW 3430 Legal and Ethical Environment of Business
- BCIS 3610 Basic Information Systems
- MKTG 3650 Foundations of Marketing Practice
- MGMT 3720 Organizational Behavior
- FINA 3770 Finance

#### **Notes**

\*Communication requirements for the degree require one of the following combinations:

a) ENGL 1310 , ENGL  $1320\,$  or TECM  $2700\,$  (preferred), and COMM  $1010\,$ 

OR

b) ENGL 1310 , ENGL 1320  $\,$  and TECM 2700  $\,$ 

## Major requirements

The major in aviation logistics consists of 30 hours beyond the business foundations requirements.

- LSCM 3960 Logistics and Supply Chain Management
- LSCM 4560 Business Transportation Management
- LSCM 4800 Logistics Internship
- LGAV 3100 Introduction to Aviation Industry
- LGAV 3110 Aviation Maintenance Programs
- LGAV 3120 Aviation Safety Systems
- LGAV 3130 Air Cargo Planning and Control
- LGAV 3140 Air Passenger Planning and Control
- LGAV 3150 Transportation Regulation and Trade Compliance
- LGAV 4100 Airport and Infrastructure Planning and Control

## Other course requirements

An additional 9 hours of directed electives (supporting courses) from the following list are required.

- DSCI 3870 Management Science
- OPSM 3830 Operations Management
- OPSM 4880 Management of Projects and Systems
- LGAV 4500 Human Factors and Cockpit Resource Leadership
- LGAV 4810 Special Topics in Aviation Logistics
- LGAV 4900 Special Problems
- LSCM 4360 Global Alliances and International Supply Chain Management

- LSCM 4510 Logistics and Business Analysis
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4540 Logistics Application of Enterprise Resource Planning Systems

### **Electives**

See individual degree plan.

## Other requirements

Students must meet College of Business Academic Standards.

## Logistics and Supply Chain Management, BS

The course work for the Bachelor of Science with a major in logistics and supply chain management encompasses all of the activities involved in getting a product to the consumer. Because this field is so broad, virtually any business could be a potential employer.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in logistics and supply chain management.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and the G. Brint Ryan College of Business requirements.

## Preprofessional program requirements

- ACCT 2010 Accounting Principles I (Financial Accounting) (with a grade of C or higher)
- ACCT 2020 Accounting Principles II (Managerial Accounting) (with a grade of C or higher)
- BCIS 2610 Introduction to Computers in Business (with a grade of C or higher)
- COMM 1010 Introduction to Communication or
- TECM 2700 Technical Writing
- DSCI 2710 Data Analysis with Spreadsheets
- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- MATH 1190 Business Calculus
   or
  - MATH 1710 Calculus I (with a grade of C or higher)

## Business foundation requirements

In addition to ACCT 2010, ACCT 2020, BCIS 2610 and DSCI 2710, the BS degree requires the following 21 semester hours of basic foundation courses in business administration:

- BCIS 3610 Basic Information Systems
- BLAW 3430 Legal and Ethical Environment of Business
- DSCI 3870 Management Science
- FINA 3770 Finance

- MGMT 3720 Organizational Behavior
- MKTG 3010 Professional Selling
- MKTG 3650 Foundations of Marketing Practice

## Major requirements

The major in logistics and supply chain management consists of 27 hours beyond the business foundations requirements, plus 6 hours of supporting course work.

- LSCM 3960 Logistics and Supply Chain Management
- LSCM 4360 Global Alliances and International Supply Chain Management
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4560 Business Transportation Management
- LSCM 4800 Logistics Internship
- LSCM 4860 Advanced Logistics Management
- OPSM 3830 Operations Management
- OPSM 4810 Purchasing and Materials Management
- OPSM 4880 Management of Projects and Systems

## Supporting course work

An additional 6 hours of supporting course work from the following list are required. Choose two.

- ACCT 3270 Cost Accounting
- ACCT 4130 Financial Statement Analysis
- ACCT 4270 Advanced Cost Accounting
- BCIS 4660 Introduction to Data Warehousing
- DSCI 4510 Modeling for Business Intelligence
- LGAV 3100 Introduction to Aviation Industry
- LGAV 3110 Aviation Maintenance Programs
- LGAV 3120 Aviation Safety Systems
- LGAV 3130 Air Cargo Planning and Control
- LGAV 3140 Air Passenger Planning and Control
- LGAV 3150 Transportation Regulation and Trade Compliance
- LSCM 4510 Logistics and Business Analysis
- LSCM 4540 Logistics Application of Enterprise Resource Planning Systems
- LSCM 4900 Special Problems
- MKTG 4520 Marketing Channels and Strategic Partnerships

### **Electives**

Hours required for electives may vary based on course placement or University Core Requirement course selection. Some professional field programs may designate specific courses in place of elective hours. Students are responsible for completing the total minimum hours required for the degree.

## Other requirements

- It is required that students entering the logistics and supply chain management major for the BS degree have a grade point average of at least 2.7 in all courses completed at UNT. First term/semester transfer students must have a transfer grade point average of 2.7 in order to take professional program courses.
- A grade of C or above must be earned in each professional program course completed in residence or transferred to UNT.

 Academic requirements for graduation with a major in logistics and supply chain management for the BS degree:

A minimum 2.0 grade point average in all hours attempted in the professional program course, with minimum grades of C required in each professional program course.

A minimum 2.0 grade point average in all courses completed at UNT.

A grade of C or above in each course taken in the professional program.

## Marketing with a concentration in professional selling, BBA

A Bachelor of Business Administration with a professional field in marketing gives you the skills to identify target audiences, gather market information, develop products and services, and more. Additionally, to get a competitive advantage over other job seekers, you can earn certificates in e-commerce, new product development and retailing.

## **Degree requirements**

## Bachelor of Business Administration

The department offers the Bachelor of Business Administration degree in the professional field listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

# Professional field in marketing with concentration in professional selling, 28 hours

Students must apply for admission into the professional selling concentration and meet specific admission criteria. See the Department of Marketing and Logistics for details. A grade of C or above must be earned in each professional field and supporting course completed in residence or transferred to UNT.

- LSCM 3960 Logistics and Supply Chain Management
- MKTG 3010 Professional Selling (cannot be applied to both the business foundation and professional field)
- MKTG 3700 Marketing Metrics
- MKTG 3881 Personal Professional Development
- MKTG 4280 Global Marketing Issues and Practice
- MKTG 4470 Business-to-Business Marketing
- MKTG 4570 Professional Selling Analytics
- MKTG 4670 Advanced Professional Selling
- MKTG 4770 Sales Force Design and Management
   MKTG 4805 Internship in Professional Selling

## Approved supporting courses, 3 hours

Three hours of 3000- or 4000-level marketing or logistics and supply chain management courses chosen in consultation with the student's advisor.

## Marketing, BBA

A Bachelor of Business Administration with a professional field in marketing gives you the skills to identify target audiences, gather market information, develop products and services, and more. Additionally, to get a competitive advantage over other job seekers, you can earn certificates in e-commerce, new product development and retailing.

### **Degree requirements**

## Bachelor of Business Administration

The department offers the Bachelor of Business Administration degree in the professional field listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

## Professional field in Marketing, 22 hours

The professional field in marketing consists of 22 hours of course work beyond Foundations of Marketing Practice (MKTG 3650), plus an additional 9 hours of supporting field courses. A grade of C or above must be earned in each professional field and supporting course completed in residence or transferred to UNT. The professional field consists of the following courses:

- LSCM 3960 Logistics and Supply Chain Management
- MKTG 3700 Marketing Metrics
- MKTG 3710 Marketing Research and Analytics
- MKTG 3881 Personal Professional Development
- MKTG 4120 Consumer Behavior
- MKTG 4280 Global Marketing Issues and Practice
- MKTG 4330 Strategic Brand Management
- MKTG 4890 Applied Marketing Problems

### Approved supporting courses, 9 hours

Nine hours of 3000- or 4000-level marketing or logistics and supply chain management courses.

The supporting field can be varied to meet the needs of students seeking specialized training toward career objectives in marketing management, sales management, retail management, logistics and professional selling.

## Operations and Supply Management, **BBA**

A Bachelor of Business Administration with a professional field in operations and supply chain management makes you a vital contributor to a company's success. Your skills will help you plan technological innovations, compete globally, increase productivity and reduce costs.

### **Program requirements**

### Bachelor of Business Administration

The department offers the Bachelor of Business Administration degree in the professional fields listed below. General requirements for the BBA are listed in the "University Core Curriculum" and the "University Core Curriculum Requirements" in the Academics section and under "Bachelor of Business Administration" in the College of Business section.

### Academic standards

Refer to the "College of Business Academic Standards" and the "Bachelor of Business Administration General Degree Requirements" sections.

## Operations and Supply Management professional field, 21 hours

The following courses are required for the professional field in Operations and Supply Management.

- OPSM 3830 Operations Management
- OPSM 4820 Manufacturing Planning and Control
- OPSM 4830 Productivity and Quality Management
- OPSM 4880 Management of Projects and Systems
- OPSM 4810 Purchasing and Materials Management
- LSCM 4360 Global Alliances and International Supply Chain Management
- LSCM 4800 Logistics Internship

## Approved supporting courses, 12 hours

Students must take

- DSCI 3870 Management Science
- LSCM 3960 Logistics and Supply Chain Management

#### Plus one course selected from

Any other courses must be approved in advance by the Program Director, Department Chair, and Assistant Dean

- ACCT 3270 Cost Accounting
- DSCI 4510 Modeling for Business Intelligence
- DSCI 4700 Analytics for Decision Making
- FINA 4300 Financial Statement Analysis and Liquidity Management
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4540 Logistics Application of Enterprise Resource Planning Systems
- LSCM 4560 Business Transportation Management
- MGMT 3850 Foundations of Entrepreneurship
- MGMT 3870 Management Research Methods
- OPSM 4850 Lean Manufacturing

## Minors

## **Aviation Logistics minor**

A minor in aviation logistics requires 18 hours.

## Required course

• LGAV 3100 - Introduction to Aviation Industry

### Plus 15 hours

Select 5 courses. At least three must be LGAV courses.

- LGAV 3110 Aviation Maintenance Programs
- LGAV 3120 Aviation Safety Systems
- LGAV 3130 Air Cargo Planning and Control
- LGAV 3140 Air Passenger Planning and Control
- LGAV 3150 Transportation Regulation and Trade Compliance
- LGAV 4500 Human Factors and Cockpit Resource Leadership
- LGAV 4810 Special Topics in Aviation Logistics
- LGAV 4900 Special Problems
- LSCM 3960 Logistics and Supply Chain Management
- LSCM 4360 Global Alliances and International Supply Chain Management

- LSCM 4510 Logistics and Business Analysis
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4540 Logistics Application of Enterprise Resource Planning Systems
- LSCM 4560 Business Transportation Management

## Logistics and Supply Chain Management minor

The minor in Logistics and Supply Chain Management requires 18 hours.

## Requirements

Students who wish to minor in logistics and supply chain management must take one required course:

 LSCM 3960 - Logistics and Supply Chain Management

#### Plus 15 hours

Any five courses selected from the following:

- LSCM 4360 Global Alliances and International Supply Chain Management
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4540 Logistics Application of Enterprise Resource Planning Systems
- LSCM 4560 Business Transportation Management
- LGAV 3120 Aviation Safety Systems
- LGAV 3130 Air Cargo Planning and Control
- LGAV 3140 Air Passenger Planning and Control
- LGAV 3150 Transportation Regulation and Trade Compliance

## **Marketing minor**

A minor in marketing requires 18 hours.

## Required course, 3 hours

MKTG 3650 - Foundations of Marketing Practice

#### Plus 15 hours from

- MKTG 2650 Culture and Consumption
- MKTG 3010 Professional Selling
- MKTG 3660 Advertising Management
- MKTG 3700 Marketing Metrics
- MKTG 3710 Marketing Research and Analytics
- MKTG 3720 Digital Marketing Fundamentals
- MKTG 4120 Consumer Behavior
- MKTG 4280 Global Marketing Issues and Practice
- MKTG 4330 Strategic Brand Management
- MKTG 4520 Marketing Channels and Strategic Partnerships
- MKTG 4600 Retailing
- MKTG 4620 E-Commerce Marketing Tools and Applications
- MKTG 4630 Retailing II
- MKTG 4800 Internship in Marketing
- MKTG 4880 Advanced Marketing Management
- MKTG 4890 Applied Marketing Problems
- LSCM 3960 Logistics and Supply Chain Management

- LSCM 4360 Global Alliances and International Supply Chain Management
- LSCM 4530 E-Logistics in Supply Chain Management
- LSCM 4560 Business Transportation Management

## **Professional Selling minor**

Students must apply for admission into the minor in professional selling and meet specific admission criteria. See the Department of Marketing and Logistics for details. A grade of "C" or higher is required in each course in the minor.

Exceptions to the requirements may be granted with approval from the Department of Marketing and Logistics. It is the student's responsibility to satisfy required course prerequisites where applicable.

## Required courses, 18 hours

- MKTG 3010 Professional Selling
- MKTG 4470 Business-to-Business Marketing
- MKTG 4570 Professional Selling Analytics
- MKTG 4670 Advanced Professional Selling
- MKTG 4770 Sales Force Design and Management
- MKTG 4805 Internship in Professional Selling

## **Undergraduate Academic Certificates**

## **E-commerce Marketing certificate**

For information, please contact the Department of Marketing and Logistics.

## Logistics and Supply Chain Management certificate

For information, please contact the Department of Marketing and Logistics.

## **New Product Development certificate**

For information, please contact the Department of Marketing and Logistics.

## **Retailing certificate**

For information, please contact the Department of Marketing and Logistics.

## **College of Education**

Main Office Matthews Hall, Room 117

Mailing address: 1155 Union Circle #311337 Denton, TX 76203-5017 940-565-2235 Fax: 940-565-4415

Web site: www.coe.unt.edu Student Advising Office Matthews Hall, Room 105

940-565-2736

Web site: www.coe.unt.edu/sao

Post-Baccalaureate Teacher Certification Program

Matthews Hall, Room 206

https://coe.unt.edu/teacher-certification/ Email: COE-PBAdvisors@unt.edu

#### Randy Bomer, Dean

Alexandra Leavell, Associate Dean for Educator Preparation Programs

Brian McFarlin, Associate Dean for Research and Undergraduate Studies

Ruth Lowery, Associate Dean for Graduate Studies and Faculty Affairs

#### Mission

Developing professionals who help others reach their full potential through powerful learning, social-emotional wellness, physical health, and civic engagement.

#### Vision

The Metroplex, Texas, the United States, and the world will pursue increasing numbers of our graduates as informed and thoughtful practitioners.

The people our students serve will become personally committed to the processes in which our students engage them, and client/student outcomes will inspire those who know them.

The work of those practitioners, and the policies needed to support them, will be understood by the general public and by policy makers.

Our faculty research will be influential and useful to both practitioners and other researchers in their areas of inquiry; our researchers will be widely recognized for their expertise.

The College of Education will be recognized for its excellence – in rankings and in the quality of students and faculty who seek to join us.

The College of Education will be sought out for advice and partnership, across the university, and by international and community organizations.

#### We Value:

Whole people – Though our particular specializations may focus on the body, on learning, or on emotional well-being, our research and practitioners serve individuals as whole people.

Wellness – Our research and practice with communities and individuals focuses on physical, emotional, and intellectual wellness across the lifespan and across domains of experience.

Lifelong learning – Formal learning experiences, like school or therapy, should prepare individuals to remain inquirers and learners across their lives.

Social connectedness – Individuals live, learn, and recreate in communities; our research and teaching should strengthen interpersonal bonds and social improvement.

Equity – People from all social groups should experience fairness, access, similar opportunities, and satisfactory outcomes in their quests for learning and health.

Innovation – We create worlds of innovators. Our research and teaching break with past practices to expand possibilities, the practitioners and researchers we prepare learn to innovate in their own work, and the people they serve, in turn, invent and advance new practices in their spheres of influence.

The College of Education educator

preparation program is accredited by by the Council for the Accreditation of Educator Preparation 1140 19th St NW, Suite 400 Washington, DC 20036 (202) 223-0077 http://www.ncate.org/)and the Texas Education Agency-State Board for Educator Certification https://tea.texas.gov/. The program in counselor education is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) (5999 Stevenson Avenue, 4th Floor; Alexandria, VA 22304; 703-823-4800, ext. 301 www.cacrep.org). The program in recreation and leisure studies is accredited by the National Recreation and Park Association/American Association of Leisure and Recreation Council on Accreditation (22377 Belmont Ridge Road, Ashburn, VA 20148; 703-858-0784).

### **Degrees offered:**

The college offers these undergraduate and graduate degrees:

- Bachelor of Science with majors in development and family studies; education (teacher certification in early childhood through grade 6, bilingual education, and special education), kinesiology; health promotion; and recreation and leisure studies;
- Master of Education with majors in counseling; curriculum and instruction; educational leadership; higher education;; special education; and teaching;
- Master of Science with majors in counseling; development and family studies; early childhood education; educational psychology; higher education; kinesiology; and recreation and leisure studies;
- Doctor of Philosophy with majors in counseling; curriculum and instruction; educational leadership; educational research; higher education; and special education;
- Doctor of Education with majors in educational leadership; and higher education.

General requirements for each undergraduate degree are listed in the appropriate departmental section of this catalog. Requirements for graduate degrees are listed in the UNT Graduate Catalog.

Prospective graduate students must meet all admission requirements of the Toulouse School of Graduate Studies, the College of Education, and the selected graduate degree program within the college. Admission to the individual programs is done through a holistic review of the application portfolio of each candidate. Some financial support for graduate student teaching and research is available from the programs and from the College.

### **Programs of study**

The following programs of study, organized by department, are available in the college.

### **Department of Counseling and Higher Education**

Natalya Lindo, Chair Stovall Hall, Room 155 Phone: 940-565-2910 Web site: www.coe.unt.edu/che

#### Program areas:

Counseling Higher Education

#### **Department of Educational Psychology**

Robin Henson, Chair Matthews Hall, Room 316 Phone: 940-565-2093

Web site: www.coe.unt.edu/epsy

#### Program areas:

Educational Research Human Development and Family Studies School Psychology Special Education

## Department of Kinesiology, Health Promotion and Recreation

Jakob Vingren, Chair

Physical Education Building, Room 209

Phone: 940-565-2651

Web site: www.coe.unt.edu/khpr

#### Program areas:

Health Promotion
Kinesiology

Recreation, Event and Sport Management

## **Department of Teacher Education and Administration**

Misty Sailors, Chair Matthews Hall, Room 206U Phone: 940-565-2920 Web site: www.coe.unt.edu/tea

#### Program areas:

Curriculum and Instruction Early Childhood Education Educational Leadership Education (including EC-6 at

Education (including EC-6 and secondary/all-level teacher

certification)

Language and Literacy Studies

## University Core Curriculum requirements and degree requirements

The University of North Texas core curriculum is listed in the "University Core Curriculum requirements" in the Academics section of this catalog. Each program within the College of Education requires specific courses to satisfy particular degree requirements. Occasionally a course required for a degree may also satisfy a requirement of the core. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree and may cause students to incur excess hour penalties. Students who have questions regarding degree requirements and course requirements should consult a degree program advisor in the Student Advising Office, Matthews Hall, Room 105.

### **Teacher certification**

Students planning to teach in elementary early childhood-grade 6 (EC-6) must major in Education (see Department of Teacher Education and Administration).

Students planning to teach in secondary schools (7–12) must earn a major and degree in the academic discipline in which they plan to teach and take a minor in secondary education to qualify for a teaching certificate. Students should check with the appropriate department for degree requirements.

The State of Texas Standard Teaching Certificate requires completion of an approved four-year degree program, passing of the appropriate TEXES state examinations and clearance on a criminal record search. Students must meet all prerequisite requirements and apply for admission to the teacher education program prior to taking education courses. Continuation in the teacher education program is contingent upon the results of criminal background checks and successful progress in teacher education courses.

A minimum of 12 semester hours must be completed in residence before a recommendation from UNT is made for any teaching certificate. For the University of North Texas to recommend an undergraduate student for teacher certification, additional teaching field, or area of specialization, that student must have successfully (1) Successfully completed an approved teacher education program for

the preparation of early childhood, secondary or all-level teachers; (2) Successfully completed clinical teaching, including attendance at required seminars; and (3) Passed the TEXES EC-12 Pedagogy and Professional Responsibilities (PPR) and all required content and supplemental certification exams of the Texas Examinations of Educator Standards (TEXES), as applicable.

Access to register for Texas teacher certification exams (TEXES) is only granted to students who have been formally admitted to the Teacher Education program at UNT. Teacher candidates (who have been admitted to TEd) must take UNT-sponsored TEXES practice exams prior to the start of Block B courses.

Practice exams are free of charge The TEXES Practice exams are offered four times in each long semester and twice during the summer.

Contact the TEXES Success Office In Matthews Hall 119 at 940-369-8601 or COE\_TSO@unt.edu for information about registering for your practice TEXES Exams, TEAL account setup, and for information and study resources for your actual certification exams. Students who have completed all requirements must apply for teaching certificates online (see www.tea.state.tx.us). In some cases, teacher service records may be required.

### **Teaching certificates**

The awarding of teaching certificates is a function of the Texas Education Agency (TEA) under the authority of the State Board for Educator Certification (SBEC) and is contingent upon a recommendation by the UNT College of Education. The College of Education is authorized to recommend students who successfully fulfill all state and program requirements for the chosen teaching certificate in the following areas:

## Early Childhood through Grade Six (certifies to teach grades EC-6)

- EC-6 Core Subjects with Science of Teaching Reading and ESL Supplemental
- EC-6 Core Subjects with Science of Teaching Reading and Bilingual Education Supplemental – Spanish (Grades EC-12)
- EC-6 Core Subjects with Science of Teaching Reading and EC-12 Special Education Supplemental

## Standard Secondary (certifies grades 7–12) and All-Level (EC–12)

At the time this catalog went to press, UNT was authorized to recommend secondary and all-level teacher certification for students who have completed a baccalaureate degree in the following content areas:

- Secondary content areas: chemistry; dance; English language arts and reading; family and consumer sciences; history; hospitality, nutrition and food sciences; human development and family studies; journalism; life science; mathematics; physical sciences; physics/mathematics; science; social studies; and speech.
- All-level content areas: art, French, German, music, physical education, Spanish and theatre.

Although teacher certification programs share many commonalities, what applies to one certificate or grade level is not necessarily applicable to another. Also, changes to existing teacher standards, content areas and certificate levels continue to be made by the State Board for Educator Certification.

Students are encouraged to schedule an appointment with an advisor in the Student Advising Office, Matthews Hall, Room 105, or check online at www.coe.unt.edu/sao for the current information regarding specific certificate requirements and any pending changes. The SAO sees students by appointment only, except during the regular registration period each term/semester when they accept drop-in visits. Appointment times fill quickly and students are encouraged to schedule early. Appointments can be made up to two weeks in advance.

#### Professional (Advanced) educator certification

The College of Education is also authorized by the Texas Education Agency to offer preparation programs leading to professional certification for post-baccalaureate students. The following certifications are available:

- Educational Diagnostician
- Principal as Instructional Leader
- Superintendent
- School Counselor
- School Librarian

See Graduate Catalog for details.

#### **Teacher certification**

#### Eligibility for Teacher Certification and Recommendation

Teaching certificates are granted by the Texas Education Agency (TEA) under the authority of the State Board for Educator certification (SBEC). Completion of the bachelor's degree and the required education courses does not guarantee certification by the TEA. In order to be recommended by UNT for a standard teaching certificate students must:

- Earn the required Bachelor's Degree.
- Be admitted to the UNT Teacher Education (TEd) Program and meet all state and program requirements including coursework with acceptable grades and GPAs
- Complete and pass all clinical practice requirements including early field experiences and clinical (student) teaching, and be recommended by the university field supervisor and cooperating teacher/s
- Pass all Texas Examinations of Educator Standards (TEXES) teacher certification exams.
- Apply to the Texas Education Agency to be certified after all requirements are met and the bachelor's degree is posted on the transcript.
- Complete Fingerprinting. All first-time applicants must be fingerprinted by the TEA-authorized entity and clear a national criminal background check.

#### Admission to the Teacher Education (TEd) Program

To be eligible for admission, students must have:

- Completed a minimum of 60 semester hours, including
  the University Core Curriculum. (See "General University
  Requirements" in the Academics section of this catalog.)
  Programs leading to teacher certification require specific
  courses contained in parts of the University Core
  Curriculum to satisfy particular degree requirements.
  Students should consult degree program advisors for best
  choices in the core;
- A 2.75 UNT GPA;
- A 2.75 overall GPA (includes all courses transferred to UNT, plus all courses taken at UNT);
- TSI Complete Status, or have appropriate exam scores on either the ACT or SAT. (Contact the Student Advising Office in Matthews Hall, Room 105, for further information on the score requirements); and
- Submit an application to the UNT Teacher Education (TEd) Program. To apply, Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or visit https://coe.unt.edu/student-advising for details.

#### **Clinical Teaching Requirement**

All EC-6, secondary and all-level teacher candidates must complete Clinical Teaching (6 SCH) with a grade of "P" (Pass) for both courses to be recommended for their standard teaching certificate. Clinical teaching requirements include attendance at required noncredit seminars.

Clinical Teaching is a full-time, 5 days per week, supervised teaching experience in a school district. Teacher candidates must attend their placement for 100% of the school day. Clinical Teaching can only be completed during long (Fall or Spring) semesters and should be the last semester before intended graduation.

Clinical Teaching may not count as full-time status for financial aid purposes, depending on student-specific awards. Therefore, the student should plan ahead and consult UNT Student Financial Services sfs.unt.edu before they intend to apply for Clinical Teaching to verify what financial aid will be available to them during the clinical teaching semester.

To be eligible for a clinical practice placement for both early field experiences and clinical teaching, students are responsible for applying the semester BEFORE by completing the Clinical Practice Application. Dates for the Clinical Practice Application are listed on the Clinical Practice Office webpage. Applications must be submitted by the designated deadline. For more information, please contact the Clinical Practice Office via email at COE-ClinicalPractice@unt.edu.

To be eligible to begin clinical teaching, students must meet the following requirements:

- Have been admitted to and accepted their admission offer to the UNT Teacher Education (TEd) Program; and,
- Must be in residence at UNT and have earned at least 6 semester hours of resident credit in education at UNT; and,

#### For EC-6 clinical teachers:

- Have completed all prerequisites and have a C or better in all course in the education major and any applicable certification-specific courses for Bilingual and Special Education candidates; exclusive of student teaching and EDEE 4890 (as required for students seeking any EC-6 certification.
- Have a minimum GPA of 2.75 in each area: UNT core, the education major, and any applicable certification-specific courses for Bilingual and Special Education candidates. No courses taken during the clinical teaching term/semester can be used to determine eligibility to clinical teach; and,
- Have passed all actual TExES content and supplemental exams required for their certificate. (This does not include the TExES Pedagogy and Professional Responsibilities, Science of Teaching Reading, or BTLPT exams.

For secondary and all-level clinical teachers:

- Have completed all the required course work in the teaching field
- Have completed all prerequisites, and have a grade of C or better in all education courses (EDEC, EDEE, EDRE, EDCI, EDUC, DFST, etc.); and,
- Have a minimum GPA of 2.75 in each area (academic major and education/pedagogy courses), and in all college work completed at UNT, as well as a cumulative GPA of 2.75 for all colleges attended.
- Have passed all actual TExES content and supplemental exams required for their certificate. (This does not include the TExES Pedagogy and Professional Responsibilities),

#### Admission, Review and Retention (ARR) Committee

Students not meeting eligibility requirements for admission to TEd or to Clinical Teaching may file an appeal with the Department of Teacher Education ARR Committee. To initiate an appeal, a student must complete the Admission, Retention and Review Appeal Form. The student completes the application and attaches the required materials and documents along with their appeal statement.

#### **TEXES Certification Exams**

#### **TExES Practice Test requirements**

Teacher candidates (students who have been admitted to TEd must take UNT-sponsored TExES practice exams. Practice exams are free of charge. TExES Practice exams are offered four times in each long semester and twice during the summer. Visit the TExES Success

Office (TSO) in Matthews Hall, Room 119, for further information about their required exams (940-369-8601), or visit the TSO webpage.

- EC-6 candidates must complete all practice tests before the end of PDS Block A.
- Secondary candidates must complete all practice exams prior to enrolling in EDCI 4840.
- All-Level candidates must complete all practice exams by the end of the last semester of early field observations.

**Exception:** A candidate may be excused from the TExES Practice Exam requirement by presenting an official TExES Test Score Report indicating passing scores on each required exam.

#### **TEXES Exam Eligibility and Passing Policies**

Access to register for all actual TEXES exams is granted by the UNT TEXES Success Office (TSO). Students must be formally admitted to the UNT Teacher Education Program and have met any program-specific practice testing requirements prior to being granted test permission for the actual TEXES exams.

EC-6 candidates must pass all content and supplemental TEXES Exams to be eligible to clinical teach, with the exception of the TEXES Science of Teaching Reading and BTLPT. Take the Pedagogy and Professional Responsibilities TEXES before or during clinical teaching to be eligible for recommendation.

**Secondary and All-Level** candidates must pass all content and supplemental TEXES exams to be eligible to clinical teach. Take the TEXES Pedagogy and Professional Responsibilities exam prior to or during clinical teaching to be eligible for recommendation.

A minimum of 12 semester hours must be completed in residence before a recommendation from UNT is made for any teaching certificate.

#### **Centers and clinics**

The Office for Research and Consulting offers services to graduate students and faculty members in the College of Education. Services include assistance in research design, measurements and analysis of data using either the SPSS or SAS statistical packages. Assistance is also given in the interpretation of computer output and display of data in the form of tables or charts.

The Center for the Study of Educational Reform conducts research and serves as an information clearinghouse on educational reform initiatives. Created in 1990, the center has received grants to conduct a statewide survey on education reform and to conduct research on private and public school choice programs. The center also provides doctoral students with opportunities for dissertation research.

The Child and Family Resource Clinic (CFRC) is an interdisciplinary diagnostic and remedial clinic serving children, adults and families from the North Texas area. Services offered include interdisciplinary assessment, counseling, reading instruction, speech/language therapy and parent education classes. Fees for all services are based on a sliding scale. CFRC provides clinical training opportunities for graduate and undergraduate students in counseling, reading and speech/language/hearing.

Center for Young Children (CYC) is an accredited preschool program for young children ages 3 through 5. In addition, it serves as a model, an observation site for undergraduate and graduate students in fields related to young children. Research related to the care and education of young children is conducted by graduate students and faculty members from across the university.

Other centers are listed under the departments with which they are associated.

#### **Endowed chairs**

The Don A. Buchholz Endowed Chair in Community College Education in the Bill J. Priest Center for Community College Education began its service to two-year colleges and to the linkage between two- and four-year colleges and universities in the fall of 2000. While the chair and the center's primary function is to provide graduate education, research, and development activities for

institutions, administrators and faculty in two-year colleges, the chair and center seek to improve the efficiency and effectiveness of the linkage between two- and four-year colleges and universities in the provision of education to students in post-secondary education.

The Meadows Chair for Excellence in Education was established and funded by the Meadows Foundation to attract distinguished scholars to the College of Education to teach, interact with faculty and students, and engage in scholarly work. Involving such scholars in the academic community should enhance professional development of the faculty, improve the quality of education for students and ultimately lead to a better-prepared Texas public school student body.

The Dr. Mike Moses Chair in Educational Administration was established in honor of a major figure in educational administration in Texas. Dr. Moses, for whom it is named, was Commissioner of Education for Texas, Deputy Chancellor for Systems Operations at Texas Tech University System, and Superintendent of the Dallas Independent School District. The chair position supports the chair holder's scholarship and also provides resources for building UNT's educational administration programs and bringing increased recognition to the graduate programs.

The Velma Schmidt Endowed Chair in Early Childhood
Development was established and fully funded as a continuing
memorial to Dr. Velma Schmidt and her work on behalf of young
children. The holder of the chair is responsible for teaching and
mentoring graduate and undergraduate students, collaboration with
faculty and schools, participation in professional and scholarly
activities, and providing leadership in the university and community.

### **Course listings**

Independent study courses numbered 4900-4910 are open to advanced undergraduate students who are capable of developing a problem independently. A project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a term paper. These courses are not open to graduate students and are offered only when other required courses are unavailable. Prerequisites include consent of instructor and consent of the appropriate authority.

Individual courses of instruction are subject to change or withdrawal at any time and may not be offered each term/semester or every year. Any course may be withdrawn from current offerings if the number of registrants is too small to justify conducting it.

# Department of Counseling and Higher Education

Main Office Welch Complex 2

Mailing address: 1155 Union Circle #310829 Denton, TX 76203-5017 940-565-2910 Fax: 940-565-2905

Web site: www.coe.unt.edu/che

Natalya Lindo, Chair

Faculty

The Department of Counseling and Higher Education provides programs designed to prepare professionals for leadership positions in community services, preschools, schools, colleges, universities and the public sector.

Consortium for Animal Assisted Therapy trains professionals and volunteers to work with their pets to facilitate the development of students with pet-assisted educational programs and to enhance the emotional well-being of persons of all ages through positive human-animal interactions.

The Higher Education Development Initiative was established in 1972 with foci to provide professional development activities to graduate students and to disseminate research findings through books, journals and monographs. The center expanded its goals to include support of the UNT Law Conference and comparative international studies.

The Center for Play Therapy exists to facilitate the unique development and emotional growth of children through the process of play therapy. The center carries out this commitment by providing graduate courses in play therapy, a play therapy summer institute, an annual play therapy conference, research, scholarships, a directory of play therapy training in the United States and Canada, a bibliography of play therapy literature, an international clearinghouse for play therapy literature, play therapy for children and training for parents.

The Counseling and Human Development Center (CHDC) and The Child and Family Resource Clinic (CFRC) are instructional facilities in which master's and doctoral-level counselors-in-training provide counseling under faculty supervision. These clinics serve individuals of all ages, couples, families and groups. Fees are based on a sliding scale, making counseling affordable to a segment of the population that otherwise might not have access to mental health services.

### Counseling

Advising Office Welch Complex 2 940-565-2910

#### **Higher Education**

Advising Office Matthews Hall, Room 214 940-565-2045

#### **Minors**

## **Counseling minor**

The counseling minor program is available to undergraduate students who are working toward a bachelor's degree. Students must check with their academic advisors to have their minor program approved. The interpersonal skills gained in this program may be applied to a variety of employment settings within the professions related to health and human services. A minor in counseling also provides students with a background that serves as a strong foundation when applying to master's degree programs in counseling and related fields

A minimum of five counseling courses are offered each fall and spring term/semester. At least one section of the two introductory courses (COUN 2610 and COUN 3620) is offered each fall and spring term/semester. There are minimal courses are offered during the summer.

## Requirements:

A counseling minor requires 18 hours of coursework.

- COUN 2610 Principles of Counseling I
- COUN 3620 Principles of Counseling II

#### 12 hours from

- COUN 2620 Diversity and Cultural Awareness
- COUN 3600 Therapeutic Play
- COUN 3630 Survey of Career Development and Career Guidance
- COUN 3640 Group Process in Helping Relationships
- COUN 4620 Interpersonal Skills in Helping Relationships
- COUN 4900 Special Problems

# Department of Educational Psychology

Main Office Matthews Hall, Room 316

Mailing address: 1155 Union Circle, #311335 Denton, TX 76203-5017 940-565-4646

Fax: 940-565-2185

Web site: www.coe.unt.edu/educational-psychology

Robin K. Henson, Chair

#### Faculty

### **Academic Support and Outreach Services**

Two EPSY offices provide a variety of academic, research and outreach services to students, faculty and the community at large:

### Office of Research Consulting

The EPSY Office of Research Consulting (ORC) supports the research needs of faculty and students across the UNT community by providing methodological and statistical advice on grants, research, dissertations and classwork. ORC is dedicated to enhancing the research atmosphere at UNT by improving statistical understanding of students and faculty, providing seminars and support on latest developments in data analysis and research methods, archiving publicly available national and international research data, and providing consulting on grant proposals and funded projects.

## Office of Giftedness, Talent Development, and Creativity

The Office for Giftedness, Talent Development, and Creativity (OGTD) is committed to transforming potential into excellence through innovative educational opportunities, research, and outreach. The OGTD aspires to serve the intellectual, academic, social, and emotional needs of gifted children and adolescents in the greater North Texas area, and assist those who parent, teach, and otherwise work with them. The Office aspires to be a leading resource on giftedness, talent development, and creativity that is known regionally, nationally, and internationally.

Changed to match formatting of ORC description.

## **Human Development and Family Science**

Web site: www.coe.unt.edu/educational-psychology

Human development and family science provides students a program of study and career opportunities in a selected emphasis area focusing on foundations in child and human development and/or family science. Emphasis areas include community and family services and individual and family development.

The program offers coursework leading to credentialing as a Certified Family Life Educator (CFLE) through the National Council on Family Relations or as an Early Intervention Specialist with the Texas Department of Assistive and Rehabilitative Services. Students interested in either credential should meet with their faculty advisor as soon as possible for a list of required coursework.

### Degree/teacher certification plan

The **Human Development and Family Science** secondary teaching certificate is a specialized certificate encompassing a subset of content area standards (1, 2 and 3) from the composite certificate and credentialing to teach a corresponding subset of the discipline's courses.

The **Family and Consumer Sciences** secondary teaching certificate is a composite certificate with content area standards encompassing competencies from the full breadth of the discipline (content area standards 1–8) and credentialing to teach the full range of the discipline's courses.

The degree/teacher certification plan is the official document outlining the student's course of study. The student is responsible for initiating the degree/teacher certification plan process and should do so as soon as possible after being formally enrolled at the university.

Advising should be sought in the Student Advising Office. The student, with advisement, makes decisions relating to the program of study. The degree/teacher certification plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Degree/teacher certification plan processing takes four to six weeks. Students must make an appointment to review completed degree/teacher certification plans in Matthews Hall, Room 105.

## **Educational Psychology**

Web site: www.coe.unt.edu/educational-psychology

### **Special Education**

Web site: www.coe.unt.edu/educational-psychology

Special Education EC-12 certification is available in conjunction with the Bachelor of Science with a major in Interdisciplinary Studies with EC-6 certification. See the Education, BS (offered by the Department of Teacher Education and Administration) for specific details.

Courses in special education leading to teacher certification credentials are also offered at the graduate level. See the *Graduate Catalog* for additional information.

#### **Scholarships**

The Department of Educational Psychology offers several scholarships designated for undergraduate students in human development and family science and for undergraduate students seeking a special education (K-12) certification. Applications can be found online at coe.unt.edu/scholarships. Deadlines for applications vary slightly with each academic year, with awards generally being announced in late spring. Check with the department office, Matthews Hall, Room 316, for additional scholarship information.

#### Degree plan

The degree plan is the official document outlining the student's course of study. The student is responsible for initiating the degree plan process and should do so as soon as possible after being formally enrolled at the university.

Career advising should be sought in the departmental office, Matthews Hall, Room 316. The student, with advisement, makes decisions relating to the program of study. The degree plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Students should have their degree plans updated the term/semester before graduation in Matthews Hall, Room 105.

#### Special programs

#### **UNT ELEVAR Inclusive Post-Secondary Program**

UNT ELEVAR (Empower, Learn, Excel, enVision, Advance, Rise) is a four-year inclusive postsecondary education program for students with intellectual disabilities (ID). Following the definition of the program's name, ELEVAR [lift, soar, rise, in Spanish], the program's vision is to empower young adults with ID who wish to continue postsecondary education (PSE) to become self-determined, independent, and healthy adults readied for integrated competitive employment. The UNT ELEVAR program has received U.S. Department of Education Comprehensive Transition Program Accreditation.

#### **Program Contact:**

Brenda L. Barrio, Ph.D.
Associate Professor of Special Education (Critical Perspectives)
UNT ELEVAR Inclusive Post-Secondary Program (Project Lead)
Educational Psychology Department
College of Education
University of North Texas
https://elevar.unt.edu

## Certificate requirements

The ELEVAR certificate requires the completion of 48 credit hours of course work earned with a grade of pass.

## Course work, 48 hours of zerocredit courses

Zero-credit courses will include modified assignments tied to both course content and specific career and or life goals. Course of study (48-hour program) will be individually determined in relation to student goals. Satisfactory academic progress will be measured by performance on individually modified assignments.

## Internships

Minimum of eight (8) supervised internships related to career goal. Internships can be paid or non-paid. Every internship must last no less than six-weeks and can be completed in one or more inclusive and competitive employment setting.

## Workshops, 32 hours

UNT ELEVAR Program semester-long seminar workshops. Semester-long workshops will include assignments tied to course content, career goals, and life goals. Course of study (32-hour program) will be required for all students in the program. Satisfactory academic progress will be measured by performance on individually modified assignments. Additional workshops can be accessed by the student if needed.

### **Portfolio**

Student portfolio of accomplishments is required for completion of the program. Portfolio will include examples of assignments or projects for courses taken; projects for classes/workshops; examples of skills obtained through internships; and may also include examples of leadership or service learning activities on campus or in the community, extra-curricular involvement, etc.

## **Majors**

## Human Development and Family Science with a concentration in Individual and Family Development across the Lifespan, BS (non-teacher certification)

Graduates of the human development and family science program seek to enhance the well-being of individuals and families through research and community engagement. Individual and Family Development across the Lifespan is one of the two non-certification concentrations offered.

## **Degree Requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in human development and family science with a concentration in Individual and Family Development across the Lifespan(non–teacher certification).

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

## Major requirements

## Educational psychology core, 42 hours

It is recommended that students enroll in HDFS 1013, HDFS 1023, HDFS 2013, and HDFS 2042 during their first year in the program.

- EPSY 3013 Reading and Understanding Research
- HDFS 1013 Human Development
- HDFS 1023 Assessment and Observation
- HDFS 2013 Introduction to Human Development and Family Science Theories
- HDFS 2033 Parenting
- HDFS 2042 Professional Development in Human Development and Family Science
- HDFS 3113 Infant and Child Development
- HDFS 3153 The Impact of Culture on Individuals and Families
- HDFS 3313 Interpersonal Relationships
- HDFS 3423 Family, School and Community
- HDFS 3533 Families in Crisis
- HDFS 4011 Pre-Internship
- HDFS 4023 Internship
- HDFS 4133 Adolescence and Emerging Adulthood
- HDFS 4323 Family Law and Public Policy

#### Concentrations

Students must also complete course requirements for a concentration, chosen with the advice of a faculty member within the program area. Concentrations are available in Individual and Family Development Across the Lifespan or Community and Family Services.

## Individual and Family Development Across the Lifespan, 21 hours

## Required courses

- HDFS 2313 Courtship and Marriage
- HDFS 4433 Family Resource Management
- HDFS 4353 Current Research in Family Science
- HLTH 2200 Family Life and Human Sexuality
- PSYC 4470 Sexual Behavior
- PSYC 3480 Adult Development and Aging
   or
- AGER 3480 Psychology of Adult Development and Aging

TWO upper-level electives from the following departments/programs: AGER, ANTH, ASLP, COUN, EDSP, HDFS, HSML, PADM, PSYC, RHAB, SOCI, SOWK, WGST.

### **Electives**

To complete the minimum of 120 hours for the degree.

## Other requirements

- A minimum grade of C is required in each course in the major; a minimum GPA of 2.50 in the major, 2.0 GPA in UNT courses and 2.0 overall GPA is required for graduation (overall GPA includes all course work transferred in addition to those taken at UNT).
- Students who are interested in research and preparing for graduate studies are advised to take a research practicum and complete a senior thesis. Any student who is interested in research should meet with a faculty advisor early in the program to plan an appropriate minor and electives and to seek approval for choosing a senior thesis.
- Students majoring in human development and family science must contact the Student Advising Office, Matthews Hall, Room 105, to prepare their degree audits.

## Internship Information

Include one 3-hour unpaid internship (HDFS 4023) related to the student's selected emphasis area (see below). Students must complete a minimum of 150 clock hours to meet this requirement. Some students may be required to complete a second internship. Students should have senior status and have completed HDFS 4011 before beginning the internship. Liability insurance is required for all internship students. Permission to enroll in an internship and approval of the internship site are required. Students must have completed the following courses to be eligible for enrollment in internships related to:

#### Infants or toddlers

- HDFS 3113 Infant and Child Development
- HDFS 3213 Infant and Toddler Intervention and Education

## Teaching young children (2 years–8 years)

- HDFS 4233 Guidance of Children and Youth
- EDEC 4243 Environmental Processes and Assessment

## School-age care and programming

- HDFS 3123 Child Development for Non-Majors
- HDFS 4133 Adolescence and Emerging Adulthood

#### Adolescents

HDFS 4133 - Adolescence and Emerging Adulthood

## Administration and/or parent/family life education

- HDFS 4253 Administration of Programs for Children, Youth and Families
- HDFS 4413 Family Life Education

#### Child life

HDFS 4213 - Child Life Seminar

## Human Development and Family Science with a concentration in Community and Family Services, BS (non-teacher certification)

Graduates of the human development and family science program seek to enhance the well-being of individuals and families through research and community engagement. Community and Family Services is one of two non-certification concentrations offered.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in human development and family science with a concentration in Community and Family Services (non–teacher certification).

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

## Major requirements

## Educational psychology core, 42 hours

It is recommended that students enroll in HDFS 1013, HDFS 1023, HDFS 2013, and HDFS 2042 during their year in the program.

- EPSY 3013 Reading and Understanding Research
- HDFS 1013 Human Development
- HDFS 1023 Assessment and Observation
- HDFS 2013 Introduction to Human Development and Family Science Theories
- HDFS 2033 Parenting
- HDFS 2042 Professional Development in Human Development and Family Science
- HDFS 3113 Infant and Child Development
- HDFS 3153 The Impact of Culture on Individuals and Families
- HDFS 3313 Interpersonal Relationships
- HDFS 3423 Family, School and Community
- HDFS 3533 Families in Crisis
- HDFS 4011 Pre-Internship
- HDFS 4023 Internship
- HDFS 4133 Adolescence and Emerging Adulthood
- HDFS 4323 Family Law and Public Policy

#### Concentrations

Students must also complete course requirements for a concentration, chosen with the advice of a faculty member within the program area. Concentrations are available in Community and Family Services or Individual and Family Development across the Lifespan .

## Community and Family Services, 21 hours

## Required courses

- HDFS 3213 Infant and Toddler Intervention and Education
- HDFS 4253 Administration of Programs for Children, Youth and Families
- HDFS 4413 Family Life Education
- PADM 3010 Foundations of Philanthropy and Nonprofits
- SOWK 4700 Child Welfare Practice and Services
   TWO upper-level electives from the following departments/
   programs: AGER, ANTH, ASLP, COUN, EDSP, HDFS,
   HSML, PADM, PSYC, RHAB, SOCI, SOWK, WGST.

#### **Electives**

To complete the minimum of 120 hours for the degree.

## Other requirements

- A minimum grade of C is required in each course in the major; a minimum GPA of 2.50 in the major, 2.0 GPA in UNT courses and 2.0 overall GPA is required for graduation (overall GPA includes all course work transferred in addition to those taken at UNT).
- Students who are interested in research and preparing for graduate studies are advised to take a research practicum and complete a senior thesis. Any student who is interested in research should meet with a faculty advisor early in the program to plan an appropriate minor and electives and to seek approval for choosing a senior thesis.
- Students majoring in human development and family science must contact the Student Advising Office, Matthews Hall, Room 105, to prepare their degree audits.

## Internship Information

Include one 3-hour unpaid internship (HDFS 4023) related to the student's selected emphasis area (see below). Students must complete a minimum of 150 clock hours to meet this requirement. Some students may be required to complete a second internship. Students should have senior status and have completed HDFS 4011 before beginning the internship. Liability insurance is required for all internship students. Permission to enroll in an internship and approval of the internship site are required. Students must have completed the following courses to be eligible for enrollment in internships related to:

### Infants or toddlers

- HDFS 3113 Infant and Child Development
- HDFS 3213 Infant and Toddler Intervention and Education

## Teaching young children (2 years–8 years)

- HDFS 4233 Guidance of Children and Youth
- EDEC 4243 Environmental Processes and Assessment

## School-age care and programming

- HDFS 3123 Child Development for Non-Majors
- HDFS 4133 Adolescence and Emerging Adulthood

#### Adolescents

HDFS 4133 - Adolescence and Emerging Adulthood

## Administration and/or parent/family life education

- HDFS 4253 Administration of Programs for Children, Youth and Families
- HDFS 4413 Family Life Education

#### Child life

HDFS 4213 - Child Life Seminar

## Human Development and Family Science, BS (teacher certification)

Graduates of the human development and family science program with teacher certification seek to enhance the well-being of individuals and families through education and community engagement.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in human development and family science (teacher certification).

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

## Major requirements

## Human Development and Family Science certificate, 55 hours

- HDFS 1013 Human Development
- HDFS 1023 Assessment and Observation
- HDFS 2033 Parenting
- HDFS 2313 Courtship and Marriage
- HDFS 3113 Infant and Child Development
- HDFS 3123 Child Development for Non-Majors
- HDFS 3213 Infant and Toddler Intervention and Education
- HDFS 3313 Interpersonal Relationships
- HDFS 3423 Family, School and Community
- HDFS 4011 Pre-Internship
- HDFS 4133 Adolescence and Emerging Adulthood
- HDFS 4233 Guidance of Children and Youth
- HDFS 4253 Administration of Programs for Children, Youth and Families
- HDFS 4323 Family Law and Public Policy
- HDFS 4413 Family Life Education
- HDFS 4433 Family Resource Management
- EDEC 3613 Childhoods Across Time, Space and Place

- EDEC 4243 Environmental Processes and Assessment
- EDEC 4633 Nurturing Children's Social Competence
- HMGT 1450 Principles of Nutrition
- CMHT 4750 Managing a Diverse Workforce

## Family and Consumer Sciences certificate, 64 hours

- HDFS 1013 Human Development
- HDFS 2033 Parenting
- HDFS 2313 Courtship and Marriage
- HDFS 3113 Infant and Child Development
- HDFS 3123 Child Development for Non-Majors
- HDFS 3313 Interpersonal Relationships
- HDFS 4011 Pre-Internship
- HDFS 4233 Guidance of Children and Youth
- HDFS 4253 Administration of Programs for Children, Youth and Families
- HDFS 4413 Family Life Education
- HDFS 4433 Family Resource Management
- EDEC 4243 Environmental Processes and Assessment
- HFMD 2400 Introduction to the Furniture Industry
- HMGT 1420 Food Sanitation
- HMGT 1450 Principles of Nutrition
- HMGT 1470 Introduction to Professional Food Preparation
- HMGT 1500 Orientation to the Hospitality Industry
- HMGT 3250 Restaurant Operations I
- HMGT 3700 Hotel Operations
- MDSE 4250 Product Development
- MDSE 2650 Textiles for Apparel
- MDSE 3750 Consumer Studies
- CMHT 4750 Managing a Diverse Workforce

## Other course requirements, 3 hours

• LTEC 1100 - Computer Applications

## Other requirements

## Admission to teacher education

- 1. Junior standing (60 credit hours earned);
- a 2.75 overall GPA (includes all transferred and UNT courses) and a 2.75 GPA in the core with all graded courses complete;
- appropriate exam scores on either the ACT, SAT or Praxis Core: Academic Skills for Educators; (contact the Student Advising Office in Matthews Hall, Room 105, for further information on the exam requirement);
- a rating of "accepted" on the online admission interview questionnaire;
- active enrollment at UNT and a completed or in-process degree audit in the College of Education Student Advising Office; and
- a completed Application for Admission to Teacher Education submitted to the College of Education Student Advising Office once all requirements are complete.

Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or www.coe.unt.edu/sao for additional information.

## Professional education requirements, 21 hours

## Pedagogy, 12 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4070 Teaching Diverse Populations
- EDCI 4840 Instructional Strategies and Classroom Management

## Reading/English/language arts, 3 hours

EDCI 4060 - Content Area Reading

## Internship (student teaching), 6 hours

- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School

#### Note

See "Student Teaching" in the College of Education general information section of this catalog.

## Eligibility for teacher certification and endorsements

Teacher certification is a function of the State Board for Educator Certification. Completion of the bachelor's degree and the required education courses does not necessarily result in certification by the agency. In order to receive recommendation for teacher certification through the University of North Texas, students must have:

- Successfully completed an approved teacher education program for the preparation of secondary teachers;
- Successfully completed student teaching, including attendance at appropriate seminars and passing a comprehensive teacher preparation examination; and
- Passed the content examination from the American Association of Family and Consumer Sciences.

Students completing course requirements for the Human Development and Family Science teacher certificate will be eligible to apply to the National Council of Family Relations for the Certified Family Life Educator credential. Students completing course requirements for the Family and Consumer Sciences teacher certificate will be eligible to apply to the American Association of Family and Consumer Sciences for the Certified Family and Consumer Sciences credential.

## **Grad Track Options**

## Human Development and Family Science, BS with grad track option leading to Educational Psychology, MS

Academically strong undergraduate students with a major or minor in human development and family science (HDFS) may apply for and be admitted to the master's in educational psychology while still undergraduates. Doing so allows them to finish first their bachelor's degree and then their master's program on an accelerated pathway. With departmental approval, and subject to the requirements of the accelerated master's degree (see below), four undergraduate courses are replaced with their graduate counterparts. These four graduate courses also count toward the 33 hours for the master's degree in educational psychology.

## Admission requirements and program policies

## Admission requirements

Students who have completed 75 credit hours of undergraduate coursework may apply for admission into the grad track program in educational psychology by submitting the following:

- Submission of official GRE scores is strongly encouraged, but not required.
- At least two written letters of recommendation from individuals who can give evidence of the candidate's reading, critical thinking, writing and quantitative skills. These letters must be sent from the recommender, signed and on letterhead. Preference is given to letters from fulltime EPSY faculty and/or the UNT faculty from whom the applicant has taken upper-division or graduate courses.
- Resume or vita that includes educational and any professional experiences.
- A personal statement (1-3 pages) stating the applicant's goals and rationale for applying to the desired degree concentration. Please describe any related job experiences or any relevant research and/or evaluation experiences.

Students meeting the grad track requirements will be notified to start the accelerated program after completing 90 credit hours of coursework toward their undergraduate degree program. This official notification is required for taking graduate-level courses.

## Program policies

Students with an overall GPA of 3.50 may apply to the program and to the graduate school for the grad track option, which includes 6 hours of undergraduate courses in human development and family science and up to 12 hours of graduate courses in educational psychology. Following successful completion of the undergraduate degree, students may transfer the 12 graduate hours into the MS with a major in educational psychology and concentrations in family policy and program administration or learning and development.

Students admitted into the grad track option must earn a grade point of 3.0 or higher in each of the four graduate courses taken. Full admission to the UNT graduate school is obtained upon completion of the undergraduate degree.

## Program requirements

Students seeking a master's concentration in Family Policy and Program Administration will take the following courses in the grad track option:

- EPSY 5050 Foundations of Educational Research Methodology
- EPSY 5000 Introduction to Educational Psychology
- EPSY 5413 Family Relationships
- EPSY 5453 Family Law and Policy

Students seeking a master's concentration in Learning and Development will take the following courses in the grad track option:

- EPSY 5000 Introduction to Educational Psychology
- EPSY 5050 Foundations of Educational Research Methodology
- EPSY 5133 Infant and Child Development
- EPSY 5143 Advanced Adolescent Development

With department approval the following courses may be substituted based on course availability:

- EPSY 5250 Grant Proposal Writing Techniques
- EPSY 5210 Educational Statistics

All remaining courses for Human Development and Family Science, BS must be completed.

## Human Development and Family Science, minor with grad track option leading to Educational Psychology, MS

A minor in human development and family science (HDFS) is suggested for students whose careers or graduate degree audits involve children and families, for students who desire enrichment in family life education and for students in pre-professional studies leading to careers in medicine and family law. A grad track minor in HDFS requires 18 semester hours, including 12 advanced hours. Students who choose HDFS as a minor must meet prerequisite requirements for courses.

## Admission requirements and program policies

## Admission requirements

Students who have completed 75 credit hours of undergraduate coursework may apply for admission into the grad track program in educational psychology by submitting the following:

- Submission of official GRE scores is strongly encouraged, but not required.
- At least two written letters of recommendation from individuals who can give evidence of the candidate's reading, critical thinking, writing and quantitative skills. These letters must be sent from the recommender, signed and on letterhead. Preference is given to letters from fulltime EPSY faculty and/or the UNT faculty from whom the applicant has taken upper-division or graduate courses.
- Resume or vita that includes educational and any professional experiences.
- 4. A personal statement (1–3 pages) stating the applicant's goals and rationale for applying to the desired degree concentration. Please describe any related job experiences or any relevant research and/or evaluation experiences.

Students meeting the grad track requirements will be notified to start the accelerated program after completing 90 credit hours of coursework toward their undergraduate degree program. This official notification is required for taking graduate-level courses.

## Program policies

Students with an overall GPA of 3.50 may apply to the program and to the graduate school for the grad track option, which includes 6 hours of undergraduate courses in human development and family science and up to 12 hours of graduate courses in educational psychology. Following successful completion of the undergraduate degree, students may transfer the 12 graduate hours into the MS with a major in educational psychology and concentrations in family science, child life or learning and development.

Students admitted into the grad track option must earn a grade point of 3.0 or higher in each of the four graduate courses taken. Full admission to the UNT graduate school is obtained upon completion of the undergraduate degree.

## Program requirements

Students seeking a master's concentration in Family Policy and Program Administration will take the following courses in the grad track option:

- EPSY 5050 Foundations of Educational Research Methodology
- EPSY 5000 Introduction to Educational Psychology
- EPSY 5413 Family Relationships
- EPSY 5453 Family Law and Policy

Students seeking a master's concentration in **learning and development** will take the following courses in the grad track option:

EPSY 5000 - Introduction to Educational Psychology

- EPSY 5050 Foundations of Educational Research Methodology
- EPSY 5133 Infant and Child Development
- EPSY 5143 Advanced Adolescent Development

Students seeking a master's concentration in **research and** evaluation will take the following courses in the grad track option:

- EPSY 5000 Introduction to Educational Psychology
- EPSY 5050 Foundations of Educational Research Methodology
- EPSY 5123 Life Span Development
- EPSY 5350 Foundations of PsychoEducational Measurement

With department approval the following courses may be substituted based on course availability:

- EPSY 5250 Grant Proposal Writing Techniques
- EPSY 5210 Educational Statistics

For the remainder of the minor requirements, please contact the Department of Educational Psychology.

## Special Education, minor with grad track option leading to Special Education, MEd

Academically strong undergraduate students in departments other than Educational Psychology (EPSY) who have a cumulative GPA of 3.5 or better may apply for permission to pursue a Pathways Minor in SPED. Acceptance into the minor will enable them to both finish their coursework for a Bachelors degree in their major programs, while also transfer up to 12 graduate credit hours into the Master of Education degree. Upon acceptance into the Pathways Minor, students will take 4 graduate and 2 undergraduate courses. The four graduate courses will count towards the Master's degree in Special Education, pending a grade of B or better.

## Admission requirements

Students who have completed 75 credit hours of undergraduate course work may apply for admission into the grad track program in special education by submitting the following:

- Submission of official GRE scores is strongly encouraged, but not required.
- At least two written letters of recommendation from individuals who can give evidence of the candidate's reading, critical thinking, writing and quantitative skills. These letters must be sent from the recommender, signed and on letterhead. Preference is given to letters from fulltime EPSY faculty and/or the UNT faculty from whom the applicant has taken upper-division or graduate courses.
- Resume or vita that includes educational and any professional experiences.
- 4. A personal statement (1-3 pages) stating the applicant's goals and rationale for applying to the desired degree concentration. Please describe any related job experiences or any relevant research and/or evaluation experiences.

Students meeting the grad track requirements will be notified to start the graduate program after completing 90 credit hours of course work toward their undergraduate degree program. This official notification is required for taking graduate-level courses.

## Program policies

Students with an overall GPA of 3.50 may apply to the program and to the graduate school for the grad track option, which includes 6 hours of undergraduate courses and up to 12 hours of graduate courses in special education. Following successful completion of the undergraduate degree, students may transfer the 12 graduate hours into the MEd with a major in special education, concentrations in Autism Spectrum Disorders, High Incidence Disabilities, or Educational Diagnostician.

Students admitted into the grad track option must earn a grade point of 3.0 or higher in each of the four graduate courses taken. Full admission to the UNT graduate school is obtained upon completion of the undergraduate degree. Please see Graduate Catalog for other requirements for the MEd degree.

## The 18-hour Minor with Grad Track Option will consist of

- EPSY 5000 (replacing EPSY 3000)
- EDSP 5240 (replacing EDSP 3240)
- EDSP 5330(replacing EDSP 4340)

One of the following options (3 hours):

- For Autism Intervention Concentration: EDSP 5310 (replacing EDSP 3410)
- For High Incidence Disabilities Concentration: EDSP 5740 (replacing EDSP 4330)
- For Educational Diagnostician Concentration: EDSP 5510 (replacing EDSP 4320)
- Plus two other EDSP courses listed under Special Education Minor, with adviser's approval.

#### **Minors**

## Human Development and Family Science minor

An 18-hour minor (12 of which are advanced hours) in human development and family science is suggested for students whose careers or degree audits involve children and families, for students who desire enrichment in family life education and for students in preprofessional studies leading to careers in medicine and family law. Students who choose human development and family science as a minor must meet prerequisite requirements for courses.

## **Special Education minor**

The special education minor is available to undergraduate students working toward a bachelor's degree. Because of its compatibility with other human service fields, special education provides an appropriate minor for students majoring in such areas as rehabilitation, speech and hearing science, behavior analysis, psychology, criminal justice, social work, recreation, kinesiology, and human development and family science.

Students minoring in special education must take a minimum of 18 semester hours to complete the minor, with at least 6 hours of advanced work (3000- or 4000-level). Minors must observe the system of prerequisites for courses. Departmental advisors are available for consultation on the minor in special education. Contact the College of Education Advising Office at (940) 565-2736 or the Educational Psychology Office at (940) 565-4646. Certain courses are recommended depending on the student's major.

### Required courses

A minor in special education requires 18 semester hours from the following, with EPSY advisor's approval:

- EDSP 3210 Educational Aspects of Exceptional Learners
- EDSP 3240 Family Collaboration for Exceptional
  Learners
- EDSP 3410 Developmental Disabilities and Autism: Identification and Intervention
- EDSP 3420 Behavioral Disorders: Characteristics, Identification and Intervention
- EDSP 4320 Educational Assessment and Evaluation of Exceptional Learners
- EDSP 4330 Advanced Educational Strategies for Exceptional Learners

- EDSP 4340 Classroom and Behavioral Management Strategies for Exceptional Learners
- EDSP 4360 Transition Education and Services for Exceptional Learners
- EPSY 3000 Foundations of Educational Psychology

## Department of Kinesiology, Health Promotion and Recreation

Main Office Physical Education Building, Room 209 Mailing address:

1155 Union Circle #310769 Denton, TX 76203-5017 940-565-2651 Fax: 940-565-4904

Web site: www.coe.unt.edu/khpr

Jakob Vingren, Chair

#### **Faculty**

The Department of Kinesiology, Health Promotion and Recreation offers a variety of programs of study in kinesiology; health promotion; and recreation, events and sport management. The department offers teaching and non-teaching degrees and courses that fulfill university core requirements.

The Center for Sport Psychology and Performance Excellence (CSPPE) is a multi-disciplinary center devoted to offering sport psychology interventions, research and training. The center combines the expertise of faculty in psychology and kinesiology to produce the most comprehensive and state-of-the-art sport psychology services available.

### Kinesiology

Main Office Physical Education Building, Room 209 940-565-2651

The program in kinesiology offers a complete curriculum that prepares students for a variety of careers in the public and private sectors and in teaching. Degrees include Bachelor of Science and Master of Science with a major in kinesiology. A teacher certification program is available, which is a standard all-level certificate in physical education (kinesiology) at the bachelor's level.

#### **Teacher certification**

Students should refer to the sections on "Teacher certification," "Teaching certificates" and "Student teaching" in the College of Education general information pages of this catalog for necessary requirements to qualify for recommendation for a Texas teaching certificate.

#### Degree plan

The degree plan is the official document outlining the student's course of study. The student is responsible for initiating the degree plan process and should do so as soon as possible after being formally enrolled at the university.

Career advising should be sought in the departmental office, Physical Education Building, Room 209. The student, with advisement, makes decisions relating to the program of study. The degree plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Students should have their degree plans updated the term/semester before graduation in Matthews Hall, Room 105.

#### **Scholarships**

The Irma Caton, John Douthitt Memorial, Corinne and David Hill, Morrow Family, and Peggy Richardson scholarships are awarded annually to a kinesiology major. The Eurice Miller Bass, Paramount Pictures KHPR and Delta Psi Kappa Beulah A. Harriss scholarships also are available. Information and applications are available in the departmental office, Physical Education Building, Room 209, and on the departmental web site (www.coe.unt.edu/khpr).

#### **Health Promotion**

Main Office Physical Education Building, Room 209 940-565-2651

The health promotion program is designed to prepare graduates for careers in a variety of community health organizations (hospital-based health programs, work-site wellness programs, community-based agencies, commercial fitness centers, public health departments), as well as in local, state and national government health agencies (CDC&P, FDA, EPA).

The Health Promotion division of the Department of Kinesiology, Health Promotion and Recreation has added a Bachelor of Science degree in public health, in addition to the Bachelor of Science with a major in Health Promotion (Community/Corporate tracks). This new degree supports a developing, collaborative relationship with the University of North Texas Health Science Center (UNTHSC) School of Public Health. The new Bachelor of Science with a major in public health meets or exceeds accreditation requirements of the Council for Education in Public Health (CEPH).

The Bachelor of Science with a major in public health offers an interdisciplinary experience across colleges and departments at the University of North Texas at Denton. The Bachelor of Science with a major in public health offers flexibility and a variety of options in the job marketplace due to its diverse curriculum.

The Bachelor of Science degree in public health offers a public health core, with tracks in either population studies (humanities) or biological sciences. The curriculum offers opportunities for students interested in pursuing careers in clinical professions (medicine, dentistry, nursing, etc.) as well as in public health.

#### Degree plan

The degree plan is the official document outlining the student's course of study. The student is responsible for initiating the degree plan process and should do so as soon as possible after being formally enrolled at the university.

Career advising should be sought in the departmental office in PEB, Room 209. The student, with advisement, makes decisions relating to the program of study. The degree plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Students should have their degree plans updated the term/semester before graduation in Matthews Hall, Room 105.

#### **Scholarships**

The Linda and Philip Dudney Health Promotion Scholarship is awarded to deserving undergraduate and graduate majors. The Eurice Miller Bass, Paramount Pictures KHPR, and Delta Psi Kappa Beulah A. Harriss scholarships also are available. For information, contact the departmental office or visit the departmental web site (www.coe. unt.edu/khpr).

### **Recreation, Event and Sport Management**

Main Office Physical Education Building, Room 209 940-565-2651

The program's primary goals are the professional preparation of undergraduate and graduate students, research into the phenomena of leisure; practical application related to recreation and sport operation and management; development of new techniques for professional practice; community and professional service; continuing education; scholarly publications; and technical assistance.

The program in recreation, event and sport management leading to the Bachelor of Science degree prepares students for careers in three interest areas: program management, event management, and sport management. The undergraduate program emphasizes the study of recreation, event and sport and the preparation of students for management and leadership positions in a variety of agency settings.

Career opportunities for program graduates include federal, state and local government park and recreation agencies; intramural, youth, community, intercollegiate and professional sport management agencies; commercial recreation agencies; corporate employee and campus and military recreation operations.

#### Degree plan

The degree plan is the official document outlining the student's course of study. The student is responsible for initiating the degree plan process and should do so as soon as possible after being formally enrolled at the university.

Advising should be sought in the departmental office. The student, with advisement, makes decisions related to the program of study. The degree plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Students should have their degree plans updated the term/semester before their internship in Matthews Hall, Room 105.

#### **Scholarships**

The Don C. Bailey, Sue Delmark, Marian C. Keller, Rita Pilkey, Julia Wakeley, and the Rich Herold Scholarships are awarded annually on a competitive basis to undergraduate and graduate majors in the program. The KHPR and Delta Psi Kappa Beulah A. Harriss scholarships also are available. Information and applications are available in the departmental office and on the departmental web site (www.coe.unt.edu/khpr).

### **Majors**

# Health Promotion with a Community Health track, BS (non-teacher certification)

The Bachelor of Science with a major in health promotion teaches you health principles so you can assist others in living a healthy lifestyle. The curriculum explores a wide range of areas including epidemiology, consumer health, health communication and program planning.

## **Degree requirements**

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 hours must be advanced, and fulfillment of degree requirements for Bachelor of Science degree as specified in the "General university requirements" in the Academics section of this catalog and the College of Education requirements.

## Major requirements

## All health promotion majors

- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II and
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- COMM 2020 Interpersonal Communication or
- COMM 2040 Public Speaking
- ENGL 2210 Survey of World Literatures from Antiquity to 1700
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

## Health promotion core courses, 39 hours

 AGER 4800 - The Social Context of Aging: Global Perspectives

- HLTH 1900 Principles of Health
- HLTH 2100 Mental Health
- HLTH 2200 Family Life and Human Sexuality
- HLTH 3300 Health Emergencies and First Aid
- HLTH 3110 Health Promotion: Development and Application of Presentation Skills
- HLTH 3120 Drugs and Human Health
- HLTH 3130 Health Promotion Skills and Competencies
- HLTH 4430 Planning, Administration and Evaluation of Health Programs
- HLTH 4600 Behavioral Change Strategies in Health Promotion
- HLTH 4850 Internship in Community Health Promotion (6 hours) (Internship will serve as the Capstone experience for students on the Community Health track)
- HMGT 1450 Principles of Nutrition

### Community health track, 18 hours

- COUN 2620 Diversity and Cultural Awareness
- HLTH 1100 School and Community Health Problems and Services
- HLTH 1570 Environmental Health and Safety
- HLTH 3100 Epidemiology of Communicable and Non-Communicable Disease
- PSYC 3620 Developmental Psychology
- PSYC 4020 Psychology of Death and Dying

#### Minor

Students on the community health track will have a minor in communication studies. This is an 18-hour minor with at least 6 hours at the 3000-4000 level.

### Required, 9 hours

- COMM 2020 Interpersonal Communication
- COMM 3720 Small Group Communication
- COMM 3920 Organizational Communication

### Remaining 9 hours

Students may select the remaining 9 hours from the following courses:

- COMM 3120 Nonverbal Communication
- COMM 3220 Health Communication
- COMM 3320 Communication and Conflict Management
- COMM 3420 Communication and New Technology
- COMM 3520 Advanced Interpersonal Communication
- COMM 3620 Intercultural Communication
- COMM 4020 Communication Theory
- COMM 4140 Gender and Communication
- COMM 4420 Communication and Relational Development
- COMM 4829 Topics in Interpersonal/Organizational Studies

#### Additional elective courses, 3 hours

Students on the community health track will take 3 hours from the following courses:

- AGER 4020 Psychology of Death and Dying
- EADP 3010 Principles of Emergency Management
- EADP 4010 Public Health and Disasters

- EADP 4050 Social Vulnerability in Disasters
- HLTH 4500 Leadership and Professional Proficiency in Health Promotion
- KINE 3020 Movement for Individuals with Disabilities
- KINE 3050 Biomechanics
- KINE 4320 Exercise Testing and Prescription
- KINE 4330 Advanced Sport Nutrition and Metabolism
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4260 Volunteer Program Planning and Evaluation
- PSYC 3620 Developmental Psychology
- PSYC 4670 Behavioral and Biopsychosocial Challenges within LGBT Communities
- SOCI 3110 Sociology of Mental Health, Mental Illness and Mental Health Care
- SOWK 4540 Human Diversity for the Helping Professions
- WGST 2100 Introduction to Women's and Gender Studies

### **Electives**

See official degree audit for elective requirements for the community health track.

### Other requirements

A minimum grade of C is required in each course of the major; a minimum overall GPA of 2.0; a minimum UNT GPA of 2.0; a minimum GPA of 2.75 in the major is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)

# Health Promotion with a Corporate Health track, BS (non-teacher certification)

The Bachelor of Science with a major in health promotion teaches you health principles so you can assist others in living a healthy lifestyle. The curriculum explores a wide range of areas including epidemiology, consumer health, health communication and program planning.

### **Degree requirements**

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 hours must be advanced, and fulfillment of degree requirements for Bachelor of Science degree as specified in the "General university requirements" in the Academics section of this catalog and the College of Education requirements.

### Major requirements

### All health promotion majors

- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II and
- BIOL 2312 Human Anatomy and Physiology II Laboratory

- COMM 2020 Interpersonal Communication or
- COMM 2040 Public Speaking
- ENGL 2210 Survey of World Literatures from Antiquity to 1700
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

## Health promotion core courses, 39 hours

- AGER 4800 The Social Context of Aging: Global Perspectives
- HLTH 1900 Principles of Health
- HLTH 2100 Mental Health
- HLTH 2200 Family Life and Human Sexuality
- HLTH 3300 Health Emergencies and First Aid
- HLTH 3110 Health Promotion: Development and Application of Presentation Skills
- HLTH 3120 Drugs and Human Health
- HLTH 3130 Health Promotion Skills and Competencies
- HLTH 4430 Planning, Administration and Evaluation of Health Programs
- HLTH 4600 Behavioral Change Strategies in Health Promotion
- HLTH 4850 Internship in Community Health Promotion (6 hours) (Internship will serve as the Capstone experience for students on the Corporate Health track)
- HMGT 1450 Principles of Nutrition

### Corporate health track, 18 hours

- HLTH 4300 Health Promotion in the Corporate Setting
- KINE 3080 Physiological Bases of Exercise and Sport
- KINE 4300 Exercise Leadership
- KINE 4320 Exercise Testing and Prescription
- RESM 4050 Management of Recreation, Event, and Sport Organizations
- RESM 4180 Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas

#### Minor

Students on the corporate health track will have a minor in marketing. This is an 18-hour minor with at least 6 hours at the 3000-4000 level.

#### Required, 3 hours

• MKTG 3650 - Foundations of Marketing Practice

### Remaining 15 hours

Students may select the remaining 15 hours from the following courses:

- MKTG 3010 Professional Selling
- MKTG 3660 Advertising Management
- MKTG 3700 Marketing Metrics
- MKTG 4120 Consumer Behavior
- MKTG 4280 Global Marketing Issues and Practice

### Health elective courses, 3 hours

Students on the corporate health track will take 3 hours from the following courses:

- AGER 4020 Psychology of Death and Dying
- EADP 3010 Principles of Emergency Management
- EADP 4010 Public Health and Disasters
- EADP 4050 Social Vulnerability in Disasters
- HLTH 4500 Leadership and Professional Proficiency in Health Promotion
- KINE 3020 Movement for Individuals with Disabilities
- KINE 3050 Biomechanics
- KINE 4320 Exercise Testing and Prescription
- KINE 4330 Advanced Sport Nutrition and Metabolism
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4260 Volunteer Program Planning and Evaluation
- PSYC 3620 Developmental Psychology
- PSYC 4670 Behavioral and Biopsychosocial Challenges within LGBT Communities
- SOCI 3110 Sociology of Mental Health, Mental Illness and Mental Health Care
- SOWK 4540 Human Diversity for the Helping Professions
- WGST 2100 Introduction to Women's and Gender Studies

### **Electives**

See official degree audit for elective requirements for the corporate health track.

### Other requirements

A minimum grade of C is required in each course of the major; a minimum overall GPA of 2.0; a minimum UNT GPA of 2.0; a minimum GPA of 2.75 in the major is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)

# Kinesiology, BS (All-Level Teacher Certification)

# Hours required and general/college requirements

A minimum of 120 semester hours (124 semester hours for those seeking all-level teacher certification), of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

### All Kinesiology majors

#### Tier 1

- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- KINE 2030 Introduction to Kinesiology
- KINE 2050 Sociology of Sport
- MATH 1680 Elementary Probability and Statistics
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

#### Tier 2

To move into Tier 2 you must have completed the courses in Tier 1 and have a 2.5 overall GPA or higher. A minimum grade of C is required in MATH 1680, BIOL 2301/BIOL 2312, KINE 2030, KINE 2050, KINE 3080, KINE 3090 and PHED 1000 prior to a Kinesiology major being allowed to take any additional Kinesiology courses.

- KINE 3080 Physiological Bases of Exercise and Sport (has prerequisite of BIOL 2301/2311 and BIOL 2302/2312)
- KINE 3090 Motor Behavior \*

### Additional course requirements

HLTH 2200 - Family Life and Human Sexuality

### Other requirements

The student must have a 2.5 overall GPA or higher to take any additional Kinesiology courses. A Kinesiology course may be repeated one time in order to improve a grade to the requirement of a C or better. Following the second attempt, approval for a third attempt must be sought from the Program Coordinator or Department.

### Kinesiology theory core, 15 hours

All Kinesiology majors take the following courses and must meet all prerequisites.

- KINE 2010 Fundamentals of Strength and Conditioning
- KINE 3050 Biomechanics
- KINE 3090 Motor Behavior \*
- KINE 4000 Psychology of Sport
- KINE 4050 Quantitative Analysis in Kinesiology

### Major capstone, 3 hours

 KINE 4102 - Student Teaching in Physical Education, Grades EC-5

# Physical performance courses, 3 hours

Students must complete a total of 3 courses. (Students are encouraged to select courses that will expand their competence in a variety of physical activities.)

- 1. At least one course from Group I
- 2. At least one course from Group II
- One of the courses must be at the intermediate or advanced level.
- Only one course can come from each section (i.e., A, B, or C within Group I and within Group II).

### Group I

### Section A

- PHED 1590 Beginning Tennis
- PHED 1600 Intermediate Tennis
- PHED 1610 Advanced Tennis

#### Section B

- PHED 1500 Beginning Golf
- PHED 1510 Intermediate Golf

#### Section C

- PHED 1440 Intermediate Badminton
- PHED 1470 Beginning Badminton

### Group II

### Section A

- PHED 1210 Weight Training
- PHED 1211 Intermediate Weight Lifting

#### Section B

- PHED 1010 Beginning Swimming
- PHED 1030 Intermediate Swimming
- PHED 1120 Swim Conditioning

### Section C

- PHED 1200 Conditioning Exercises
- PHED 1220 Jogging
- PHED 1230 Aerobic Dance
- PHED 1250 Pilates
- PHED 1260 Yoga
- PHED 1760 Ultimate Frisbee

### Minor, 18 hours

Minimum of 18 hours from area other than Kinesiology, 6 of which must be advanced.

# Admission to Teacher Education (2.75 GPA);

- Junior standing (minimum of 60 earned hours)
- 2.75 overall GPA and 2.75 UNT GPA
- Acceptable scores on SAT, ACT, Praxis
- Approved online interview questionnaire
- An official degree audit with certification
- A signed application for admission to Teacher Education

Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or go to www.unt.edu/sao for additional information.

### Required Courses, 35 hours

- KINE 2550 Skill Competency for Physical Education Candidates
- KINE 3020 Movement for Individuals with Disabilities
- KINE 3500 Motor Development

### Once admitted to Teacher Education (2.75 GPA)

- HDFS 3423 Family, School and Community
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- KINE 3550 Pedagogical Skills, Strategies and Management in Physical Education and Movement for Children
- KINE 3560 Pedagogical Skills, Strategies and Management in Secondary Physical Education
- KINE 4100 Curriculum and Methods in Kinesiology (Sport Pedagogy)
- KINE 4101 Early Field Experience Kinesiology Certification

#### After all other courses are completed:

- KINE 4102 Student Teaching in Physical Education, Grades FC-5
- KINE 4104 Student Teaching in Physical Education, Grades 6–12

### Additional program requirements

- A minimum grade of C is required in each course in the major; a minimum GPA of 2.75 in the major, a 2.75 in UNT courses, and overall is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)
- 12 hours of KINE must be taken at UNT.
- 36 hours must be advanced; 24 of which must be taken at UNT.
- 6 hours minimum of minor must be advanced.

Major courses are theory core courses, KINE 3080, KINE 2030, KINE 2050, and general interest area courses.

Total number of hours may be reduced if student follows recommendations for courses listed university core. (Consult the Student Advising Office, Matthews Hall, Room 105, for details.)

\*KINE 3090 is only counted once toward the degree.

Students are encouraged to see their academic or faculty advisor each term/semester for help with program decisions and enrollment.

### Teacher education

### Additional requirements:

Prior to student teaching, students must provide verification of current certifications in First Aid, CPR and Bloodborne Pathogens training. The certifications must be maintained through the duration of student teaching.

Student teaching (KINE 4102 and KINE 4104).

The student may not receive credit for education courses until after admission to teacher education.

KINE 4102 will serve as a capstone for all-level teacher certification students.

Spring	Fall	Spring	Fall
Complete online admission interview, if successful the student must apply for admission this semester or complete an interview again the next semester			KINE 4100
Complete admission application to teacher education once the student has a successful interview	Back-up application for admission to teacher education	Apply for Early Field Experience	Early Field Experience

#### Completion

To receive final approval for teacher certification:

- Completion of all requirements of an approved 122-hour degree plan.
- Grades of C or better for each kinesiology and each PHED course
- Minimum 2.75 GPA in each of the following areas: each teaching field, all education courses, all UNT work, overall.
- Successful completion of student teaching (see Eligibility for teacher certification requirements listed under the Department of Teacher Education and Administration in this catalog for details).
- Successful scores on appropriate sections of the Texas Examinations of Educator Standards (TEXES).

Students should visit the Student Advising Office in Matthews Hall, Room 105, for additional information regarding degree audits. Questions about student teaching should be addressed to the Clinical Practice Office in Matthews Hall, Room 207. Questions regarding the

TEXES exam should be addressed to the TEXES Advising Office in Matthews Hall, Room 103 (940-369-8601).

Students are encouraged to see their academic or faculty advisor each term/semester for help with program decisions and enrollment.

## Kinesiology, BS (Fitness Leadership Track)

# Hours required and general/college requirements

A minimum of 120 semester hours (127 semester hours for those seeking all-level teacher certification), of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "General university requirements" in the Academics section of this catalog and the College of Education requirements.

### All Kinesiology majors

#### Tier 1

- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- KINE 2030 Introduction to Kinesiology
- KINE 2050 Sociology of Sport
- MATH 1680 Elementary Probability and Statistics
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

#### Tier 2

To move into Tier 2 you must have completed the courses in Tier 1 and have a 2.5 overall GPA or higher. A minimum grade of C is required in MATH 1680, BIOL 2301/BIOL 2312, KINE 2030, KINE 2050, KINE 3080, KINE 3090 and PHED 1000 prior to a Kinesiology major being allowed to take any additional Kinesiology courses

- KINE 3080 Physiological Bases of Exercise and Sport (has prerequisite of BIOL 2301/2311 and BIOL 2302/2312)
- KINE 3090 Motor Behavior \*

### Additional course requirements

• HLTH 2200 - Family Life and Human Sexuality

#### Other requirements

The student must have a 2.5 overall GPA or higher to take any additional Kinesiology courses. A Kinesiology course may be repeated one time in order to improve a grade to the requirement of a C or better. Following the second attempt, approval for a third attempt must be sought from the Program Coordinator or Department.

### Kinesiology theory core, 15

All Kinesiology majors take the following courses and must meet all prerequisites.

- KINE 2010 Fundamentals of Strength and Conditioning
- KINE 3050 Biomechanics
- KINE 3090 Motor Behavior \*
- KINE 4000 Psychology of Sport
- KINE 4050 Quantitative Analysis in Kinesiology (major capstone course)

### Required courses, 36

- HLTH 4300 Health Promotion in the Corporate Setting
- HLTH 4430 Planning, Administration and Evaluation of Health Programs
- HLTH 4600 Behavioral Change Strategies in Health Promotion
- KINE 3030 Fundamentals of Sport Nutrition
- KINE 4300 Exercise Leadership
- KINE 4320 Exercise Testing and Prescription
- KINE 4325 Fitness Testing
- KINE 4330 Advanced Sport Nutrition and Metabolism
- KINE 3400 Administrative Theory and Practice in Athletic and Sport Regulatory Organizations
- RESM 4050 Management of Recreation, Event, and Sport Organizations
- RESM 4080 Legal Aspects of Recreation, Event, and Sport Organizations
- RESM 4180 Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas
- RESM 4190 Finance and Economics in Recreation, Event, and Sport Organizations

### Track specific electives, 6 hours

- HLTH 2150 Health and Personal Safety
- HLTH 3300 Health Emergencies and First Aid
- KINE 3020 Movement for Individuals with Disabilities
- KINE 4310 Advanced Strength and Conditioning
- KINE 4860 Internship in Kinesiology
- RESM 4070 Staffing Perspectives in Recreation, Event and Sport Organization

### UNT electives, 10 hours

### Additional program requirements

- A minimum grade of C is required in each course in the major; a minimum GPA of 2.75 in the major, 2.0 in UNT courses, and overall is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)
- 12 hours of KINE must be taken at UNT.
- 36 hours must be advanced; 24 of which must be taken at UNT.
- 6 hours minimum of minor must be advanced.

Major courses are theory core courses, KINE 3080, KINE 2030, KINE 2050, and general interest area courses.

\*KINE 3090 is only counted once toward the degree.

Total number of hours may be reduced if student follows recommendations for courses listed in university core. (Consult the Student Advising Office, Matthews Hall, Room 105, for details.)

Students are encouraged to see their academic or faculty advisor each term/semester for help with program decisions and enrollment.

### Kinesiology, BS (General track)

A Bachelor of Science with a major in kinesiology shows that you are committed to best practices within the field of human movement and wellness. By choosing the general track, you have a wide latitude for choice of studies within your major.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in kinesiology (general track).

# Hours required and general/college requirements

A minimum of 120 semester hours (122 semester hours for those seeking all-level teacher certification), of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in "General university requirements" in the Academics section of this catalog and the College of Education requirements.

### All Kinesiology majors

#### Tier 1

- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- KINE 2030 Introduction to Kinesiology
- KINE 2050 Sociology of Sport
- MATH 1680 Elementary Probability and Statistics
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

#### Tier 2

To move into Tier 2 you must have completed the courses in Tier 1 and have a 2.5 overall GPA or higher. A minimum grade of C is required in MATH 1680, BIOL 2301/BIOL 2312, KINE 2030, KINE 2050, KINE 3080, KINE 3090 and PHED 1000 prior to a Kinesiology major being allowed to take any additional Kinesiology courses.

- KINE 3080 Physiological Bases of Exercise and Sport (has prerequisite of BIOL 2301/2311 & BIOL 2302/2312)
- KINE 3090 Motor Behavior \*

#### Additional course requirements

HLTH 2200 - Family Life and Human Sexuality

#### Other requirements

The student must have a 2.5 overall GPA or higher to take any additional Kinesiology courses. A Kinesiology course may be repeated one time in order to improve a grade to the requirement of a C or better. Following the second attempt, approval for a third attempt must be sought from the Program Coordinator or Department.

### Kinesiology theory core, 15 hours

- KINE 2010 Fundamentals of Strength and Conditioning
- KINE 3050 Biomechanics
- KINE 3090 Motor Behavior \*
- KINE 4000 Psychology of Sport
- KINE 4050 Quantitative Analysis in Kinesiology (major capstone course)

### General interest area, 15 hours

Students select 15 hours from the following kinesiology courses:

- HLTH 2150 Health and Personal Safety
- KINE 2240 Coaching Soccer
- KINE 3250 Coaching Individual Sports
- KINE 3260 Coaching Youth Sport
- KINE 3030 Fundamentals of Sport Nutrition
- KINE 3400 Administrative Theory and Practice in Athletic and Sport Regulatory Organizations
- KINE 3500 Motor Development
- KINE 3540 Learning and Teaching in Physical Activity
- KINE 3550 Pedagogical Skills, Strategies and Management in Physical Education and Movement for Children
- KINE 3560 Pedagogical Skills, Strategies and Management in Secondary Physical Education
- KINE 4300 Exercise Leadership
- KINE 4320 Exercise Testing and Prescription
- KINE 4325 Fitness Testing
- KINE 4410 Facilities, Equipment and Budget for Athletics
- KINE 4800 Studies in Kinesiology
- KINE 4860 Internship in Kinesiology

### Minor, 18 hours

Minimum of 18 hours from area other than Kinesiology, 6 of which must be advanced.

### Additional program requirements

- A minimum grade of C is required in each course in the major, a minimum GPA of 2.75 in the major, a 2.0 in UNT courses, and overall is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)
- 12 hours of KINE must be taken at UNT.
- 36 hours must be advanced; 24 of which must be taken at UNT.
- 6 hours minimum of minor must be advanced.

Major courses are theory core courses, KINE 2030, KINE 2050, KINE 3080 and general interest area courses.

Total number of hours may be reduced if student follows recommendations for courses listed in university core. (Consult the Student Advising Office, Matthews Hall, Room 105, for details.)

\*KINE 3090 is only counted once toward the degree.

Students are encouraged to see their academic or faculty advisor each term/semester for help with program decisions and enrollment.

# Kinesiology, BS (Pre-PT/Allied Health Track)

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

### All Kinesiology majors

#### Tier 1

- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- KINE 2030 Introduction to Kinesiology
- KINE 2050 Sociology of Sport
- MATH 1680 Elementary Probability and Statistics
- PHED 1000 Scientific Principles and Practices of Health-Related Fitness

#### Tier 2

To move into Tier 2 you must have completed the courses in Tier 1 and have a 2.5 overall GPA or higher. A minimum grade of C is required in MATH 1680, BIOL 2301/BIOL 2312, KINE 2030, KINE 2050, KINE 3080, KINE 3090 and PHED 1000 prior to a Kinesiology major being allowed to take any additional Kinesiology courses.

- KINE 3080 Physiological Bases of Exercise and Sport (has prerequisite of BIOL 2301/2311 and BIOL 2302/2312)
- KINE 3090 Motor Behavior \*

### Additional course requirements

• HLTH 2200 - Family Life and Human Sexuality

### Other requirements

The student must have a 2.5 overall GPA or higher to take any additional Kinesiology courses. A Kinesiology course may be repeated one time in order to improve a grade to the requirement of a C or better. Following the second attempt, approval for a third attempt must be sought from the Program Coordinator or Department.

### Major requirements

### Kinesiology theory Core, 15

All Kinesiology majors take the following courses and must meet all prerequisites.

- KINE 2010 Fundamentals of Strength and Conditioning
- KINE 3050 Biomechanics
- KINE 3090 Motor Behavior \*
- KINE 4000 Psychology of Sport
- KINE 4050 Quantitative Analysis in Kinesiology (major capstone course)

### Required courses, 51 hours

### Kinesiology courses, 18 hours

- KINE 3500 Motor Development
- KINE 4200 Basic Athletic Training
- KINE 4300 Exercise Leadership
- KINE 4325 Fitness Testing
- Upper-level KINE electives, 6 hours

#### Health promotion courses, 3 hours

 HLTH 4600 - Behavioral Change Strategies in Health Promotion

### Chemistry, 8 hours

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

### Physics, 8 hours

- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II

### Psychology, 6 hours

- PSYC 1630 General Psychology I
- PSYC 1650 Biological Psychology
- PSYC 3620 Developmental Psychology

### Biology, 8 hours

- BIOL 1710 Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II
- BIOL 1760 Biology for Science Majors Laboratory
- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II and
- BIOL 2312 Human Anatomy and Physiology II Laboratory

### **UNT Electives, 3 hours**

- BIOL 3500 Medical Terminology
- HLTH 3300 Health Emergencies and First Aid
- KINE 3020 Movement for Individuals with Disabilities
- KINE 3030 Fundamentals of Sport Nutrition
- KINE 4310 Advanced Strength and Conditioning
- KINE 4325 Fitness Testing
- KINE 4330 Advanced Sport Nutrition and Metabolism
- KINE 4860 Internship in Kinesiology
- PSYC 4300 Psychosocial Issues in HIV/AIDS

#### Minor

None required.

### **Electives**

See degree plan.

KINE 4860 - Internship may be taken as an elective. Prerequisites for KINE 4860 are a minimum of 3.25 GPA in the Kinesiology core courses (KINE 2010, KINE 3050, KINE 3090, KINE 4000 and KINE 4050), and consent of department and successful completion of the University core courses.

### Additional program requirements

- A minimum grade of C is required in each course in the major; a minimum GPA of 2.75 in the major, 2.75 in UNT courses, and overall is required for graduation. (Overall GPA includes all course work transferred plus that taken at UNT.)
- 12 hours of KINE must be taken at UNT.
- 36 hours must be advanced; 24 of which must be taken at UNT.
- 6 hours minimum of minor must be advanced.

Major courses are theory core courses, KINE 3080, KINE 2030, KINE 2050, and general interest area courses.

Total number of hours may be reduced if student follows recommendations for courses listed in university core. (Consult the Student Advising Office, Matthews Hall, Room 105, for details.)

\*KINE 3090 is only counted once toward the degree.

Students are encouraged to see their academic or faculty advisor each term/semester for help with program decisions and enrollment.

# Recreation, Event and Sport Management, BS

The Recreation, Event, and Sport Management degree is designed as a 2+2 program. Students earning their associate in arts or associate in science degrees from a Texas college will come with 60 semester credit hours that will be applied to their RESM BS degree.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in recreation and leisure studies.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

# Recreation, event and sport management core courses, 30 hours

- RESM 1950 Professional Foundations of Recreation, Event and Sport Professions (must be taken during the furst semester enrolled in the program)
- RESM 2150 Leadership in Recreation, Event, and Sport Organizations
- RESM 3050 Operations and Logistics in Recreation, Event, and Sport Organizations
- RESM 3450 Diversity and Inclusion in Recreation, Event, and Sport Organizations
- RESM 4050 Management of Recreation, Event, and Sport Organizations
- RESM 4080 Legal Aspects of Recreation, Event, and Sport Organizations
- RESM 4160 Assessment and Data Analytics in Recreation, Event, and Sport Organizations
- RESM 4180 Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas
- RESM 4190 Finance and Economics in Recreation, Event, and Sport Organizations
- RESM 4250 Marketing in Sport and Recreation Industries

### RESM capstone/pre-internship, 3 hours

 RESM 4150 - Capstone Experience in Recreation, Event, and Sport Management

### Internship, 12 hours

- Each Recreation, Event, and Sport Management student is required to complete a total of 12 credit hours of internship/ on-site experience (RESM 4100).
- Students must complete a minimum of 480 clock hours to meet this requirement.
- The student must meet several requirements prior to enrollment in this course, including:
  - O Completion of RESM 4150 (Capstone/Pre-Internship) with a "C" or better;
  - A minimum of 2.25 overall GPA; a minimum of 2.50 GPA in all RESM courses with a "C" or better in each RESM course;
  - Verification of 100 hours of paid or voluntary experience in at least two different recreation, sport, park, or leisure service agencies within the past 48 months; and
  - O Departmental permission to enroll in the course.
- The internship is typically a 30 to 40-hours per week affiliation with an approved agency.

### Minor requirements, 18 hours

 Student may choose a pre-defined minor from another discipline.

OR

 Students may choose an interdisciplinary minor by selecting any six courses (18 hours) from outside the RESM program.

## Recreation, event and sport management electives, 15 hours

Student must choose any five courses with the RESM prefix.

The five courses from the electives requirement cannot include the RESM Core, Capstone and/or Internship courses listed above.

### Other requirements

- A minimum grade of C is required in each RESM course, and
- A 2.5 overall GPA is required on all RESM courses.
- A minimum UNT GPA of 2.0 and an overall GPA of 2.0 are required for graduation. Overall GPA includes all course work transferred plus that taken at UNT.

#### Notes

Students are encouraged to see their academic or faculty advisor and the department degree audit advisor each term/semester for help with program decisions and enrollment.

### **Grad Track Options**

# Kinesiology, BS with grad track option leading to Kinesiology, MS

The Department of Kinesiology, Health Promotion and Recreation offers a grad track option for existing UNT undergraduate students majoring in kinesiology. In this grad track option, the student can take a maximum of twelve (12) hours of graduate courses while completing the BS degree. These credits will be counted toward both the BS and MS degrees. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

# Admission requirements and program policies

### Admission requirements

Students must earn a 3.5 or higher GPA on all undergraduate work and have completed 75 hours, including BIOL 2301/BIOL 2311 and BIOL 2302/BIOL 2312, KINE 3050, as well as the pre-theory core in Kinesiology (PHED 1000, KINE 2030 and KINE 2050) with a 3.0 overall in those pre-theory core classes in order to be admitted to this program.

A student who fails to maintain the 3.5 GPA will not be allowed to enroll in the master's level courses.

Students who are applying for the Grad Track Pathway in kinesiology are not required to take the GRE.

Students are required to submit a candidate statement. The candidate statement is an essay in which students describe their interest in enrolling in the Grad Track Pathway in kinesiology. The statement must include reasons for applying to this program, academic goals, career goals, research interests, etc.

Students admitted to a pathway must complete 90 credit hours before taking the courses in the pathway. Students must complete the bachelor's degree within one academic year of their first pathway course in order to have the graduate course credits transferred to their graduate plan of study.

### Program policies

Students' applications to the Grad Track Pathway in kinesiology will be reviewed by the kinesiology undergraduate and graduate program coordinators, and students will be admitted only when approved by both program coordinators.

Students' progress will be monitored by both undergraduate and graduate kinesiology program coordinators (before completing the BS degree) and the graduate program coordinator in kinesiology (after completing the BS degree).

Students will be considered undergraduate students until all undergraduate requirements have been met and the bachelor's degree has been posted to the student's transcript. Students will not be eligible for teaching and research assistantships, or related health insurance, financial aid or graduate awards, until the undergraduate degree is completed.

Undergraduate students who have been accepted to the Grad Track option should complete all bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they start taking graduate courses or enrollment in graduate level course work will be suspended.

Students must enroll in graduate school in the long semester after completing their BS degree and should take the remaining graduate courses in the following year(s) to complete the master's degree.

### Program requirements

The Master of Science 36-hour degree includes a 15-hour core curriculum of courses in kinesiology.

- KINE 5090-Motor Behavior
- KINE 5100-Research Perspectives in Kinesiology, Health Promotion and Recreation
- KINE 5125-Sport and Exercise Psychology
- KINE 5150-Quantitative Procedures in Exercise and Sport Sciences
- KINE 5301-Physiology of Exercise

## 12 hours may be chosen from the following

- KINE 5000-Supervision in Kinesiology
- KINE 5020-Aging and Movement Control
- KINE 5030-Life-span Motor Development

- KINE 5050-Administration and Supervision of Recreation and Sport
- KINE 5060-Areas and Facilities for Recreation and Sport
- KINE 5090-Motor Behavior
- KINE 5100-Research Perspectives in Kinesiology, Health Promotion and Recreation
- KINE 5102-Student Teaching in Kinesiology
- KINE 5125-Sport and Exercise Psychology
- KINE 5135-Exercise and Health Psychology
- KINE 5140-Women, Leisure and Sport
- KINE 5150-Quantitative Procedures in Exercise and Sport Sciences
- KINE 5160-Sports in American Culture
- KINE 5175-Social Psychology of Sport
- KINE 5185-Applied Sport Psychology
- KINE 5205-Sport and Exercise Psychology Research Seminar
- KINE 5210-Administration Issues and Problems in Kinesiology
- KINE 5230-Professional Preparation in Kinesiology
- KINE 5250-Advanced Human Physiology
- KINE 5290-Current Topics in Exercise Physiology
- KINE 5301-Physiology of Exercise
- KINE 5310-Exercise and Fitness for Special Populations
- KINE 5330-Sport Nutrition and Metabolism
- KINE 5340-Biomechanics of Sports Skills
- KINE 5390-Physiological Assessment in the Health Science
- KINE 5400-Clinical Application of Exercise PhysiologyKINE 5410-Sport/Fitness Organization Management
- KINE 5420-Facilities and Equipment in Kinesiology
- KINE 5430-Legal Aspects of Kinesiology
- KINE 5450-Implementing Health/Fitness Programs
- KINE 5470-Special Topics in Health Fitness
- KINE 5700-Curriculum and Methods in Kinesiology and Health Promotion
- KINE 5800-Studies in Kinesiology
- KINE 5850-Sport and Exercise Psychology Practicum
- KINE 5860-Practicum, Field Problem or Internship
- KINE 5940-Current Topics in Kinesiology
- KINE 6190-Neuromuscular Physiology of Exercise
- KINE 6200-Cardiovascular Physiology of Exercise

#### Additional requirements

For the remainder of the bachelor's degree requirements, please see the appropriate kinesiology degree on the Department of Kinesiology, Health Promotion and Recreation page.

For the remainder of the graduate degree requirements, a student will take 21 hours of additional course work that allows for the development of an interest area such as exercise physiology, sport and exercise psychology, or sport pedagogy. Four graduate courses listed below may be applied toward the student's undergraduate degree as part of the Grad Track Pathway.

### **Minors**

### **Health Promotion minor**

Students who wish to minor in health promotion must take a minimum of 18 credit hours in health courses, including 12 hours at the advanced level. A minimum grade of C is required in each course in the minor.

### **Kinesiology minor**

The requirements for a minor in kinesiology are 21 hours.

### 15 hours selected from

\*Course has prerequisite

- KINE 2000 History and Philosophy of Sport and Physical Activity in the United States (course not being offered)
- KINE 2030 Introduction to Kinesiology
- KINE 2050 Sociology of Sport
- KINE 3020 Movement for Individuals with Disabilities
- KINE 3050 Biomechanics \*
- KINE 3080 Physiological Bases of Exercise and Sport \*
- KINE 3090 Motor Behavior
- KINE 4000 Psychology of Sport
- KINE 4050 Quantitative Analysis in Kinesiology \*

### Plus 6 additional hours

Selected from any KINE courses.

### Additional requirements

Six hours must be advanced. A minimum grade of C is required in each course in the minor.

### Recreation, Event, and Sport Management Minor (for non-majors)

Students minoring in Recreation, Event, and Sport Management are required to take:

### Major course, 3 hours

 RESM 1950 - Professional Foundations of Recreation, Event and Sport Professions

### Additional Minor Requirements

Student must select 5 courses (15 hours) from the list of courses below:

- RESM 2150 Leadership in Recreation, Event, and Sport Organizations
- RESM 3050 Operations and Logistics in Recreation, Event, and Sport Organizations
- RESM 4050 Management of Recreation, Event, and Sport Organizations
- RESM 4080 Legal Aspects of Recreation, Event, and Sport Organizations
- RESM 4160 Assessment and Data Analytics in Recreation, Event, and Sport Organizations
- RESM 4180 Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas
- RESM 4190 Finance and Economics in Recreation, Event, and Sport Organizations
- RESM 4250 Marketing in Sport and Recreation Industries

### Additional requirements

A minimum grade of C is required in each course in the minor.

### Department of Teacher Education and Administration

Main Office Matthews Hall, Room 206

Mailing address: 1155 Union Circle #310740 Denton, TX 76203-5017 940-565-2920 Fax: 940-565-4952

Web site: www.coe.unt.edu/tea

Curriculum and Instruction Matthews Hall, Room 206 940-565-2920

Early Childhood Education Matthews Hall, Room 206 940-565-2920

Educational Leadership Matthews Hall, Room 206 940-565-2920

Post Baccalaureate Certification Programs Matthews Hall, Room 119 940-369-8411

Language and Literacy Studies Matthews Hall, Room 206 940-565-2920

Bilingual/ESL Certification Programs Matthews Hall, Room 206 940-565-2920

Field Experience (PDS, Clinical Teaching) Matthews Hall, Room 119 940-369-8411

Undergraduate Advising Office Matthews Hall, Room 105 940-565-2736

Misty Sailors, Chair

#### Faculty

The Department of Teacher Education and Administration seeks to improve educational practice through the generation of knowledge and to prepare education professionals who serve all students in an effective, inclusive, and equitable manner. Its focus is on the preparation of highly competent educators, researchers and administrators who employ current theory and research as they fill these important roles. The department also provides service to educational institutions, governmental agencies, and practitioners at all levels.

Programs in Teacher Education are approved by the Texas Education Agency (1701 N. Congress Avenue, Austin, TX 78701 [www.tea.state. tx.us]) and are accredited by the Council for the Accreditation of Teacher Education (CAEP) 1140 19th St NW, Suite 400 Washington, DC 20036 (202) 223-0077 [http://caepnet.org/]

The department offers teacher certification programs for both undergraduate and graduate students. Undergraduates seeking teacher certification in early childhood through grade six (EC–6) should enroll in the Bachelor of Science program with a major in education. Undergraduates seeking certification in all-level or secondary education receive a degree though the major department and add the required courses for teacher certification.

Students who have earned an undergraduate degree from an accredited university may have their undergraduate transcript evaluated to develop a post-baccalaureate certification plan. Post-baccalaureate students must apply for admission and be admitted to the Toulouse School of Graduate Studies prior to enrolling in any classes (see the *Graduate Catalog* for admission requirements).

### Degree/certification plan

The degree/certification plan is the official document outlining the student's course of study. The student is responsible for initiating the degree/certification plan process and should do so as soon as possible after being formally enrolled at the university and prior to the first term/semester in teacher education.

Advising should be sought in the Student Advising Office. The student, with advisement, makes decisions relating to the program of study. The degree/certification plan is subsequently prepared in the College of Education Student Advising Office in Matthews Hall, Room 105. Degree/certification plan processing takes four to six weeks. Students must make an appointment to review completed degree/certification plans in Matthews Hall, Room 105. Any changes in degree/certification plans must be approved by the academic departments and the Department of Teacher Education and Administration office.

#### **Certification options**

The department offers several options leading to educator certification, including:

- EC-6 Core Subjects with Science of Teaching Reading and ESL Supplemental
- EC-6 Core Subjects with Science of Teaching Reading and Bilingual Education Supplemental – Spanish
- EC-6 Core Subjects with Science of Teaching Reading and Special Education EC-12

### **Scholarships**

The University of North Texas is committed to excellence in all academic programs. In keeping with this commitment the university offers a variety of scholarships and awards to continuing students and to exceptional entering freshmen and transfer students. The university has two categories of competitive academic scholarships: general and departmental. Information on general scholarships may be obtained from Student Financial Aid and Scholarships.

Departmental scholarships are listed on the department's web page.

### Admission, Review and Retention (ARR) Committee

The ARR Committee reviews referrals made by faculty and determines a course of action. The ARR Committee also reviews student appeals and determines an appropriate course of action regarding changes in the student's course of study. Any instructor in the College of Education has the right and responsibility to refer any student to the ARR Committee if that instructor has a concern about a student's academic progress, behavioral characteristics or communication skills that indicates potential problems in school settings.

### **Center for Young Children**

The Center for Young Children (CYC) is an accredited preschool program for young children ages 3 through 5. In addition, it serves as a model, an observation site for undergraduate and graduate students in fields related to young children. Research related to the care and education of young children is conducted by graduate students and faculty members from across the university.

### **Secondary Education**

Secondary Education, in cooperation with other schools and departments, offers a complete curriculum of teacher preparation.

Undergraduate professional development courses in secondary education constitute a minor for bachelor's degree programs in the College of Liberal Arts and Social Sciences, the College of Business or the College of Public Affairs and Community Service. The program of studies offered through Secondary Education meets all current professional development requirements for Texas teacher certification.

Individuals interested in pursuing certification in math or science teaching at the secondary level may wish to pursue a minor through the Teach North Texas program. See "Teach North Texas " in the College of Science section of this catalog.

### **Majors**

### **Education, BS**

Students completing the requirements for the undergraduate degree will receive the Bachelor of Science with a major in Education. The undergraduate program requires a minimum of 120 semester hours.

This degree centers on the professional interests and personal curiosity of students who are studying to be teachers. There are many places in this degree for students to choose courses based on their interests and their goals for their career as teachers. It is the intention of this degree to set beginning teachers/future educators on a lifelong career path of self-selected professional learning.

The last three long semesters of this degree are structured using a block model and must be taken in sequence. Block A signals the entry into the professional development sequence, and students must be admitted to Teacher Education in order to enroll in Block A courses. Students must be in good standing to continue into Block B and C.

Students make decisions about which specialization area they want to work inside; their first course in their specialization is taken prior to Block A.

Block A is the first semester of this three semester sequence; some courses contain required field experiences. Students take two more courses associated with their specialization area in Block A. Block B is the second semester of the sequence and involves two days each week of coursework and two days of field experience working in classrooms at a local school district or community partnering site. In addition, students are expected to attend and participate in regular seminars associated with the field experiences. The final semester, Block C, is the Clinical Teaching semester. Students are expected to participate in14-weeks of full-time student teaching plus attendance at a weekly seminar. As per State regulations, students must participate in an "intensive start of school field experience" in either Block B or C.

All courses in Blocks A, B, and C are organized into cohorts and students must enroll in courses with their associated cohort.

Students seeking certification as a bilingual or special education teacher will not participate in specializations. Rather, specific coursework prepares them for their respective certifications.

NOTE: As of 12/23/2020, UNT discontinued admissions to Grade 4-8 certification programs. All students admitted to 4-8 programs prior to 12/23/2020 will be able to complete their certification program as described in the Catalog under which they were admitted.

#### **Degree requirements**

Students must be admitted to the Teacher Education (TEd) Program before enrolling courses in Blocks A and B and must be admitted to clinical teaching before enrolling in Block C. In addition, students must maintain a 2.75 GPA in various sub-areas of their degree audit (i.e., university core, academic major, and education courses) in order to be eligible for Blocks A, B, and C. Students seeking EC–6 teacher certification must also earn grades of C or above in all required courses on their degree audit. Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or coe.unt.edu/student-advising for details and to apply for admission to the Teacher Education program.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be 3000 or 4000 level courses, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Education requirements.

The department recommends specific courses (best choices) in some categories. Students may elect to take other courses listed under the University Core Curriculum to fulfill these requirements; however, doing so may add hours to the degree.

Students should consult with their advisors to determine how best to meet the core requirements.

Degree requirements include the following:

	EC-6 w/ ESL	EC-6 w/ Bilingual	EC-6 w/ Special Education
Texas Core	42	42	42
Education Core	42	42	42
Specializations/ Certifications	9	12	15
Free electives	9	6	3
Electives outside College of Education	9	(9; must include SPAN 3800)	9
Clinical Teaching (includes 6 hours for student teaching plus EDEE 4890)	9	9	9

### Major requirements

# Early Childhood through Grade Six (EC–6) Core Subjects teacher certification options

Students may prepare for the following certifications:

- (a) Core Subjects EC-6 with Science of Teaching Reading and ESL Supplemental.
- (b) Core Subjects EC-6 with Science of Teaching Reading and Bilingual Education Supplemental - Spanish (Grades EC-12).
- (c) Core Subjects EC-6 with Science of Teaching Reading with EC-12 Special Education.

Students should consult with their advisors to determine the best sequence for taking core courses, prerequisite courses, major courses, and courses in the blocks. Part of this degree is the last three long semesters of the professional development sequence (called Blocks: A, B, and C). Courses in Block A may/not require field experiences at local early childhood education centers, elementary schools, and partnering community organizations. Additionally, the final two long semesters (Blocks B & C) involve full-day internship experiences at local schools.

## Core Subjects EC-6 with Science of Teaching Reading and ESL Supplemental

- EDBE 2050 Understanding and Teaching Multilingual Students
- EDBE 3050 Teaching English as an Additional Language
- EDCI 4010 Classrooms as Communities
- EDEC 1010 Learning With and From Children
- EDEE 1010 Teaching as Advocacy for Equity
- EDEE 3330 Teaching Science EC-6
- EDEE 3340 Teaching Social Studies EC-6
- EDEE 4350 Mathematics in Grades EC–8
- EDEE 4890 Practice-Based Research
- EDLE 2010 How Schools Work
- EDRE 3350 Early Language and Literacy Development
- EDRE 4850 Teaching the Tools and Practices of Reading Across the Curriculum EC-6
- EDRE 4860 Teaching the Tools and Practices of Writing across the Curriculum EC-6

- EDSP 4350 Strategies to Support Diverse Learners in General Education
- EPSY 2010 How People Learn
- COUN 2600 Culture-Centered Social and Emotional Learning in the Schools
- LTEC 2600 Digital Tools in Education

### Early Childhood Education Specialization

Children's experiences during their early years are foundational to build their social and emotional well-being and academic learning. Understanding young children's ways of being and knowing is essential to creating environments and nurturing relationships in the classroom that sustain children's cultures. A major focus of this specialization is to re-imagine early childhood education, which involves a re-humanizing processes of education for young children and includes children in the movement for social justice and equity.

The faculty working in this specialization look to a future in which young children are viewed and treated as intellectual and social agents who are knowledge-producers and complex cultural beings. Our goal is to provide early childhood educators with the tools to see children in more expansive ways. These ways of seeing and knowing young children on their own terms can support the critical reconceptualize of pedagogies, practices, and policies that impact the lives and identities of young children, particularly those from communities of Color, considering the intersectionality of race, ethnicity, culture, languages, abilities, gender, and other identity markers. We also examine relationships children have with technology and the natural world around them in order to consider our collective role in ecological justice. This specialization is aligned with the core commitments of the program.

There are three courses required for this specialization:

- EDEC 3613 Childhoods Across Time, Space and Place (taken prior to the start of Block A)
- EDEC 3700 Pedagogies and Practices of Early Childhood (taken during Block A and will serve as the centering course)
- EDEC 3750 Young Children in Schools, Families and Communities (taken during Block A and will include a field component)

#### **Ethnic Studies Specialization**

The goal of this specialization is to prepare future educators to teach about race and ethnicity by focusing on the experiences, histories, and perspectives of people of Color in the United States. Preservice teachers will explore the ways in which race, class, gender, sexuality, immigration status, dis/ability intersect and have been, and continue to be, powerful forces that impact the experiences of people of Color, especially children. The focus will be to prepare educators to create and teach a curriculum that centers the knowledge and experiences of children of Color and work alongside culturally and linguistically diverse children and communities.

This specialization program takes on an interdisciplinary approach with critical theoretical foundations that explores historical and contemporary issues that explore factors that interrogate the relationships between social, historical, cultural, and political contexts that are focused on the lives, experiences, and needs of historically marginalized communities. Through this specialization, educators will develop an understanding of and utilize theoretical frameworks that promote the reconstruction of education that reflects critical race, Black feminist, raciolinguistics, multicultural, Indigenous, and queer theories on education. Through the experiences in this specialization, future educators will see themselves as part of an abolitionist community of co-conspirators who seek to restore humanity back in teaching and learning. This specialization is aligned with the core commitments of the program.

There are three courses required for this specialization:

- EDCI 3400 Decolonizing Language and Literacies in the Classroom (taken prior to the start of Block A)
- EDCI 3600 Critical Ethnic Studies in Education (taken during Block A and serves as the centering course)

 EDCI 3900 - Special Topics in Ethnic Studies (taken during Block A)

### Inclusive Education Specialization

This specialization offers future educators a deep dive into building inclusive education, opportunities, equity and access in partnership with students with dis/abilities and their families. Taking a sociohistorical perspective, students will critically analyze systems of oppression for students with disabilities and build advocacy skills that will help elevate the voice of children and youth with dis/abilities from a strengths-based perspective and with an intersectional and culturally relevant lens. Pragmatic skills include how to navigate special education and school systems, develop inclusive pedagogies, implement evidence-based practices and build accessible communities to revolutionize inclusive education in schools.

The specialization seeks to amplify the voices of students and individuals with dis/abilities, especially those diverse racial/ethnic, cultural, linguistic, and socio-economic communities. The goal of the Inclusive Education specialization is to reimagine, redesign, and implement inclusive education in our schools and communities. This specialization is aligned with the core commitments of the program.

Note: The completion of this specialization is not the same as completing the program for special education certification. Students interested in a special education certification should see their advisor.

There are three courses required for this specialization:

- EDSP 2010 Dis/Ability, Community and Culture (taken prior to the start of Block A)
- EDSP 3210 Educational Aspects of Exceptional Learners (taken during Block A and has a service-learning component)
- EDSP 3410 Developmental Disabilities and Autism: Identification and Intervention (taken during Block A and serves as the centering course)

#### Interdisciplinary Studies in Education

School curriculum and instruction often derives its content and methods from disciplines in the social and physical sciences. In this specialization, students will consider how disciplines exert control over school curriculum, to whose advantage and disadvantage, and the benefits and drawbacks of interdisciplinary, transdisciplinary, and multidisciplinary studies. A definition of interdisciplinary understanding is to "...integrate knowledge and modes of thinking from two or more disciplines (or well established fields of study) in order to create products, raise questions, solve problems, and offer explanations of the world around them in ways that would not have been possible through single disciplinary means" (adapted from Boix Mansilla & Gardner, 1996). The course will examine how knowledge is produced and for whose benefit. The course will consequently center social and educational justice as a lens and outcome. This specialization is aligned with the core commitments of the program.

The aims of the specialization include:

- Demonstrate the ability to be a critical consumer and producer of curriculum, pedagogy, and research;
- Demonstrate how disciplinary, interdisciplinary, transdisciplinary, approaches to schooling might support social and educational equity;
- Demonstrate how interdisciplinary studies might be applied to classroom teaching in K-6 settings;
- Synthesize research on interdisciplinary approaches and their educational and social impact on students and communities; and
- Integrate technology as is appropriate, ethical, and just.

This specialization offers considerable flexibility. There is one required course for this specialization:

 EDEE 3300 - Interdisciplinary Studies in Education (taken during Block A, has a field experience component, and serves as the centering course)  Two other courses are selected by the future educator from the other specializations (Early Childhood; Ethnic Studies; International Studies; Language, Literacy, and Activism; STEAM Education; Inclusive Education; and others as they are available).

#### International Studies in Education Specialization

Rapid changes in technology and human mobility challenge educators to prepare critically aware cosmopolitans: citizens of the world who respect the dignity of all human beings. Students who choose this specialization will consider what it means to become globally competent teachers of empowered, globally aware citizens. Students will investigate the world, recognize perspectives, communicate ideas, and act while exploring education and schooling from an international perspective.

This area includes a broad focus on global issues such as interconnectedness, communication, and cultural exchange, connections between the local and global, cosmopolitan practices, migration patterns and policies affecting migrant populations, and equity in economic development, educational access, and health and well-being.

Emphasizing critical and decolonizing perspectives, supporting coursework will build understanding and enhance knowledge of local-global citizenship; diverse cultures, interculturality, and cultural competence; and educational policies and systems, and teaching practices.

Students enrolled in this specialization are encouraged, but not required, to engage in study abroad and/or other international experiences. Opportunities for in-person and/or virtual exchange will be embedded in coursework. This specialization is aligned with the core commitments of the program.

There are three courses required for this specialization:

- EDCI 3450 Critical Global Perspectives in Education (taken prior to the start of Block A)
- EDCI 3650 Migration and Transnational Students (taken during Block A, involves a service-learning [with field hours] component, and serves as the centering course)
- EDCI 3750 Immigration, Language and Culture (taken during Block A)

### Language, Literacy, and Activism Specialization

Literacy is the curriculum area that receives the most attention in elementary schools. Engaging children/youth in the language arts is essential work for teachers in classrooms and therefore a major focus in quality preparation programs. Language, Literacy and Activism in Teaching is the only specialization option that is directly tied to a required certification examination (i.e., the Science of Teaching Reading) that all preservice teachers must take and pass for certification. The focus on multilingual children in this specialization will also serve as additional preparation in working with children/youth who are emerging bilingual people.

The faculty working in this specialization are particularly focused on working with children/youth, families, and communities that represent diverse racial/ethnic, linguistic, cultural, and economic experiences. Consistent with the core values and commitments in the preparation program, the goal of this specialization is to prepare future teachers to engage in transformative instructional literacy practices that position all children as capable and curious. We emphasize activism as central to the work of teachers who engage children/youth with the world around them as to promote equity, especially for children/youth from families and communities of Color, who and have been historically denied equitable educational opportunities.

There are three courses required for this specialization:

- EDRE 3400 Language and Literacy Practices in Communities (taken prior to the start of Block A and includes a field component)
- EDRE 3600 Engaging Children and Youth with Literature that Represents Diversity (taken during Block A)

 EDRE 3650 - Critical Literacies, New Literacies, and Teacher Inquiry (taken during Block A and serves as the centering course for the specialization)

#### STEAM Education Specialization

This specialization introduces future teachers to the discipline of Science, Technology, Engineering, Arts, and Mathematics (STEAM) as a way of designing integrated learning environments for purposes of equity in education. Future teachers enrolled in these courses will explore innovative venues for STEAM learning and teaching with an emphasis on diversity and equity. Consistent with the core commitments in this preparation program, future teachers will engage in transformative STEAM practices to foster and grow STEAM education in schools. This specialization emphasizes social justice and activism as central to the work of teachers engaging children/ youth with the world around them through STEAM practices that promote equity. Future teachers in this specialization will learn methods of learning and teaching science and math that are equity and asset-based, rigorous, foster children's positive mathematics and science identity development, and transform classrooms into spaces that challenge marginalizing processes and use STEAM practices as a tool to critically examine the world.

There are three courses required for this specialization:

- EDEE 3400 STEAM Education: Commitments to Equity, Diversity and Inclusion (taken prior to the start of Block A and includes a field component)
- EDEE 3600 Teaching with STEAM: Integrated Math (serves as the centering course for the specialization)
- EDEE 3650 Teaching with STEAM: Integrated Sciences (taken during Block A)

### Core Subjects EC-6 with Science of Teaching Reading and Bilingual Education Supplemental - Spanish (Grades EC-12)

- EDBE 2050 Understanding and Teaching Multilingual Students
- EDBE 2060 Latina/o/x Children's and Young Adult Literature for the Elementary Multilingual Classroom
- EDBE 3050 Teaching English as an Additional Language
- EDBE 3060 Biliteracy in Bilingual Classrooms
- EDBE 3600 Dual Language Bilingual Education: Programs, Policy and Practice
- EDBE 3650 Teaching and Learning in the Bilingual Classroom
- EDCI 4010 Classrooms as Communities
- EDEC 1010 Learning With and From Children
- EDEE 1010 Teaching as Advocacy for Equity
- EDEE 3330 Teaching Science EC-6
- EDEE 3340 Teaching Social Studies EC-6
- EDEE 4350 Mathematics in Grades EC-8
- EDEE 4890 Practice-Based Research
- EDLE 2010 How Schools Work
- EDRE 3350 Early Language and Literacy Development
- EDRE 4850 Teaching the Tools and Practices of Reading Across the Curriculum EC-6
- EDRE 4860 Teaching the Tools and Practices of Writing across the Curriculum EC-6
- EDSP 4350 Strategies to Support Diverse Learners in General Education
- EPSY 2010 How People Learn
- COUN 2600 Culture-Centered Social and Emotional Learning in the Schools
- LTEC 2600 Digital Tools in Education

## Core Subjects EC-6 with Science of Teaching Reading with EC-12 Special Education

- EDBE 2050 Understanding and Teaching Multilingual Students
- EDBE 3050 Teaching English as an Additional Language
- EDCI 4010 Classrooms as Communities
- EDEC 1010 Learning With and From Children
- EDEE 1010 Teaching as Advocacy for Equity
- EDEE 3330 Teaching Science EC-6
- EDEE 3340 Teaching Social Studies EC–6
- EDEE 4350 Mathematics in Grades EC-8
- EDEE 4890 Practice-Based Research
- EDLE 2010 How Schools Work
- EDRE 3350 Early Language and Literacy Development
- EDRE 4850 Teaching the Tools and Practices of Reading Across the Curriculum EC-6
- EDRE 4860 Teaching the Tools and Practices of Writing across the Curriculum EC-6
- EDSP 3210 Educational Aspects of Exceptional
  Lagrange
- EDSP 4320 Educational Assessment and Evaluation of Exceptional Learners
- EDSP 4330 Advanced Educational Strategies for Exceptional Learners
- EDSP 4340 Classroom and Behavioral Management Strategies for Exceptional Learners
- EDSP 4350 Strategies to Support Diverse Learners in General Education
- EDSP 4360 Transition Education and Services for Exceptional Learners
- EPSY 2010 How People Learn
- COUN 2600 Culture-Centered Social and Emotional Learning in the Schools
- LTEC 2600 Digital Tools in Education

### Internship (student teaching), 6 hours

Students seeking certification in (a) Core Subjects EC-6 with Science of Teaching Reading and ESL Supplemental or (b) Core Subjects EC-6 with Science of Teaching Reading and Bilingual Education Supplemental - Spanish (Grades EC-12) will enroll in the following courses:

- EDEE 4101 Clinical Teaching
- EDEE 4102 Clinical Teaching

Students seeking certification in Core Subjects EC-6 with Science of Teaching Reading with EC-12 Special Education will enroll in the following courses:

- EDEE 4102 Clinical Teaching
- EDSP 4110 Student Teaching in Special Education

### Minor requirements

There is no minor for this degree.

### Electives Outside the College of Education

Students take 9 hours of electives outside the College of Education. Students should talk to their advisor about which courses work well with their areas of interest, Specialization areas, and/or certification path. SPAN 3080 is required as one of these "outside" courses for students seeking certification as a bilingual teacher.

### Free Choice Electives

Students can take between 3 and 9 hours of free electives. The following applies to the various certifications:

- Students who are seeking EC-6 with ESL certification can take 9 hours of free electives;
- Students who are seeking bilingual certification can take 6 hours of free electives;
- Students who are seeking certification as special education teachers can take 3 hours of electives.

These free electives can come from within the Department of Teacher Education & Administration, the College of Education, or any other college at UNT.

### Other requirements

#### Admission to elementary teacher education

For admission to elementary teacher education, a student must have:

- 1. Completed a minimum of 60 semester hours;
- 2. 2.75 UNT GPA;
- 2.75 overall GPA (includes all transferred and UNT courses);
- appropriate exam scores on either the ACT or SAT, or TSI Complete; (contact the Student Advising Office in Matthews Hall, Room 105, for further information on the exam requirement);

receive a score of "accepted" on the Admissions Interview Ouestionnaire.

Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or https://coe.unt.edu/student-advising for details on the application process. See the College of Education's calendar for application deadlines.

Students seeking EC-6 teacher certification must also earn grades of C or above in all required courses on their degree audit.

### Eligibility for Recommendation for Teacher Certification

In order to be accepted into Clinical Practice, students must,

- Apply to Clinical Practice during Block A but before Block B (see College of Education calendar for application deadlines). Clinical Practice Application periods are posted on the Clinical Practice Office (calendar: https://coe.unt.edu/ educator-preparation-office/clinical);
- Have completed all TX General Core courses with no grade lower than a "C";
- Have at least a 2.75 GPA in the academic major and for overall UNT GPA, with no grade lower than a "C" in the academic major;
- Have at least an average of 2.75 GPA in core, academic major, teaching field courses, and pedagogy (education) courses;
- Have a grade of at least a "C" in all courses required for graduation;
- 6. Except for Block A courses, have all required courses completed (except for those in Blocks B and C);
- Submit a Statement of Qualification Form prior. Forms are available here: https://coe.unt.edu/educator-preparationoffice/clinical. This form must be approved by your academic advisor prior to submission; and
- Have completed a UNT-sponsored TEXES Certification
  Practice Exams for all certification areas relevant
  to the degree plan. Practice exams are scheduled by
  the TEXES Success Office. Information about the practice
  exams is located at https://coe.unt.edu/educator-preparationoffice/texes.

Contact the Educator Preparation Office, Matthews Hall, Room 119; 940-369-8411; or https://coe.unt.edu/educator-preparation-office for additional information.

#### Admission to secondary or all-level teacher education

For admission to secondary or all-level teacher education, a student must have:

- 1. Junior standing (60 credit hours earned);
- 2. 2.75 UNT GPA:
- 2.75 overall GPA (includes all transferred and UNT courses);
- appropriate exam scores on either the ACT, SAT or Praxis Core: Academic Skills for Educators; (contact the Student Advising Office in Matthews Hall, Room 105, for further information on the exam requirement);
- a rating of "accepted" on the online admission interview questionnaire (for all students except all-level art and music);
- active enrollment at UNT and an official degree audit on file in the College of Education Student Advising Office; and
- a completed Application for Admission to Teacher Education submitted to the College of Education Student Advising Office once all requirements are complete.

Students must be admitted to teacher education before enrolling in most education classes. In addition, students must maintain a 2.75 GPA in various sub-areas of their degree audit (i.e., teaching field and education/pedagogy courses) in order to proceed with early field experience and student teaching.

Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or www.coe.unt.edu/sao for additional information.

#### **Eligibility for Recommendation for Teacher Certification**

Teacher certification is granted by the Texas Education Agency (TEA), not UNT. As an approved State of Texas Educator Preparation Program, UNT can only recommend students for certification. Completion of the bachelor's degree and the required education courses does not necessarily result in certification by TEA. In order to be recommended for teacher certification through the University of North Texas, students must have:

- Successfully completed an approved teacher education program for the preparation of early childhood, secondary or all-level teachers;
- Successfully completed clinical teaching, including attendance at required seminars; and
- Passed the TEXES EC-12 Pedagogy and Professional Responsibilities (PPR) and all required content and supplemental certification exams of the Texas Examinations of Educator Standards (TEXES), as applicable.

Access to register for Texas teacher certification exams (TEXES) is only granted to students who have been formally admitted to the Teacher Education program at UNT. Teacher candidates (who have been admitted to TEd) must take UNT-sponsored TEXES practice exams prior to the start of Block B courses. Practice exams are free of charge

The TEXES Practice exams are offered four times in each long semester and twice during the summer.

Contact the TEXES Success Office In Matthews Hall 119 at 940-369-8601 or COE\_TSO@unt.edu for information about registering for your practice TEXES Exams, TEAL account setup, and for information and study resources for your actual certification exams.

#### **Minors**

# Secondary and All-level (EC-12) Education Teacher Certification minor (for BA, BS)

Teacher certification is granted by the Texas State Board for Educator Certification (SBEC). UNT is authorized to recommend secondary and all-level teacher certification for students who successfully fulfill all state and program requirements for the chosen teaching certificate in the following content areas:

- Secondary Content Areas: chemistry; dance; English language arts and reading; family and consumer sciences; history; hospitality, nutrition and food sciences; human development and family studies; journalism; life science; mathematics; physical sciences; physics/mathematics; science; social studies; and speech.
- All-Level (EC-12) Content Areas: art, French, German, music, physical education, Spanish and theatre.

Although teacher certification programs share many commonalities, course and program requirements will vary by chosen content area. Standards for teaching certificates are continually reviewed by the SBEC, meaning that requirements can and do change. Therefore, it is impractical to list certification requirements for individual content areas in this catalog. Consult your advisor for specific requirements.

### **Degree requirements**

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 hours must be advanced, and fulfillment of degree requirements for the Bachelor of Arts or Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and all College of Education requirements. Students seeking teacher certification in secondary or all-level education must also meet all degree requirements of the college responsible for awarding the degree for their selected major.

### Major requirements

See your degree program advisor for an individual degree audit.

### Other course requirements

See individual degree audit.

### Minor requirements

### Pedagogy, 12 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4070 Teaching Diverse Populations
- EDCI 4840 Instructional Strategies and Classroom Management

### Reading/English language arts, 3 hours

• EDCI 4060 - Content Area Reading

### Internship (student teaching), 6 hours

See "Student Teaching" in the College of Education general information section of this catalog.

- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School

### **Electives**

See your degree program advisor for an individual degree audit.

### Other requirements

- Admission to the Teacher Education (TEd) Program. You must be accepted to the Teacher Education Program prior to enrolling in the first education course. To be eligible for admission, students must have:
  - Completed a minimum of 60 semester hours, including the University Core Curriculum.
     (See "General University Requirements" in the Academics section of this catalog.) Programs in teacher education require specific courses contained in parts of the University Core Curriculum to satisfy particular degree requirements. Students should consult program advisors for best choices in the core;
  - A 2.75 UNT GPA;
  - A 2.75 overall GPA (includes all courses transferred to UNT, plus all courses taken at UNT);
  - Appropriate exam scores on either the ACT, SAT or Praxis Core: Academic Skills for Educators; (contact the Student Advising Office in Matthews Hall, Room 105, for further information on the exam requirement); and
  - Formally applied and been admitted to Teacher Education through the College of Education Student Advising Office in Matthews Hall, Room 105.
     Contact the College of Education Student Advising Office, 940-565-2736; Matthews Hall, Room 105; or https://coe.unt.edu/student-advising for details and to apply for admission to the Teacher Education..

#### b. Eligibility for Teacher Certification and

Recommendation: Teacher certification is granted by the State Board for Educator Certification. Completion of the bachelor's degree and the required education courses does not necessarily result in certification by the agency. In order to be recommended for teacher certification through the University of North Texas, students must have:

- Successfully completed an approved teacher education program for the preparation of early childhood, elementary, middle grades, secondary or all-level teachers:
- Successfully completed student teaching, including attendance at appropriate seminars;
- Passed the TEXES Pedagogy and Professional Responsibilities (PPR) and all required content tests of the Texas Examinations of Educator Standards (TEXES), as applicable.
- Eligibility to test: Access to register for Texas teacher certification exams (TExES) is granted to students who have been formally admitted to the Teacher Education program at UNT. Some content areas require that students take their content practice exam as part of a course requirement, or prerequisite for Early Field Experience. Only students who have been admitted to the Teacher Education program may sit for the practice exam.

The TEXES Practice exams are offered four times in each long semester and twice during the summer. Students should visit with the TEXES Success Office in Matthews Hall, Room 119, for further information about their required exams (940-369-8601).

### **College of Engineering**

Dean's Office Discovery Park, Room A140

Mailing address: 1155 Union Circle #310440 Denton, TX 76203-5017 940-565-4300

Undergraduate Academic Advising Discovery Park, Room A101 940-565-4201

Web site: engineering.unt.edu

#### Hanchen Huang, Dean

Nandika Anne D'Souza, Associate Dean Yan Huang, Associate Dean

Engineering is the application of science and mathematics to the solution of relevant societal needs and problems. The current standard of living is due in large part to efforts of engineers and technologists. Technological development has created a demand for qualified engineers and technologists who maintain the momentum of innovation and who extend and direct its course. The expanding population, with its increased demand for goods and services, has imposed challenges to provide a diversity of new and better products with minimized adverse side effects. Engineers and technologists recognize that long-term solutions are found in careful, thorough planning and study.

The University of North Texas College of Engineering strives to educate and train engineers and technologists who have the vision to recognize and solve the problems of society. The College of Engineering comprises six degree-granting departments of instruction and research. The Department of Biomedical Engineering, the Department of Computer Science and Engineering, the Department of Electrical Engineering, the Department of Engineering Technology, the Department of Materials Science and Engineering, and the Department of Mechanical and Energy Engineering offer programs of study and research leading to bachelor's, master's and doctoral degrees; some offer programs in one or more majors. Undergraduate programs include biomedical engineering, computer engineering, computer science, construction engineering technology, electrical engineering, information technology, materials science and engineering, mechanical and energy engineering, and mechanical engineering technology.

### Mission

The mission of the UNT College of Engineering is to capitalize on the opportunity for innovation and excellence in teaching, research and service. This will be achieved by a strategic alliance among all of the college's constituencies in the region, the state of Texas and the nation. The constituencies involved include foremost our undergraduate and graduate students as well as academic units and industry, particularly in North Texas, so as to foster economic development and promote an academically diverse environment.

#### Vision

The vision of the College of Engineering is to have the highest quality and most innovative teaching and research programs in North Texas and beyond:

- in strategically selected areas of engineering and computer science that service the community, industry, and the profession;
- in an intellectually stimulating and diverse environment; and
- in support of industry and economic development.

## College of Engineering admissions requirements

Admission to the College of Engineering is contingent on clear admission to the university. The College has 5 departments of Engineering and 1 department of Engineering Technology.

Applicants will be admitted to the College of Engineering in an Engineering program if they meet the requirements below:

#### Freshman Applicants

- they were in the top 25% of their graduating class and have a math SAT score of 590 or better and a total SAT score of 1140 or better; or a math ACT score of 23 or better and a cumulative ACT score of 23 or better.
- they were in the top 50% of their graduating class or have no graduating class ranking (home schooled, GED, international students, etc.) and have a math SAT score of 620 or better and a total SAT score of 1170 or better; or a math ACT score of 24 or better and a cumulative ACT score of 24 or better.
- they were below 50% in their graduating class and have a math SAT score of 650 or better and a total SAT score of 1250 or better; or a math ACT score of 26 or better and a cumulative ACT score of 26 or better.
- Freshman applicants to Engineering Technology programs must have a math SAT score of 570 or better, or a math ACT score of 22 or better.

#### Transfer, international and post-baccalaureate applicants

 Transfer, international and post-baccalaureate (second bachelor's degree) applicants must be eligible to enroll in MATH 1710 (Calculus I) or in a higher-level math class and have a grade point average of 2.0 or greater in all prior math, science, and engineering coursework.

### Admission for Pre-Engineering and students changing major to an engineering program within UNT:

- Students not meeting the admission requirements for the major or applying to change their major into a degree in the College of Engineering will be supported through enrollment as a pre-major in their corresponding program.
- Students classified as pre-majors will be reclassified into their respective major with the COllege of Engineering upon completing the corresonding course listed below with a C or higher and a student in good standing

Pre-major	Course to be completed with a C or higher
Pre-Computer Science	CSCE 1030
Pre-Information Technology	CSCE 1030
Pre-Computer Engineering	CSCE 1030
Pre-Electrical Engineering	MATH 1710
Pre-Mechanical and Energy Engineering	MATH 1710
Pre-Biomedical Engineering	MATH 1710
Pre-Materials Science and Engineering	MATH 1710
Pre-Mechanical Engineering Technology	MATH 1710
Pre-Construction Engineering Technology	MATH 1710

While enrolled in the pre-major, a student must be continuously enrolled each semester in a MATH course approved by an engineering advisor. A student will have 4 long semesters once enrolled in the pre-major to meet the requirements to be admitted to the major.

Enrollment in mathematics classes for entering freshmen will be determined in accordance with criteria established by the Department of Mathematics. The UNT mathematics department web site lists links to preparation tests for the UNT math placement exam (www. math.unt.edu/academics/mathematics-placement).

### Degree audit

A degree audit is an official document of the university that lists all the courses needed to complete a chosen degree and shows how all of the courses completed are applied toward the degree. Students should file for a degree audit by making an appointment with the faculty advisor in the major department.

- All students must request an official degree audit through the departmental faculty advisor upon successful completion of the Departmental Foundation requirements.
- Students who have not filed a degree audit will be blocked from enrolling in upper-division major courses.

Students should take a complete evaluated transcript of all college work to their faculty advisors for conferences to fill out degree audit request forms. After the degree audit request forms have been signed, the department should send all materials to the College of Engineering Undergraduate Academic Advising Office, where official degree audits will be prepared. Graduation checks should be requested during the term/semester before graduation.

### **Academic advising**

Information about academic matters is available from various sources within the College of Engineering. Undergraduate academic advising is available through the Dean's Office and in the major departments. Advisors assist students in the selection of courses and answer questions about selecting a major, degree audits, application of transfer credit, general academic requirements, and policies and procedures.

While college faculty and staff members give students academic advice and assistance, each student is expected to take responsibility for his or her education and personal development. The student must know and abide by the academic and disciplinary policies given in the undergraduate catalog, including rules governing quantity of work, the standard of work required to continue in the university, academic probation and dismissal, and enforced withdrawal. The student must also know and meet the requirements of his or her degree program, including the university's core, and the College of Engineering foundation requirements; must enroll in courses appropriate to the program; must meet prerequisites and take courses in the proper sequence to ensure orderly and timely progress; and must seek advice from college advisors or faculty advisors in the major about degree requirements and other college and university policies when necessary. The student must also know and adhere to all college and university deadlines.

All students are expected to be familiar with the following sources of information. Students will not be relieved of their responsibility to know the policies, deadlines and business practices of the university on the grounds that they were not told. If students have questions regarding these materials, it is the university's expectation that the student will consult his/her academic advisor for guidance and resolution

### Policy on Academic Performance and Dismissal in the College of Engineering

- Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).
- A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog.
- Additional requirements for academic performance are found under the program the student is enrolled in.

NOTE: Students placed on academic suspension for a second time are eligible to apply for readmission to the College of Engineering after having not attended UNT for the prescribed period of time as outlined in "Regulations governing students under academic suspension" in the Academics section of this catalog. A student must petition the dean of the College of Engineering for reinstatement. If

the petition for reinstatement is disapproved, a student may not file another petition until the following term. The decision of the office of the dean is final. A student who receives a third suspension will be dismissed indefinitely from the university, but will be dismissed permanently from the College of Engineering.

### **Programs of Study**

The college offers the following undergraduate degrees:

- Bachelor of Science with majors in biomedical engineering, computer science, computer engineering, electrical engineering, materials science and engineering, and mechanical and energy engineering;
- Bachelor of Science in Engineering Technology with majors in construction engineering technology, electrical engineering technology, and mechanical engineering technology; and
- Bachelor of Arts, with a major in information technology.

A concentration in manufacturing engineering technology is available under the major in mechanical engineering technology.

#### **Grad Track Programs**

The College of Engineering offers Grad Track options to enable eligible undergraduate students to earn graduate credit hours that are applied towards both the undergraduate and graduate degree plans.

To be eligible, students should be eligible to enroll in the capstone design course in the following semester, have a UNT GPA of 3.5 or higher and want to complete a Master's or PhD that is a) housed in the department from which they are completing their bachelor's degree, and b) within the same discipline as their bachelor's degree.

Two options for the program are offered

- The Grad Track leading to Master's degree allows you to earn 9 hours of graduate credit while you are enrolled as an undergraduate student. These 9 credits are also applied to your Master's degree plan once you are admitted to the graduate program.
- The Grad Track Leading to PhD degree allows you to earn 12 hours of graduate credit while you are enrolled as an undergraduate student. These 12 credits are also applied to your PhD degree plan once you are admitted to the graduate program.

### Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree requirements and core requirements should consult an academic advisor.

#### **Bachelor of Science degree requirements**

Candidates for the Bachelor of Science degree must satisfy all general requirements for the bachelor's degree listed in the Academics section of this catalog, and all engineering degree requirements as listed below.

- Hours required for the degree: Completion of a minimum of 120–128 total semester hours; 36-45 must be advanced, depending on the major.
- General university requirements: See "University Core Curriculum" in the Academics section of this catalog.
- Major requirements: A major of at least 24 semester hours;
   hours of advanced work in the major must be completed at UNT. Only grades of A, B and C in major courses are accepted. See specific degree audit for exact requirements.
- 4. Minor (optional): A minor is at least 18 hours, of which a minimum of 6 hours must be advanced, from a field outside the major. Minors are chosen with faculty advisors for selected majors. For some majors the minor is specified,

- but for most majors a minor field is optional. Consult major requirements.
- 5. Electives: See specific degree audit for exact requirements.
- 6. Other course requirements: Only grades of A, B and C in other required courses are accepted. Examples of other required courses include, but are not limited to, supporting area courses, technical elective courses, technical option courses, math and science courses, and specialization courses. See specific degree audit for exact requirements.

### **Bachelor of Arts degree requirements**

Candidates for the Bachelor of Arts degree must satisfy all general requirements for the bachelor's degree listed in the Academics section of this catalog, and all engineering degree requirements as listed below.

- Hours required for the degree: Completion of a minimum of 121 semester hours; 42 must be advanced.
- General university requirements: See "University Core Curriculum" in the Academics section of this catalog.
- Major requirements: A major of at least 30 semester hours;
   12 hours of advanced work in the major must be completed at UNT. Only grades of A, B and C in major courses are accepted. See specific degree audit for exact requirements.
- 4. Minor (optional): A minor is at least 18 hours, of which a minimum of 6 hours must be advanced, from a field outside the major. Minors are chosen with faculty advisors for selected majors. For some majors the minor is specified, but for most majors a minor field is optional. Consult major requirements.
- 5. Electives: See specific degree audit for exact requirements.
- 6. Other course requirements: Only grades of A, B and C in other required courses are accepted. Examples of other required courses include, but are not limited to, supporting area courses, technical elective courses, technical option courses, math and science courses, and specialization courses. See specific degree audit for exact requirements.

# Undergraduate Academic Certificates Additive and Digital Manufacturing certificate

Additive and digital manufacturing is an area that combines computer aided design, structural analysis, materials selection and performance, manufacturing, lean manufacturing and technical communication. The certificate enables students to complete courses and complete a project report. The Certificate will be administered by the college of engineering and is open to all majors on campus.

### Course requirements, 12 hours

### Manufacturing, 9 hours

Students complete 3 courses from the following:

- DSCI 2710 Data Analysis with Spreadsheets
- ENGR 1304 Engineering Graphics
- ENGR 3450 Engineering Materials
- MEEN 3100 Manufacturing Processes
- MEEN 4800 Topics in Mechanical and Energy Engineering (when topic is "CAD/CAE")
- MEET 3550 Geometrical Dimensioning and Tolerancing
- MEET 3750 Digital Manufacturing
- MEET 4100 Fundamentals of Product and Process Design Development
- MTSE 3000 Fundamentals of Materials Science and Engineering - I
- MTSE 4040 Computational Materials Science

- MTSE 4060 Materials Selection and Performance
- MTSE 4900 Special Topics in Materials Science and Engineering (when topic is "Additive Manufacturing: Processes and Materials")
- OPSM 3830 Operations Management
- OPSM 4850 Lean Manufacturing

### Communication, 3 hours

• TECM 2700 - Technical Writing

### Report

Students must register for a zero credit course and complete a 5000 character report that includes a product that can be additively manufactured. The report should have headings with:

- 1. Design of the part using computer aided design
- 2. Structural analysis of mechanical failure
- Sources of materials for the design and basis for their selection
- Lean manufacturing and supply chain considerations for large scale production of the part.

# Department of Biomedical Engineering

Main Departmental Office Discovery Park, Suite B131

Mailing address: 1155 Union Circle #310440 Denton, TX 76203-5017 940-565-3338

Fax: 940-369-8570

Web site: biomedical.engineering.unt.edu

### Vijay Vaidyanathan, Chair

Faculty

#### Mission and vision

The mission of the department of Biomedical Engineering is to provide a student-centered environment that facilitates a culture of interdisciplinary learning and innovation, while encouraging active participation in scholarly and professional activities to serve the biomedical engineering profession and society, while advancing regional economic development.

The vision of the Department of Biomedical Engineering is to create an innovative, interdisciplinary academic program that emphasizes the fundamentals of biomedical engineering; state-of-the-art applications pertaining to biomedical instrumentation, biomaterials, biotechnology, biomechanics and bioinformatics, and other health care—related areas in an environment of life-long learning and research.

## Program educational objectives for the biomedical engineering program

Graduates of the biomedical engineering program will:

- Successfully practice biomedical engineering to serve healthcare institutions, academia, and industry at regional, state, national and international levels
- Work professionally in one or more of the following areas: biomedical instrumentation, biomechanics, biomaterials, biotechnology, biocomputing and medicine.
- Achieve personal and professional success with commitment to ethical and social responsibility, both as individuals and in team environments.
- Engage in lifelong learning, including entering and succeeding in an advanced degree program in a field such as engineering, science, medicine and business.

#### **Student outcomes**

Upon completion of the Bachelor of Science with a major in biomedical engineering, students are enabled to achieve the following outcomes:

- an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;
- an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors;
- an ability to communicate effectively with a range of audiences;
- an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
- an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;

- an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions; and
- an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

#### Constituencies of the Biomedical Engineering Program

Our program constituencies are:

- students: current, as well as alumni
- faculty, and
- industry (particularly in the North Texas region) represented primarily by our departmental Industrial Advisory Board (IAB) and in general by the College of Engineering Advisory Board (CEAB).

### **Majors**

# Biomedical Engineering, BS Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced courses, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering.

### Major requirements

A minimum of 62 semester hours, including:

### Required courses, 35 hours

- BMEN 1300 Discover Biomedical Engineering
- BMEN 1400 Software for Biomedical Engineers
- BMEN 2210 Biomedical Circuits and Data Acquisition Best Practices
- BMEN 2320 Biomedical Instrumentation I
- BMEN 3350 Biomedical Transport Phenomena
- BMEN 3310 Engineering Measurements from Human Systems
- BMEN 3311 Biomedical Signal Analysis
- BMEN 3312 Introduction to Biomechanics
- BMEN 3321 Biomaterials
- BMEN 4212 Senior Design I
- BMEN 4222 Senior Design II
- BMEN 4310 Biomedical Modeling

## Biomedical engineering electives, 9 or 15 hours

Three or five advanced, 4000-level, organized BMEN courses.

# Additional electives, 12 or 18 hours (minimum)

Choose one from the options below:

## Option 1: Additional engineering electives, 18 hours

18 hours to fulfill one of seven tracks:

- Biomedical instrumentation: 18 hours in BMEN or EENG courses
- Biomechanics: 18 hours in BMEN or MEEN courses
- Biocomputing: 18 hours in BMEN or CSCE courses

- Biotechnology: 18 hours in BIOC/BIOL courses
- Pre-med: 18 hours in BIOC/BIOL courses+ additional courses as deemed necessary by the Pre-med program
- Biomaterials: 18 hours in BMEN or MTSE courses
- Computational Epidemiology: 18 hours in CSCE courses, including CSCE 1035; CSCE 1045; CSCE 2100; CSCE 2110; CSCE 3850; CSCE 4820.

### Option 2: Business electives, 12 hours

12 hours to fulfill one of four tracks:

- Business Foundations Track: 12 hours in Business Foundations courses
- Management: 12 hours in Management courses
- Marketing: 12 hours in Marketing courses
- Entrepreneurship: 12 hours in Entrepreneurship courses

Students choosing Business electives will need to complete 15 hours of Biomedical Engineering (BMEN) Electives.

### Other required courses, 34 hours

- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory

or

- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1415 General Chemistry for Engineering Majors and
- CHEM 1435 General Chemistry Laboratory for Engineering Majors
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3680 Applied Statistics
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- TECM 2700 Technical Writing

#### Minor

Through careful selection of engineering, mathematics electives and electives taken toward one of the five optional tracks (see below), it may be possible for a student to fulfill the requirements for a minor in mathematics and a minor in computer science and computer engineering, material science and engineering, electrical engineering, or mechanical and energy engineering.

### Other requirements

### Foundation courses

BMEN foundation courses include BMEN 1300, BMEN 1400, BMEN 2210, BMEN 2320, MATH 1710, MATH 1720, ENGL 1310 or TECM 1700; TECM 2700; PHYS 1710, PHYS 1730; CHEM 1410 /CHEM 1430 or CHEM 1415 /CHEM 1435; BIOL 2301/BIOL 2311 or PHYS 2220/PHYS 2240 or CHEM 1420/CHEM 1440

Successful completion of foundation courses is based on achieving a C or higher in each course and cumulative GPA of 2.0.

### Major transfer policy

Students enrolled at UNT can transfer into Biomedical Engineering if they have completed the following courses with a C or better and with a cumulative GPA of at least 2.5.

- BMEN 1300 Discover Biomedical Engineering
- BMEN 1400 Software for Biomedical Engineers
- ENGL 1310 First-Year Writing I
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- TECM 1700 Introduction to Professional, Science, and Technical Writing
- TECM 2700 Technical Writing

### Department policies

### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A student will graduate with a degree in Biomedical Engineering, provided the following conditions are satisfied:

- 1. The student has an overall GPA  $\geq 2.0$
- The student has a GPA of 2.0 in Biomedical Engineering Foundation courses and all have been passed with a grade of C or better.
- The student has a GPA ≥ 2.0 in all degree major courses including but not limited to, engineering, math, sciences, laboratory sciences and technical electives.
- 4. The student has completed all required courses in the student's degree plan.
- The student has satisfied all College of Engineering and UNT criteria for graduation.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

### **Grad Track Options**

### Biomedical Engineering, BS with grad track option leading to Biomedical Engineering, MS

# Admission requirements and program policies

### Admission requirements

- Student should be a major in the UNT Biomedical Engineering, BS program.
- Student can apply for the grad track option his/her junior year (following completion of at least 75 credit hours; a benchmark is if the student is ready for BME Senior Design in the following fall semester).
- Minimum of 3.5 or higher cumulative GPA required at the time of application submission, with a minimum GPA of 3.5 for BME core courses BMEN 1300, BMEN 2210, BMEN 2320, BMEN 3310, BMEN 3311, BMEN 3312 and BMEN 3321
- 4. The student should provide two recommendation letter from BME faculty members with his/her application.
- Application will be reviewed by both the BME undergraduate advisor and graduate advisor.
- Once approved by the BME advisors, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

- After being admitted to the grad track program and completion of at least 90 credit hours, the student can start taking the graduate courses as technical electives or biomedical electives for the BS degree requirement. For the graduate courses to be counted for the MS degree, the student should get a B or above for the courses.
- The student in the grad track program will be advised and monitored by both the undergraduate coordinator (prior to completion of the BS) and the graduate advisor (after completion of the BS).
- The student should choose a major research advisor in the semester that the student begins taking graduate courses.
- 4. There will be an annual review of each student's academic progress in meeting both bachelor's and master's degree requirements. If the student fails to meet degree requirements, the student will be placed in a probationary period for one semester. If the student continues to not meet the degree requirements in the probationary period, the student will be expelled from the grad track program (he/she will still be in the general biomedical engineering BS program if all general biomedical engineering BS degree requirements are met).
- 5. Undergraduate students who have been accepted to a grad track option should complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they begin taking graduate courses or enrollment in graduate level course work will be suspended.
- 6. The students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all course work for the BS degree and maintained a 3.0 or higher GPA, he/she will be fully admitted to the MS program.
- 7. The student must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following years to complete his/her biomedical engineering master's degree. If the student did not enroll in graduate school in the long

semester after finishing his/her BS degree those graduate course credit hours will not be counted toward the MS degree, even if the student comes back for graduate school in the future.

### Program requirements

BMEN courses that apply to the grad track, with corresponding undergraduate courses in parenthesis:

- BMEN 5310 Clinical Instrumentation (BMEN 4311)
- BMEN 5313 Bioengineering of Cellular Systems (BMEN 4313)
- BMEN 5314 Advanced Tissue Engineering and Regenerative Medicine (BMEN 4314)
- BMEN 5315 Computational Methods in Biomedical Engineering (BMEN 4310)
- BMEN 5319 Cardiovascular Fluid Dynamics (BMEN 4319)
- BMEN 5323 Advanced Biomedical Optics (BMEN 4321)
- BMEN 5319 Cardiovascular Fluid Dynamics (BMEN 4319)
- BMEN 5325 Biomedical Nanotechnology Compatibility (BMEN 4325)
- BMEN 5326 Biomolecular Engineering (BMEN 4326)

All remaining courses required for the Biomedical Engineering, BS must also be completed. Other Biomedical Engineering graduate courses, including BMEN 5800, BMEN 5810, may be applied to the grad track program in Biomedical Engineering with consent of the department.

#### **Minors**

### **Biomedical Engineering Minor**

A minor in biomedical engineering requires a total of 18 semester hours of biomedical engineering courses, including 12 hours of advanced courses. Twelve hours of advanced courses must be taken at UNT

### Requirements

- BMEN 2210 Biomedical Circuits and Data Acquisition Best Practices
- BMEN 2320 Biomedical Instrumentation I

Any two courses from:

- BMEN 3311 Biomedical Signal Analysis or
- BMEN 3312 Introduction to Biomechanics or
- BMEN 3321 Biomaterials
- BMEN 3350 Biomedical Transport Phenomena
- One 3 hour 4000-level BMEN course (student may not use BMEN 4900 or BMEN 4910 to meet this requirement)

# Department of Computer Science and Engineering

Main Departmental Office Discovery Park, Room F201

Mailing address: 1155 Union Circle #311366 Denton, TX 76203-5017 940-565-2767 Fax: 940-565-2799

Web site: www.cse.unt.edu

Yan Huang, Chair

Faculty

The Department of Computer Science and Engineering at the University of North Texas provides very high quality educational programs by maintaining a balance between theoretical and experimental aspects of computer science and engineering, as well as a balance between software and hardware issues, and by providing curricula that serve the citizens and industrial organizations of Texas in general, and those in North Texas in particular. The department offers ABET-accredited bachelor of science degrees in computer engineering and computer science and an ABET-accredited bachelor of arts degree in information technology. The bachelor of science degree in cybersecurity enabled students to gain skills to create and maintain secure computing systems. The department also offers master of science degrees in computer engineering and computer science and a doctoral degree in computer science and engineering. Current research interests of the faculty may be grouped broadly into algorithms and computational science, computer security, computer systems and networks, databases and data mining, intelligent systems, and software engineering. Details about specific faculty research may be found on the faculty members' web pages. The departmental research is supported by federal and state agencies as well as industrial concerns.

### **Vision and Mission**

The vision of the Department of Computer Science and Engineering is to be a leader for quality research and education in selected areas in computer engineering, computer science and information technology. The mission of the Department of Computer Science and Engineering is to provide high-quality education through its undergraduate degree program in information technology, undergraduate and graduate degree programs in computer science and computer engineering, and to conduct internationally recognized research in selected areas of computer science and engineering.

### **Majors**

### **Computer Engineering, BS**

The Bachelor of Science with a major in computer engineering provides a high-quality education by balancing the theoretical and experimental aspects of hardware and software issues. A BS with a major in computer engineering provides excellent job prospects in the engineering and technology sectors.

The Bachelor of Science degree with a major in computer engineering is designed for students who wish to specialize in computer hardware, communication systems, digital signal processing, micro-controllers, real-time and embedded systems. Computer engineering students are exposed to both theoretical and practical issues of both hardware and software in laboratories with state-of-the art equipment. The program provides a strong engineering background, with an understanding of the principles and techniques of computing. A professional degree, which includes a two-term/semester senior design project sequence, prepares the graduates for a career and graduate studies in computer engineering and related fields.

The Bachelor of Science degree with a major in computer engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET (abet.org), (415 N. Charles Street, Baltimore, MD 21201; 410-347-7700).

### Program educational objectives

Graduates will:

- Have completed projects involving design, evaluation of materials, and management of computational and personnel resources to solve problems in multi-disciplinary teams and exhibit the ability to communicate effectively.
- Pursue graduate studies in computer engineering or related disciplines and careers involving VLSI design, real-time systems, communications, and networks or computer systems.
- Act responsibly and ethically in their professional conduct and successfully engage in life-long learning.
- Complete professional work assignments that exhibit a
  good balance between software and hardware systems,
  including software development, design of digital systems,
  microprocessors, embedded systems, real-time systems and
  digital communication systems.

### Student outcomes

This program will enable students to attain, by the time of graduation:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
- An ability to communicate effectively with a range of audiences.
- 4. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

### Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering requirements.

### Major requirements

A minimum of 40 semester hours, including:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 2610 Assembly Language and Computer Organization

- CSCE 3010 Signals and Systems
- CSCE 3020 Communications Systems
- CSCE 3600 Principles of Systems Programming
- CSCE 3612 Embedded Systems Design
- CSCE 3730 Reconfigurable Logic
- CSCE 4011 Engineering Ethics
- CSCE 4910 Computer Engineering Design I
- CSCE 4915 Computer Engineering Design II

### Other required courses

- EENG 3510 Electronics I (Devices and Materials)
- EENG 2610 Circuit Analysis and
- EENG 2611 Circuit Analysis Lab
- EENG 2710 Digital Logic Design and
- EENG 2711 Digital Logic Design Lab
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 1780 Probability Models
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- TECM 2700 Technical Writing
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- CHEM 1410 General Chemistry for Science Majors
  and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1415 General Chemistry for Engineering Majors and
- CHEM 1435 General Chemistry Laboratory for Engineering Majors
- Mathematics or science elective (3 hours, advanced, with advisor approval)

#### Specialization area, 9 hours

Three courses selected from one of the five computer engineering specialization areas listed below.

#### Real-Time and Embedded Systems

- CSCE 3444 Software Engineering
- CSCE 3610 Introduction to Computer Architecture
- CSCE 4440 Real-Time Software Development
- CSCE 4600 Introduction to Operating Systems
- CSCE 4610 Computer Architecture
- CSCE 4620 Real-Time Operating Systems
- CSCE 4730 VLSI Design
- CSCE 4890 Directed Study
- ELET 3750 Embedded C-Programming

#### VLSI and Electronics

- CSCE 3610 Introduction to Computer Architecture
- CSCE 4610 Computer Architecture
- CSCE 4730 VLSI Design
- CSCE 4890 Directed Study
- ELET 3750 Embedded C-Programming
- ELET 4300 Embedded System Organization
- ELET 4340 Digital Logic Design Techniques
- PHYS 4500 Introduction to Solid-State Physics

#### Communication and Networks

- CSCE 3420 Internet Programming
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 4510 Introduction to Wireless Communications
- CSCE 4520 Wireless Networks and Protocols
- CSCE 4530 Computer Network Design
- CSCE 4560 Secure Electronic Commerce
- CSCE 4890 Directed Study

### Computer Systems

- CSCE 4160 Parallel Programming
- CSCE 3610 Introduction to Computer Architecture
- CSCE 4050 Applications of Cryptography
- CSCE 4240 Introduction to Digital Image Processing
- CSCE 4600 Introduction to Operating Systems
- CSCE 4610 Computer Architecture
- CSCE 4620 Real-Time Operating Systems
- CSCE 4650 Introduction to Compilation Techniques
- CSCE 4730 VLSI Design
- CSCE 4890 Directed Study

#### Artificial intelligence and machine learning

Many embedded systems designers are using Artificial Intelligence (AI) and Machine Learning(ML) techniques to provide smart solutions for their applications. Currently, there is demand for engineers in the job market with some AI and ML expertise.

- CSCE 3110 Data Structures and Algorithms
- CSCE 4200 Web Search and Information Retrieval
- CSCE 4201 Introduction to Artificial Intelligence
- CSCE 4205 Introduction to Machine Learning
- CSCE 4290 Introduction to Natural Language Processing
- CSCE 4380 Data Mining
- CSCE 4890 Directed Study

#### Note

A maximum of 6 hours of credit in CSCE 4890, CSCE 4920, CSCE 4940, or CSCE 4950 will count toward this degree. The 6 hours may include at most 3 hours in CSCE 4920.

### Minor

Optional.

### **Electives**

See CSE faculty advisor.

### Other requirements

### Foundation courses

Foundation courses include the following.

Successful completion of foundation courses is based on achieving a C or higher in each course and a cumulative GPA of 2.5.

Students are required to take Engineering Foundation Courses and/or prerequisites to the Engineering Foundation Courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all Engineering Foundation Courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000- and 4000-level courses.

Foundation courses for the degree program include the following.

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- EENG 2710 Digital Logic Design
- EENG 2711 Digital Logic Design Lab
- MATH 1710 Calculus I
- TECM 2700 Technical Writing
- 3 Hours from UNT Core Communication Area Group 1

### Major transfer policy

Students enrolled at UNT can transfer into Computer Engineering if they have completed the CSCE foundation courses with a C or better and a cumulative GPA of at least 2.5. The courses are:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- MATH 1710 Calculus I
- ENGL 1310 First-Year Writing I or
- TECM 1700 Introduction to Professional, Science, and Technical Writing
- TECM 2700 Technical Writing

### Department policies

### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct)

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses in required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course, or in any course required by the major, is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog.

### Computer Science, BS

A Bachelor of Science with a major in computer science provides a high-quality education by balancing the theoretical and experimental aspects of hardware and software issues. Computer science is considered to be at or near the top in terms of BS degrees in demand for job prospects.

The Bachelor of Science degree with a major in computer science is a professional degree designed to prepare the student for a career of further studies in the technology and application of computers.

The Bachelor of Science degree with a major in computer science is accredited by the Computing Accreditation Commission (CAC) of ABET (abet.org), (415 N. Charles Street, Baltimore, MD 21201; 410-347-7700).

### **Program educational objectives**

Graduates will:

- Pursue graduate studies in computer science or related disciplines, and/or a career in a technology field utilizing skills from the computer science areas studied during the undergraduate program.
- Act responsibly and ethically in their professional conduct and successfully engage in life-long learning.
- Work effectively in multi-disciplinary teams and exhibit the ability to communicate effectively.
- Complete professional work assignments that exhibit the ability to design, develop and implement software while applying computer science principles and practices to the solution of real problems.

### **Student outcomes**

This program will enable students to attain, by the time of graduation:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Apply computer science theory and software development fundamentals to produce computing-based solutions.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Engineering requirements.

### Major requirements

A minimum of 55 semester hours, including:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 2610 Assembly Language and Computer Organization
- CSCE 3110 Data Structures and Algorithms
- CSCE 3444 Software Engineering
- CSCE 3600 Principles of Systems Programming
- CSCE 4010 Social Issues in Computing
- CSCE 4110 Algorithms
- CSCE 4901 Software Development Capstone I
- CSCE 4902 Software Development Capstone II
- plus 6 hours chosen from CSCE Advanced Elective Courses or
- CSCE 4999 Senior Thesis
- plus 9 hours chosen from CSCE Advanced Elective Courses.

### CSCE core, 6 hours

Students choose 6 hours from the following.

- CSCE 3530 Introduction to Computer Networks
- CSCE 4115 Formal Languages, Automata and Computability
- CSCE 4430 Programming Languages
- CSCE 4600 Introduction to Operating Systems
- CSCE 4650 Introduction to Compilation Techniques

#### CSCE breadth courses, 6 hours

Students choose 6 hours from the following.

- CSCE 3550 Foundations of Cybersecurity
- CSCE 4201 Introduction to Artificial Intelligence
- CSCE 4210 Game Programming I
- CSCE 4230 Introduction to Computer Graphics
- CSCE 4240 Introduction to Digital Image Processing
- CSCE 4290 Introduction to Natural Language Processing
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4460 Software Testing and Empirical Methodologies

#### Note

A maximum of 6 hours of credit in CSCE 2900, CSCE 4890, CSCE 4920, CSCE 4940 or CSCE 4950 will count toward this degree. The 6 hours may include at most 3 hours in CSCE 4920.

### Other required courses

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 1780 Probability Models
- MATH 2700 Linear Algebra and Vector Geometry
- EENG 2710 Digital Logic Design
- TECM 2700 Technical Writing

### Laboratory science, 16 hours

### Required courses, 8 hours

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

### Choose 8 hours from the following courses

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1415 General Chemistry for Engineering Majors and
- CHEM 1435 General Chemistry Laboratory for Engineering Majors
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry
- BIOL 1710 Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II
- BIOL 1760 Biology for Science Majors Laboratory

### 3 hours selected from

Any 4000-level TECM course.

#### Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

### Other requirements

A grade point average of 2.0 is required for all major requirement courses and approved electives.

Policy on Transfer into the Computer Science degree, for students currently enrolled at UNT:

Students enrolled at UNT can transfer into Computer Science if they have completed the CSCI foundation courses with a C or better and a cumulative GPA of at least 2.5. The courses are CSCE 1030, CSCE 1040, CSCE 2100, CSCE 2110, 3 hours from UNT Core Communication Area Group 1, TECM 2700, and MATH 1710.

### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct)

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful

completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog.

### Foundation courses

Successful completion of foundation courses is based on achieving a C or higher in each course and a cumulative GPA of 2.5.

Students are required to take Engineering Foundation Courses and/or prerequisites to the Engineering Foundation Courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all Engineering Foundation Courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

Foundation courses for the degree program include the following.

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- MATH 1710 Calculus I
- TECM 2700 Technical Writing
- 3 Hours from UNT Core Communication Area Group 1

### Major transfer policy

Students enrolled at UNT can transfer into Computer Science if they have completed the following courses with a C or better and cumulative GPA of at least 2.5. The courses are:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- MATH 1710 Calculus I
- TECM 2700 Technical Writing
- 3 Hours from UNT Core Communication Area Group 1

### Department policies

### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

### Cybersecurity, BS

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Engineering requirements.

### Major requirements

Major of 61 hours, including:

- CSCE 1035 Computer Programming I
- CSCE 1045 Computer Programming II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 3560 Computer Systems Security
- CSCE 3600 Principles of Systems Programming
- CSCE 4010 Social Issues in Computing
- CSCE 4535 Introduction to Network Administration
- CSCE 4555 Computer Forensics
- CSCE 4560 Secure Electronic Commerce
- CSCE 4565 Secure Software Systems
- CSCE 4575 Blockchain and Applications
- CSCE 4907 Cybersecurity Capstone I
- CSCE 4927 Cybersecurity Capstone II

### **Electives**

Students choose four courses from the following list:

- BCIS 4630 Fundamentals of Information Technology Security
- BCIS 4720 Web-Based Information Technologies
- BCIS 4740 Administration and Policy in Information Security
- CJUS 3340 Computer Crime
- CJUS 4330 Domestic and International Terrorism
- CSCE 4050 Applications of Cryptography
- CSCE 4520 Wireless Networks and Protocols
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4357 Database Systems Security
- CSCE 4570 Information Privacy

- CSCE 4600 Introduction to Operating Systems
- INFO 4670 Data Analysis and Knowledge Discovery
- INFO 4710 Information Technology Management
- INFO 4745 Information Architecture

### Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 3680 Applied Statistics
- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- TECM 2700 Technical Writing

### Choose 8 hours from the following:

- BIOL 1710 Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II
- BIOL 1760 Biology for Science Majors Laboratory
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

#### Minor

No minor is required.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

### Other requirements

Students must earn at least a grade of C and a minimum 2.5 GPA in CSCE 1035, CSCE 1045, CSCE 2100 and MATH 1710 as foundations to enroll in advanced courses.

### **Information Technology, BA**

A Bachelor of Arts with a major in information technology provides you with computer science skills while offering more flexibility, fewer math and science requirements, and the opportunity to study a supporting area that can be outside of computer science. Information technology is currently one of the most rapidly growing employment prospects.

The Bachelor of Arts degree with a major in information technology is designed to provide a broad education so that the student can take advantage of a variety of professional opportunities in the information technology field.

### **Program educational objectives**

Graduates will:

- Pursue graduate studies in information technology, computer science or related disciplines, and/or a career in a technology field utilizing skills from the information technology areas studied during the undergraduate program.
- Act responsibly and ethically in their professional conduct and successfully engage in lifelong learning.
- Work effectively in multi-disciplinary teams and exhibit the ability to communicate effectively.
- Complete professional work assignments that exhibit the ability to design, develop, manage, maintain and implement information systems while applying IT and computing principles and practices to the solution of real problems.

The Bachelor of Arts degree with a major in information technology is accredited by the Computing Accreditation Commission (CAC) of ABET (abet.org), (415 N. Charles Street, Baltimore, MD 21201; 410-347-7700).

#### Student outcomes

This program will enable students to attain, by the time of graduation:

- Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- Communicate effectively in a variety of professional contexts.
- Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
- Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems.

### **Degree requirements**

# Hours required and general/college requirements

A minimum of 121 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog, and college requirements as specified in the College of Engineering section of this catalog. A minimum of 31 semester hours must be completed at UNT.

### Major requirements, 76 hours

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 3055 IT Project Management
- CSCE 3220 Human Computer Interfaces
- CSCE 3420 Internet Programming
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 3600 Principles of Systems Programming
- CSCE 3615 Enterprise Systems Architecture and Design
- CSCE 4010 Social Issues in Computing

- CSCE 4350 Fundamentals of Database Systems
- CSCE 4905 Information Technology Capstone I
- CSCE 4925 Information Technology Capstone II

### CS admin concentration area, 9 hours

- CSCE 3605 Systems Administration
- CSCE 4535 Introduction to Network Administration
- CSCE 4355 Database Administration

### Supporting area, 21 hours

21 hours are required to support the information technology major and can be chosen from courses in many UNT departments. Check with a CSE faculty advisor concerning eligible courses.

#### Note

A maximum of 6 hours of credit in the following will count toward this degree: CSCE 4890, CSCE 4920, CSCE 4940, or CSCE 4950. The 6 hours may include at most 3 hours in CSCE 4920.

### Other course requirements

- MATH 1680 Elementary Probability and Statistics
   or
- MATH 1780 Probability Models
- MATH 1710 Calculus I
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1415 General Chemistry for Engineering Majors and
- CHEM 1435 General Chemistry Laboratory for Engineering Majors

or

- BIOL 1710 Biology for Science Majors I and
- BIOL 1760 Biology for Science Majors Laboratory
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- TECM 2700 Technical Writing

### Minor

Optional.

### **Electives**

See CSE faculty advisor.

### Other requirements

#### Foundation courses

Successful completion of foundation courses is based on achieving a C or higher in each course and a cumulative GPA of 2.5.

Students are required to take Engineering Foundation Courses and/or prerequisites to the Engineering Foundation Courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all Engineering Foundation Courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

Foundation courses for the degree program include the following.

The Information Technology foundation courses are:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- MATH 1710 Calculus I
- TECM 2700 Technical Writing
- 3 Hours from UNT Communications Core Group 1

### Major transfer policy

Students enrolled at UNT can transfer into Information Technology if they have completed the following courses with a C or better and a cumulative GPA of at least 2.5. The courses are:

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- MATH 1710 Calculus I
- TECM 2700 Technical Writing
- 3 Hours from UNT Communications Core Group 1

### Department policies

#### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

### **Grad Track Options**

# Computer Engineering, BS with grad track option leading to Artificial Intelligence, MS

# Admission requirements and program policies

### Admission requirements

Students applying to the Grad Track option should be majors in the department's Computer Engineering BS program. Students are eligible for acceptance at the end of their junior year. Approval will be considered once a student has completed at least 75 credit hours. One benchmark is whether or not the student is ready for CSE Senior Design in the following fall semester. Other requirements include:

- A minimum cumulative GPA of 3.5 or higher is required at the time of application.
- A minimum cumulative GPA of 3.5 for all Computer Science core courses.
- A statement of purpose.
- Three letters of recommendation from computer science and engineering faculty members.

The student's application will be reviewed by an undergraduate and a graduate coordinator in computer science and engineering. Once approved by the CSE coordinators, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

After completing at least 90 credit hours, the student can start taking the accepted graduate courses as technical electives for the BS degree. If the student wants to take other graduate courses for grad track credits, they will need to obtain approvals from both the undergraduate and graduate CSE coordinators. For these graduate courses to be counted for the MS degree, the student must earn a grade of B or higher for each course. Courses cross-listed as graduate/undergraduate must be taken at the graduate level to be counted for graduate credit.

Students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all coursework for the BS degree and maintained a 3.0 GPA or higher, they will be fully admitted to the graduate program. Undergraduate students

who have been accepted into a grad track program should complete all of the bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses, or enrollment in graduate-level coursework will be suspended.

Students must enroll in graduate school in the long semester after finishing the BS degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in graduate school in the long semester after finishing the BS degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

### Program requirements

The student is required to take three of the courses listed below in the fourth year of their bachelor's degree program.

- CSCE 5200 Information Retrieval and Web Search
- CSCE 5210 Fundamentals of Artificial Intelligence
- CSCE 5215 Machine Learning
- CSCE 5290 Natural Language Processing
- CSCE 5380 Data Mining

# Computer Engineering, BS with grad track option leading to Computer Engineering, MS

The Department of Computer Science and Engineering offers a grad track option for existing UNT undergraduate students majoring in computer engineering.

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

# Admission requirements and program policies

### Admission requirements

Students applying to the grad track option should be majors in the department's computer engineering BS program. Students are eligible for acceptance at the end of their junior year. Approval will be considered once a student has completed at least 75 credit hours (one benchmark is whether or not the student is ready for CSE Senior Design in the following fall semester). Other requirements include:

- A minimum cumulative GPA of 3.5 or higher is required at the time of application.
- Average minimum GPA of 3.5 for all computer engineering core courses (CSCE 2610, CSCE 3600, and either CSCE 3612 or CSCE 3730)
- Three letters of recommendation from computer science and engineering faculty members.
- A statement of purpose is required.

The student's application will be reviewed by an undergraduate and a graduate coordinator in computer science and engineering. Once approved by the CSE coordinators, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

After completing at least 90 credit hours, the student can start taking the accepted graduate courses as technical electives for the BS degree. If the student wants to take other graduate courses for grad track credits, he or she will need to obtain approvals from both the undergraduate and graduate CSE coordinators. For these graduate courses to be counted for the MS degree, the student must earn a grade of B or higher for each course. Courses cross-listed as graduate/undergraduate must be taken at the graduate level to be counted for graduate credit.

Students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all course work for the BS degree and maintained a 3.0 GPA or higher, he or she will be fully admitted. Undergraduate students who have been accepted to a grad track program should complete all of the bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses, or enrollment in graduate level course work will be suspended.

Students must enroll in graduate school in the long semester after finishing the BS degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in graduate school in the long semester after finishing the BS degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

### Program requirements

The student is required to take three of the courses listed below in the fourth year of the program.

- CSCE 5050 Applications of Cryptography
- CSCE 5200 Information Retrieval and Web Search
- CSCE 5210 Artificial Intelligence
- CSCE 5215 Machine Learning
- CSCE 5220 Computer Graphics
- CSCE 5250 Introduction to Game Programming
- CSCE 5255 Programming Math and Physics for Games
- CSCE 5260 3D Game Programming
- CSCE 5265 Advanced Topics in Game Development
- CSCE 5290 Natural Language Processing
- CSCE 5350 Fundamentals of Database Systems
- CSCE 5380 Data Mining
- CSCE 5400 Automata Theory
- CSCE 5430 Software Engineering
- CSCE 5450 Programming Languages
- CSCE 5510 Wireless Communications
- CSCE 5520 Wireless Networks and Protocols
- CSCE 5550 Introduction to Computer Security
- CSCE 5555 Computer Forensics
- CSCE 5560 Secure Electronic Commerce
- CSCE 5585 Computer Networks
- CSCE 5610 Computer System Architecture
- CSCE 5620 Real-Time Operating Systems
- CSCE 5640 Operating System Design
- CSCE 5650 Compiler Design
- CSCE 5655 Principles of Compiler Optimization
- CSCE 5730 Digital CMOS VLSI Design
- CSCE 5810 Biocomputing
- CSCE 5820 Computational Epidemiology
- all remaining courses required for the BS with a major in computer engineering

# Computer Engineering, BS with grad track option leading to Computer Science and Engineering, PhD

This grad track option is a BS to PhD accelerated program for computer science and computer engineering undergraduate students. The student can take a maximum of 12 credit hours of graduate courses while completing the BS degree. These credits will be counted first toward the BS degree and then, upon graduation, be transferred to the PhD degree.

The following is the step-by-step process:

- A student applies for the grad track option in the junior year (having completed at least 75 credit hours with a GPA of 3.5 or higher).
- After the application is approved and the student has completed at least 90 credit hours, the student can start taking graduate courses that are approved for the grad track option as CSE electives for the BS degree requirements. For the graduate courses to be counted toward the PhD degree later, the student should earn a grade of B or higher for the courses.
- 3. The student applies to the Toulouse Graduate School within the first semester of the senior year. Once the student satisfies all course work for the BS degree and having maintained a 3.5 or higher GPA, the student will submit three recommendation letters from faculty members and a statement of purpose to be considered for entry into the PhD program.

- 4. The student must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her PhD degree. If the student does not enroll in graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will no longer be counted for the PhD degree, even if the student comes back for graduate school in the future.
- Once admitted to the PhD program, the students will have higher priority for funding (research and teaching assistantship) to support PhD study.
- TGS will be consulted for cases when students enrolled in the BS program with the BS-to-MS grad track option are transferred to the program with the BS-to-PhD grad track option.

### Program requirements

Students may choose up to 12 hours from the following list of courses.

- CSCE 5050 Applications of Cryptography (for CSCE 4050)
- CSCE 5200 Information Retrieval and Web Search (for CSCE 4200)
- CSCE 5210 Aritifical Intelligence (for CSCE 4310)
- CSCE 5215 Machine Learning (for CSCE 4930 when topic is "Machine Learning")
- CSCE 5220 Computer Graphics (for CSCE 4230)
- CSCE 5225 Digital Image Processing (for CSCE 4240)
- CSCE 5250 Introduction to Game Programming (for CSCE 4210)
- CSCE 5255 Programming Math and Physics for Games (for CSCE 4215)
- CSCE 5260 3D Game Programming (for CSCE 4220)
- CSCE 5265 Advanced Topics in Game Development (for CSCE 4250)
- CSCE 5290 Natural Language Processing (for CSCE 4290)
- CSCE 5350 Fundamentals of Database Systems (for CSCE 4350)
- CSCE 5400 Formal Languages, Automata and Computability (for CSCE 4115)
- CSCE 5430 Software Engineering (for CSCE 3444)
- CSCE 5450 Programming Languages (for CSCE 4430)
- CSCE 5460 Software Testing and Empirical Methodologies (for CSCE 4460)
- CSCE 5510 Wireless Communications (for CSCE 4510)
- CSCE 5520 Wireless Networks and Protocols (for CSCE 4520)
- CSCE 5560 Secure Electronic Commerce (for CSCE 4560)
- CSCE 5585 Network Security (for CSCE 4930 when topic is "Block Chain")
- CSCE 5610 Computer System Architecture (for CSCE 4610)
- CSCE 5620 Real-Time Operating Systems (for CSCE 4620)
- CSCE 5640 Operating Systems Design (for CSCE 4600)
- CSCE 5650 Compiler Design (for CSCE 4650)
- CSCE 5655 Principles of Compiler Optimization (for CSCE 4655)
- CSCE 5730 Digital CMOS VLSI Design (for CSCE 4730)
- CSCE 5810 Biocomputing (for CSCE 4810)
- CSCE 5820 Computational Epidemiology (for CSCE 4820)

Students must also complete all other courses required for the Computer Engineering, BS.

# Computer Science, BS with grad track option leading to Artificial Intelligence, MS

# Admission requirements and program policies

### Admission Requirements

Students applying to the Grad Track option should be majors in the department's Computer Science BS program. Students are eligible for acceptance at the end

of their junior year. Approval will be considered once a student has completed at least 75 credit hours. One benchmark is whether or not the student is ready for

CSE Senior Design in the following fall semester. Other requirements include:

- A minimum cumulative GPA of 3.5 or higher is required at the time of application.
- A minimum cumulative GPA of 3.5 for all Computer Science core courses.
- A statement of purpose.
- Three letters of recommendation from computer science and engineering faculty members.

The student's application will be reviewed by an undergraduate and a graduate coordinator in computer science and engineering. Once approved by the CSE coordinators, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

After completing at least 90 credit hours, the student can start taking the accepted graduate courses as technical electives for the BS degree. If the student wants to take other graduate courses for grad track credits, they will need to obtain approvals from both the undergraduate and graduate CSE coordinators. For these graduate courses to be counted for the MS degree, the student must earn a grade of B or higher for each course. Courses cross-listed as graduate/undergraduate must be taken at the graduate level to be counted for graduate credit.

Students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all coursework for the BS degree and maintained a 3.0 GPA or higher, they will be fully admitted to the graduate program. Undergraduate students who have been accepted into a grad track program should complete all of the bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses, or enrollment in graduate-level coursework will be suspended.

Students must enroll in graduate school in the long semester after finishing the BS degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in graduate school in the long semster after finishing the BS degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

### **Program Requirements**

The student is required to take three of the courses listed below in the fourth year of their bachelor's degree program.

- CSCE 5200 Information Retrieval and Web Search
- CSCE 5210 Fundamentals of Artificial Intelligence
- CSCE 5215 Machine Learning
- CSCE 5290 Natural Language Processing
- CSCE 5380 Data Mining

# Computer Science, BS with grad track option leading to Computer Science and Engineering, PhD

This grad track option is a BS to PhD accelerated program for computer science and computer engineering undergraduate students. The student can take a maximum of 12 credit hours of graduate courses while completing the BS degree. These credits will be counted first toward the BS degree and then, upon graduation, be transferred to the PhD degree.

The following is the step-by-step process:

- A student applies for the grad track option in the junior year (having completed at least 75 credit hours with a GPA of 3.5 or higher).
- After the application is approved and the student has
  completed at least 90 credit hours, the student can start
  taking graduate courses that are approved for the grad track
  option as CSE electives for the BS degree requirements. For
  the graduate courses to be counted toward the PhD degree
  later, the student should earn a grade of B or higher for the
  courses.
- 3. The student applies to the Toulouse Graduate School within the first semester of the senior year. Once the student satisfies all course work for the BS degree and having maintained a 3.5 or higher GPA, the student will submit three recommendation letters from faculty members and a statement of purpose to be considered for entry into the PhD program.
- 4. The student must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her PhD degree. If the student does not enroll in graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will no longer be counted for the PhD degree, even if the student comes back for graduate school in the future.
- Once admitted to the PhD program, the students will have higher priority for funding (research and teaching assistantship) to support PhD study.
- TGS will be consulted for cases when students enrolled in the BS program with the BS-to-MS grad track option are transferred to the program with the BS-to-PhD grad track option.

### Program requirements

Students may choose up to 12 hours from the following list of courses.

- CSCE 5050 Applications of Cryptography (for CSCE 4050)
- CSCE 5200 Information Retrieval and Web Search (for CSCE 4200)
- CSCE 5210 Aritifical Intelligence (for CSCE 4201)
- CSCE 5215 Machine Learning (for CSCE 4930 when topic is "Machine Learning")
- CSCE 5220 Computer Graphics (for CSCE 4230)
- CSCE 5225 Digital Image Processing (for CSCE 4240)
- CSCE 5250 Introduction to Game Programming (for CSCE 4210)
- CSCE 5255 Programming Math and Physics for Games (for CSCE 4255)
- CSCE 5260 3D Game Programming (for CSCE 4220)
- CSCE 5265 Advanced Topics in Game Development (for CSCE 4250)
- CSCE 5290 Natural Language Processing (for CSCE 4290)
- CSCE 5350 Fundamentals of Database Systems (for CSCE 4350)

- CSCE 5400 Formal Languages, Automata and Computability (for CSCE 4115)
- CSCE 5430 Software Engineering (for CSCE 3444)
- CSCE 5450 Programming Languages (for CSCE 4430)
- CSCE 5460 Software Testing and Empirical Methodologies (for CSCE 4460)
- CSCE 5510 Wireless Communications (for CSCE 4510)
- CSCE 5520 Wireless Networks and Protocols (for CSCE 4520)
- CSCE 5560 Secure Electronic Commerce (for CSCE 4560)
- CSCE 5585 Network Security (for CSCE 4930 when topic is "Block Chain")
- CSCE 5610 Computer System Architecture (for CSCE 4610)
- CSCE 5620 Real-Time Operating Systems (for CSCE 4620)
- CSCE 5640 Operating Systems Design (for CSCE 4600)
- CSCE 5650 Compiler Design (for CSCE 4650)
- CSCE 5655 Principles of Compiler Optimization (for CSCE 4655)
- CSCE 5730 Digital CMOS VLSI Design (for CSCE 4730)
- CSCE 5810 Biocomputing (for CSCE 4810)
- CSCE 5820 Computational Epidemiology (for CSCE 4820)

Students must also complete all other courses required for the Computer Science, BS.

# Computer Science, BS with grad track option leading to Computer Science, MS

The Department of Computer Science and Engineering offers a grad track option for existing UNT undergraduate students majoring in computer science.

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

# Admission requirements and program policies

### Admission requirements

Students applying to the grad track option should be majors in the department's computer science BS program. Students are eligible for acceptance at the end of their junior year. Approval will be considered once a student has completed at least 75 credit hours (one benchmark is whether or not the student is ready for CSE Senior Design in the following fall semester). Other requirements include:

- A minimum cumulative GPA of 3.5 or higher is required at the time of application;
- An average minimum GPA of 3.5 for all computer science core courses (CSCE 2610, CSCE 3110, CSCE 3600).
- Three letters of recommendation from computer science and engineering faculty members.
- A statement of purpose is required.

The student's application will be reviewed by an undergraduate and a graduate coordinator in computer science and engineering. Once approved by the CSE coordinators, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

After completing at least 90 credit hours, the student can start taking the accepted graduate courses as technical electives for the BS degree. If the student wants to take other graduate courses for grad track credits, he or she will need to obtain approvals from both the undergraduate and graduate CSE coordinators. For these graduate courses to be counted for the MS degree, the student must earn a grade of B or higher for each course. Courses cross-listed as graduate/undergraduate must be taken at the graduate level to be counted for graduate credit.

Students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all course work for the BS degree and maintained a 3.0 GPA or higher, he or she will be fully admitted. Undergraduate students who have been accepted to a grad track program should complete all of the bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses, or enrollment in graduate level course work will be suspended.

Students must enroll in graduate school in the long semester after finishing the BS degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in graduate school in the long semester after finishing the BS degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

### Program requirements

The student is required to take 3 of the courses listed below in the fourth year of the program.

- CSCE 5050 Applications of Cryptography
- CSCE 5200 Information Retrieval and Web Search
- CSCE 5210 Artificial Intelligence
- CSCE 5215 Machine Learning
- CSCE 5220 Computer Graphics
- CSCE 5250 Introduction to Game Programming
- CSCE 5255 Programming Math and Physics for Games
- CSCE 5260 3D Game Programming
- CSCE 5265 Advanced Topics in Game Development
- CSCE 5290 Natural Language Processing
- CSCE 5350 Fundamentals of Database Systems
- CSCE 5380 Data Mining
- CSCE 5400 Automata Theory
- CSCE 5430 Software Engineering
- CSCE 5450 Programming Languages
- CSCE 5510 Wireless Communications
- CSCE 5520 Wireless Networks and Protocols
- CSCE 5555 Computer Forensics
- CSCE 5560 Secure Electronic Commerce
- CSCE 5610 Computer System Architecture
- CSCE 5620 Real-Time Operating Systems
- CSCE 5640 Operating System Design
- CSCE 5650 Compiler Design
- CSCE 5655 Principles of Compiler Optimization
- CSCE 5730 Digital CMOS VLSI Design
- CSCE 5810 Biocomputing
- CSCE 5820 Computational Epidemiology

All remaining required courses for the Computer Science, BS.

# Information Technology, BA with grad track option leading to Artificial Intelligence, MS

# Admission requirements and program policies

### Admission requirements

Students applying to the Grad Track option should be majors in the department's Information Technology BA program. Students are eligible for acceptance at the end of their junior year. Approval will be considered once a student has completed at least 75 credit hours. One benchmark is whether or not the student is ready for CSE Senior Design in the following fall semester. Other requirements include:

- A minimum cumulative GPA of 3.5 or higher is required at the time of application.
- A minimum cumulative GPA of 3.5 for all Information Technology core courses.
- A statement of purpose.
- Three letters of recommendation from computer science and engineering faculty members.

The student's application will be reviewed by an undergraduate and a graduate coordinator in computer science and engineering. Once approved by the CSE coordinators, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

### Program policies

After completing at least 90 credit hours, the student can start taking the accepted graduate courses as technical electives for the BA degree. If the student wants to take other graduate courses for grad track credits, they will need to obtain approvals from both the undergraduate and graduate CSE coordinators. For these graduate courses to be counted for the MS degree, the student must earn a grade of B or higher for each course. Courses cross-listed as graduate/undergraduate must be taken at the graduate level to be counted for graduate credit.

Students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfiedall coursework for the BA degree and maintained a 3.0 GPA or higher, they will be fully admitted to the graduate program. Undergraduate students who have been accepted into a grad track program should complete all of the bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses, or enrollment in graduate-level coursework will be suspended.

Students must enroll in graduate school in the long semester after finishing the BA degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in graduate school in the long semster after finishing the BA degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

### Program requirements

The student is required to take three of the courses listed below in the fourth year of their bachelor's degree program.

- CSCE 5200 Information Retrieval and Web Search
- CSCE 5210 Fundamentals of Artificial Intelligence
- CSCE 5215 Machine Learning
- CSCE 5290 Natural Language Processing
- CSCE 5380 Data Mining

#### **Minors**

## Computer Science and Engineering minor

A minor in computer science and engineering consists of a minimum of 19 semester hours of computer science and engineering courses, including 6 advanced hours. The student is responsible to maintain a C or better in each required course.

Six hours of advanced courses must be taken at UNT.

### Required courses

- CSCE 1030 Computer Science I and
- CSCE 1040 Computer Science II
   or
- CSCE 1035 Computer Programming I and
- CSCE 1045 Computer Programming II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures

### **Cybersecurity minor**

The minor in cybersecurity requires 19 hours of course work.

### Required courses, 19 hours

- CSCE 1035 Computer Programming I
- CSCE 1045 Computer Programming II
- CSCE 2110 Foundations of Data Structures
- CSCE 3550 Foundations of Cybersecurity
- CSCE 3560 Computer Systems Security
- CSCE 3600 Principles of Systems Programming

#### **Certificates**

### **Security certificate**

The Department of Computer Science and Engineering offers courses leading to the Committee on National Security Systems (CNSS) National Standards:

- CNSS 4011: National Training Standard of Information Systems Security (INFOSEC) Professionals
- CNSS 4013: National Training Standard for System Administrators in Information Systems Security (INFOSEC)

For more information, visit the web page of the UNT Center for Information and Computer Security (https://cics.unt.edu/certificates).

### Courses, 18 hours

Students must obtain a grade of C or better.

- CSCE 2610 Assembly Language and Computer Organization
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4560 Secure Electronic Commerce
- CSCE 4600 Introduction to Operating Systems

### **Secondary Teacher Certification**

### **Computer Science teacher certification**

# Requirements utilizing the BA with a major in information technology

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 3055 IT Project Management
- CSCE 3220 Human Computer Interfaces
- CSCE 3420 Internet Programming
- CSCE 3444 Software Engineering
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 3600 Principles of Systems Programming
- CSCE 4010 Social Issues in Computing
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4905 Information Technology Capstone I
- CSCE 4925 Information Technology Capstone II

### Additional requirements

See major for additional course work and GPA requirements.

Upon completing the BA with a major in information technology program that includes a supporting area of 22 hours of TNT courses, the student will be eligible to take the state computer science teacher certification exam. Computer science option students can also become eligible for this exam by completing the same CSE courses and completing a Mathematics and Science Secondary Teaching minor and meeting all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

# Requirements utilizing the BS with a major in computer science

- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures
- CSCE 2610 Assembly Language and Computer Organization
- CSCE 3110 Data Structures and Algorithms
- CSCE 3444 Software Engineering
- CSCE 3600 Principles of Systems Programming
- CSCE 4010 Social Issues in Computing
- CSCE 4110 Algorithms
- CSCE 4901 Software Development Capstone I
- CSCE 4902 Software Development Capstone II
- Plus 6 hours chosen from CSCE Advanced Elective Courses OR
- CSCE 4999 Senior Thesis
- Plus 6 hours chosen from CSCE Advanced Elective Courses

### CSCE core, 6 hours

Students choose 6 hours from the following:

- CSCE 3530 Introduction to Computer Networks
- CSCE 4115 Formal Languages, Automata and Computability
- CSCE 4430 Programming Languages
- CSCE 4600 Introduction to Operating Systems
- CSCE 4650 Introduction to Compilation Techniques

### CSCE breadth courses, 6 hours

Students choose 6 hours from the following:

- CSCE 3550 Foundations of Cybersecurity
- CSCE 4210 Game Programming I
- CSCE 4230 Introduction to Computer Graphics
- CSCE 4240 Introduction to Digital Image Processing
- CSCE 4290 Introduction to Natural Language Processing
- CSCE 4201 Introduction to Artificial Intelligence
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4460 Software Testing and Empirical Methodologies

### Additional Requirements

Students must also complete the required 22 hours for the Mathematics and Science Secondary Teaching minor and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

# Undergraduate Academic Certificates Artificial Intelligence certificate

A 12-hour professional certificate in artificial intelligence.

### Required courses

- CSCE 3201 Applied Artificial Intelligence
- CSCE 3214 Software Development for Artificial Intelligence

### Choose two courses from the following:

- CSCE 4205 Introduction to Machine Learning
- CSCE 4290 Introduction to Natural Language Processing
- CSCE 4300 Intro to Big Data and Data Science
- CSCE 4890 Directed Study

### **Game Programming certificate**

The certificate in game programming is designed to prepare undergraduate students in the Department of Computer Science and Engineering to launch careers as programmers in the video game industry.

Visit larc.unt.edu for more information.

### Required courses, 12 hours

- CSCE 4210 Game Programming I
- CSCE 4255 Programming Math and Physics for Games
- CSCE 4220 Game Programming II
- CSCE 4250 Topics in Game Development

# Department of Electrical Engineering

Main Departmental Office Discovery Park, Room B270

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Web site: electrical.engineering.unt.edu

Shengli Fu, Chair

Faculty

The Department of Electrical Engineering at the University of North Texas provides an innovative program in electrical engineering, combining cognitive skills, industry-university joint projects and business skills with courses that form the foundation of the electrical engineering discipline. Combining theory and practice, the curriculum is designed to serve the citizens and industries in Texas, particularly the North Texas region, and the nation.

The department is housed in a facility designed to promote intellectual and scholarly endeavors of faculty and students. The department currently offers a Bachelor of Science degree, a Master of Science degree and a Doctor of Philosophy degree, each with a major in electrical engineering. In conjunction with Texas Woman's University, the department offers a dual Bachelor of Science degree with majors in electrical engineering and mathematics. It also offers an undergraduate minor in electrical engineering. Research interests of the faculty include digital signal processing; mage processing; pattern recognition; wireless sensor networks; systems and control; analog, RF and mixed signal design; VLSI design; wireless communication.

The department received support from the National Science Foundation to offer an "Innovative Design- and Project-Oriented Electrical Engineering Program" under the Department-Level Reform initiative.

The electrical engineering program is accredited by the Engineering Accreditation Commission of ABET (415 North Charles Street,, Baltimore, MD 21201; 410-347-7700).

#### Mission

The Department of Electrical Engineering constantly strives to further the mission of the University of North Texas. The program educational objectives of the Bachelor of Science with a major in electrical engineering program (BSEE program) have been developed to accomplish the university mission.

#### **Program Educational Objectives**

- Our graduates will be productive and valuable professionals in electrical engineering and related fields.
- Our graduates will engage in life-long learning demonstrated by advanced education/degrees, professional development activities, and/or other career-enhancing activities.
- Our graduates will be successful in taking leadership roles at various levels in their professional careers in academia or industry.

Our innovative bachelor's program is designed to satisfy the ABET criteria for accreditation of engineering programs.

#### **Student Outcomes**

Upon completion of the Bachelor of Science with a major in electrical engineering program, students will be able to achieve the following outcomes:

 identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics;

- apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors;
- 3. communicate effectively with a range of audiences;
- recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts;
- function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives;
- develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions; and
- acquire and apply new knowledge as needed, using appropriate learning strategies.

The BSEE program curriculum is designed to ensure that each undergraduate course achieves one or more of the above outcomes, and the curriculum, as a whole, achieves all student outcomes. Additionally, the undergraduate curriculum aims to enrich our students' educational experience at UNT.

### Research and scholarship

In order to accomplish the objectives in pursuing excellence in scholarly and applied research, the faculty of the department is committed to:

- establishing high standards for research and scholarship,
- fostering excellence and diversity in research,
- creating an inspiring academic environment for the students through integration of research and education, and
- serving the society and the profession through technological advances in basic and applied research.

### **Majors**

### **Electrical Engineering, BS**

The Bachelor of Science with a major in electrical engineering program provides an innovative and project-oriented curriculum that incorporates the best practices of a real-world engineering education from areas including electronics, control systems, communication systems, computer systems, very large-scale integration design, electromagnetics and signal processing.

The Bachelor of Science degree with a major in electrical engineering is an innovative undergraduate program designed to combine the best practices in electrical engineering education. This design- and project-oriented program integrates concepts, analysis, design and development of state-of-the-art electrical and electronic systems. Through course work, students have "learning-to-learn" experiences and work on hands-on design projects every semester. This active learning experience emphasizes knowledge and skills so that students can solve real-world electrical engineering problems. The one-year sequence of business and marketing courses encourages students to develop a global markets outlook.

The courses in the program are designed to cover both the breadth and depth of electrical engineering. The breadth of the curriculum is provided through course work in circuits, signals and systems, logic design, electromagnetics, electronics, communications, and analog and digital design projects. The depth of the curriculum is provided through courses in electronics, computer organization, computer networks, VLSI design, and advanced elective courses. Project courses in digital signal processing and communication system design provide additional depth. The design projects are integrated into the course work so that students can learn to solve practical engineering problems in a creative and relevant setting. In addition, project courses ensure that students have an opportunity to solve multidisciplinary engineering problems by working in teams and to develop effective oral and written communication skills.

The program also puts a strong emphasis on studies in art, business, management, humanities, physics and chemistry, social sciences, professionalism and engineering ethics, which fulfill objectives appropriate to the electrical engineering profession.

The Bachelor of Science degree with a major in electrical engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET (www.abet.org), (415 North Charles Street, Baltimore, MD 21201; 410-347-7700).

### **Degree requirements**

## Hours required and general/college requirements

A minimum of 128 semester hours, of which 42 must be advanced courses, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "General University Requirements and the University Core Curriculum" in the Academics section of this catalog and in the College of Engineering section of this catalog.

## Major requirements

A minimum of 36 semester hours, including:

- EENG 2610 Circuit Analysis
- EENG 2620 Signals and Systems
- EENG 2710 Digital Logic Design
- EENG 3410 Engineering Electromagnetics
- EENG 3510 Electronics I (Devices and Materials)
- EENG 3520 Electronics II
- EENG 3710 Computer Organization
- EENG 3810 Communications Systems
- Four EENG 4000-level electives chosen from EENG 4010, 4310, 4330, 4340, 4350, 4410, 4710, 4760, 4810, 4850, & 4900, or an equivalent upper-level electrical engineering course with department approval.

#### Project courses, 24 hours

- EENG 1910 Introduction to Electrical Engineering
- EENG 2611 Circuit Analysis Lab
- EENG 2621 Signals and Systems Lab
- EENG 2711 Digital Logic Design Lab
- EENG 2920 Analog and Digital Circuit Design Project
- EENG 3411 Engineering Electromagnetics Lab
- EENG 3511 Electronics I Lab
- EENG 3811 Communication Systems Lab
- EENG 3910 DSP System Design Project
- EENG 3920 Modern Communication System Design Project
- EENG 4910 Senior Design I
- EENG 4990 Senior Design II

### Other required courses

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- MATH 3680 Applied Statistics
- CHEM 1415 General Chemistry for Engineering Majors and
- CHEM 1435 General Chemistry Laboratory for Engineering Majors

or

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- CSCE 1030 Computer Science I

#### **Business** courses

- OPSM 3830 Operations Management and
- MGMT 3850 Foundations of Entrepreneurship
   or
- A minor in business foundations.

#### Minor

A minor in business foundations; optional if the student elects to take OPSM 3830 and MGMT 3850.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

## Other requirements

#### Foundation courses

EENG foundation courses include EENG 1910, EENG 2610, MATH 1710, MATH 1720, PHYS 1710, PHYS 1730, ENGL 1310 or TECM 1700, and TECM 2700.

Successful completion of foundation courses is based on achieving a C or higher in each course.

## Major transfer policy

Students enrolled at UNT can transfer into Electrical Engineering if they have completed the following courses with a C or better and a cumulative GPA of at least 2.5. The courses are: EENG 1910, ENGL 1310 or TECM 1700, MATH 1710, MATH 1720, PHYS 1710, PHYS 1730. TECM 2700.

### Department policies

#### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion for all engineering foundation courses is a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

## **Grad Track Options**

# Electrical Engineering, BS with grad track option leading to Electrical Engineering, MS

The Department of Electrical Engineering offers a grad track option for existing UNT undergraduate students majoring in electrical engineering.

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

## Admission requirements and program policies

### Admission requirements

 A cumulative GPA of 3.5 or higher is required at the time of application

To apply, student should submit the following to the grad track coordinator of the department before the first semester of their senior year:

- A completed grad track application form, and
- An up-to-date official transcript

The student's application will be reviewed by the undergraduate and graduate coordinators.

After a student is admitted to the grad track program, the student must apply to the Toulouse Graduate School during their senior year for admission to the MS program in electrical engineering, which should follow the same application procedure, application deadlines, and admission requirements as the regular graduate applications for admission to the MS program in electrical engineering.

### Program policies

After being accepted into the grad track option, the student then can take graduate courses in their senior year as EE electives to meet the BS degree requirements. In order for courses to be counted toward the MS degree, the student must meet the minimum grade requirements of the courses in the MS program. After being accepted into the grad track option, the student must complete the BS within one year of the first graduate level course he or she takes.

Students admitted to the program will be admitted into the MS program on a conditional basis. Once the student has satisfied all requirements for the BS degree and maintained a GPA of 3.0 or higher, he or she will be fully admitted to the MS program.

The student must enroll in graduate school in the long semester within one year after receiving his or her BS degree, and should complete the remaining graduate courses in the following year(s) to receive the MS degree. If the student does not enroll in graduate school in the long semester within one year after finishing the BS degree, those graduate credit hours will not be counted anymore for the MS degree even if the student comes back to graduate school in the future.

## Program requirements

The student is required to take any three graduate courses from the courses listed below in the senior year of the program (may be changed only if approved by both the EE undergraduate and graduate coordinators):

- EENG 5310 Control Systems Design
- EENG 5320 Systems Modeling and Simulation
- EENG 5520 Design and Testing of Digital Systems
- EENG 5530 Analog Integrated Circuit Design
- EENG 5610 Digital Signal Processing
- EENG 5810 Digital Communications

In the senior year, in addition to the approved graduate courses, the student is required to take all remaining courses required for the BS with a major in electrical engineering.

After receiving his or her BS degree and being enrolled in the graduate program, the student is required to take all remaining courses required for the MS degree with a major in electrical engineering (see Graduate Catalog).

# Electrical Engineering, BS with grad track option leading to Electrical Engineering, PhD

## Admission requirements

The following is the step-by-step process:

- Student should apply for the Super Grad Track option in the junior year (completed at least 75 credit hours with GPA of 3.5 or higher).
- 2. After the application is approved and have completed at least 90 credit hours, the students can start taking the graduate courses that are approved for Super Grad Track as EE electives for the BS degree requirement. For the graduate courses to be counted for the Ph.D. degree later, the student must meet the minimum grade requirements of the courses in the Ph.D. program.
- The student should apply to Toulouse Graduate School within the first semester of the senior year. The student needs to submit online application and all required documents for admission in the Ph.D. in EE program.
- 4. The students must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her Ph.D. degree. If the student did not enroll in graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will not be counted anymore for the Ph.D. degree even if the student comes back for graduate school in the future.
- Students in Grad Track program can apply to transfer to Super Grad Track program anytime with departmental approval.
- Once admitted to the Ph.D. program, the students will have higher priority for funding (research and teaching assistantships) to support Ph.D. study.

#### **Dual Degrees**

## Electrical Engineering, BS and Mathematics. BS

The dual degree program in mathematics and engineering combines the strengths of Texas Woman's University (TWU) and University of North Texas to permit students to earn two degrees simultaneously while preparing for a professional career in engineering.

Undergraduate students attend TWU for three years as mathematics majors in the Department of Mathematics and Computer Science, then continue their education in the College of Engineering at UNT

for approximately two additional years. After completion of the program, students receive the Bachelor of Science degree with a major in mathematics from TWU and the Bachelor of Science degree with a major in electrical engineering from UNT.

The following outline of courses is designed to satisfy the requirements of the TWU undergraduate core curriculum and of a Bachelor of Science degree in mathematics. Additional courses will be required by UNT. For the TWU degree, a total of at least 124 hours is required, including 36 advanced hours. Certain course work completed at UNT will be taken in transfer to complete the TWU degree. Interested students should consult the current undergraduate catalog for details regarding the TWU Undergraduate Core Curriculum. The minor suggested in the mathematics degree at TWU is computer science. However, the engineering major selected at UNT may serve as the minor for the TWU degree. If the degree in engineering at UNT is not completed, the student may complete the TWU degree in mathematics with appropriate additional work.

Scholarships and/or summer employment are available for the academically able student. Through TWU's Cooperative Education program, students may earn academic credit and income while gaining on-the-job experience related to engineering.

A 2.5 grade point average (GPA) is the minimum criterion for transfer admission consideration into most UNT engineering programs after completion of the first three years of work at TWU. Those applicants who have completed all foundation courses for engineering (see UNT catalog), have a 2.5 GPA in the foundation course work and a 2.5 GPA in all transferable work, will be admitted upon application to UNT. No grade lower than C is accepted in any mathematics or computer science courses at TWU. While a 2.0 GPA is the UNT requirement for admission after completion of 60 semester credit hours at TWU, a 2.5 is required for admission into UNT College of Engineering degree programs. Students may apply for concurrent enrollment at UNT prior to completion of their work at TWU by using the appropriate application and following the admissions procedure listed in the UNT catalog.

#### **Suggested courses**

The courses listed below will be accepted by the College of Engineering at University of North Texas for those students who successfully transfer from Texas Woman's University into Electrical Engineering within the College of Engineering, provided the student has duly received credit for the courses at TWU. The student should work closely with academic advisors at TWU and UNT to assure that he or she has satisfied core curriculum at both universities.

At TWU, students take a broad range of courses in mathematics, computer science, humanities, and social and natural sciences, as well as the basic introductory courses needed to enter studies in engineering.

## UNT courses for dual degree

- EENG 1910 Introduction to Electrical Engineering
- EENG 1920 Project II: Introduction to Electrical Engineering
- EENG 2610 Circuit Analysis
- EENG 2620 Signals and Systems
- EENG 2910 Project III: Digital System Design
- EENG 2920 Analog and Digital Circuit Design Project
- EENG 3410 Engineering Electromagnetics
- EENG 3510 Electronics I (Devices and Materials)
- EENG 3520 Electronics II
- EENG 3710 Computer Organization
- EENG 3810 Communications Systems
- EENG 3910 DSP System Design Project
- EENG 3920 Modern Communication System Design Project
- EENG 4010 Topics in Electrical Engineering
- EENG 4710 VLSI Design

- EENG 4810 Computer Networks
- EENG 4910 Senior Design I
- EENG 4990 Senior Design II
- TECM 2700 Technical Writing
- OPSM 3830 Operations Management

#### **Minors**

## **Electrical Engineering minor**

A minor in electrical engineering requires a total of 18 semester hours of electrical engineering courses, including 6 hours of advanced courses. Six hours of advanced courses must be taken at UNT.

## Required courses

- EENG 2610 Circuit Analysis
- EENG 2611 Circuit Analysis Lab
- EENG 2620 Signals and Systems
- EENG 2621 Signals and Systems Lab
- EENG 2710 Digital Logic Design
- EENG 2711 Digital Logic Design Lab
- EENG 3510 Electronics I (Devices and Materials)
- One EE elective. (EE electives are defined as 4000-level organized EE courses, including EENG 4010 and EENG 4900 but excluding EENG 4910, EENG 4920, EENG 4951 and EENG 4990.)

# Department of Materials Science and Engineering

Main Departmental Office Discovery Park, Room E132

Mailing address: 1155 Union Circle #305310 Denton, TX 76203-5017 940-565-3260 Fax: 940-565-4824

Web site: engineering.unt.edu/materials

Andrey Voevodin, Chair

Faculty

The Department of Materials Science and Engineering addresses the education and technological challenges of creating, applying and characterizing new materials for the 21st century. The Department of Materials Science and Engineering is committed to training students at the undergraduate and graduate levels in all aspects of modern materials including metals, ceramics, polymers, electronic and optical materials, and materials characterization. Students have opportunities for hands-on instruction and research with modern equipment and facilities. The department has strong collaborative programs with industries in the Dallas—Fort Worth region and with universities both locally and throughout the world.

The department offers bachelor's, master's and doctoral degrees, all with a major in materials science and engineering. Presently, the department has 18 tenured or tenure track faculty who divide their time between teaching and research in the different areas mentioned above. Research support comes from a variety of federal, state and industrial entities. The department has one of the most advanced analytical characterization facilities in the country, and both undergraduate and graduate students receive training on state-of-theart equipment. Finally, the department has strong connections with industry and national research laboratories for cooperative education experiences and internships so that students can receive practical training in addition to classroom and laboratory instruction.

Students who graduate with a Bachelor of Science with a major in materials science and engineering can expect a very healthy job market and relatively high starting salaries in a variety of industries. In fact, materials science and engineering graduates are heavily sought after by industries of all types, including automotive, chemical, aerospace, microelectronics, magnetic storage, medical, transportation, sports, defense, forensics, and manufacturing. A BS with a major in materials science and engineering also prepares students for continuing their education with a master's or a doctoral degree either in materials science and engineering or in a related field.

The materials science and engineering program is accredited by the Engineering Accreditation Commission of ABET (415 North Charles Street, Baltimore, MD 21201; 410-347-7700).

#### **Vision and Mission**

The vision of the Department of Materials Science and Engineering at the University of North Texas is to have a world-class materials science and engineering research program with local, national and international scientific and technological impact; to provide an outstanding educational experience for a diverse student population; and to provide a collegial environment for students, staff and faculty.

The mission of the Department of Materials Science and Engineering is to provide a high quality engineering education to our diverse student population by maintaining a balance between the theoretical and applied aspects of materials science and engineering through course work, laboratories and independent research topics. The department provides national and international leadership in research and scholarship, and strives to build mutually beneficial partnerships with both internal and external collaborators, with alumni and with the professional and business communities. The department mission is aligned with the mission of the University of North Texas. Finally, the department facilitates a collegial atmosphere that is conducive to the intellectual and scholarly pursuits of its faculty and students.

#### **Program Educational Objectives**

- Graduates will have successful careers in materials science and engineering or related disciplines.
- Graduates will successfully participate in continuing education or education towards advanced degrees.

#### **Student Outcomes**

Our student outcomes mirror the ABET outcomes:

- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. (ABET 1)
- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. (ABET 2)
- An ability to communicate effectively with a range of audiences. (ABET 3)
- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts. (ABET 4)
- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives (ABET 5)
- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions (ABET 6)
- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies. (ABET 7)

#### Research

The department has an active and robust research portfolio that ranges from fundamental studies to applications-oriented development programs. These research activities span economic sectors ranging from aerospace applications to electronic devices to biomaterials, and integrate both computational and experimental approaches. The department strives to create a learning environment, which includes multiple opportunities for research with integration of education and research activities. Students develop and practice teamwork and leadership skills, and expand their professional networks for future employment through research and internship programs with industry and national laboratories. In these programs, it is common to find both undergraduate and graduate students engaged together in diverse research teams in laboratories and centers/institutes, including the following.

#### Laboratories

- The Laboratory of Polymers and Composites
- Laboratory for Moving Mechanical Assemblies
- Laboratory for Laser Materials Synthesis and Fabrication
- Laboratory for Computational Materials Modeling
- Laboratory for Electronic Materials and Devices
- Advanced Metallic Materials and Manufacturing Processes (AM3P) Laboratory
- The Materials Synthesis and Processing Laboratory
- The Optoelectronic and Thin Films Laboratory
- Structural Metallic Materials Laboratory

#### Centers/Institutes

- Advanced Materials and Manufacturing Processing Institute
- Additive Manufacturing Laboratory
- NSF Center for Friction Stir Welding
- UNT Materials Research Facility
- ARL South Campus Research Center

#### **Majors**

## Materials Science and Engineering, BS

A Bachelor of Science with a major in materials science and engineering from the University of North Texas will prepare you to enter fast-emerging fields with relatively high starting salaries. Students who earn the degree enjoy being part of a close-knit professional community that bridges disciplines, such as applied physics and chemistry, in order to solve complex engineering problems.

The Bachelor of Science degree with a major in materials science and engineering is designed to provide students with the fundamental principles of how materials are made, how they behave during application, how their structure and properties are measured and quantified, and how to improve the performance of these materials. This information is then used in "materials-specific" courses and hands-on laboratories where students then learn to apply these principles to the different materials classes, namely, metals, ceramics, polymers, electronic materials and biomaterials. Students also learn about nanotechnology and how it is impacting the materials science and engineering discipline. During their last year, students are required to do a senior project with one of the faculty members who specialize in their primary area of interest. Students work either individually or in small groups on projects that provide them with research experiences that help them determine whether they feel better suited to finish their education and go to industry or continue on to graduate school. The course work instills in students ethical and environmental issues and standards expected by industry and society.

The Bachelor of Science degree with a major in materials science and engineering is accredited by the Engineering Accreditation Commission of ABET (www.abet.org), (415 North Charles Street, Baltimore, MD 21201; 410-347-7700).

## **Degree requirements**

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 45 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering requirements.

## Major requirements

A minimum of 53 semester hours, including:

- MTSE 1100 Discover How and Why Materials "Matter"
- MTSE 3010 Bonding and Structure
- MTSE 3020 Microstructure and Characterization of Materials
- MTSE 3030 Thermodynamics and Phase Diagrams
- MTSE 3040 Transport Phenomena in Materials
- MTSE 3050 Mechanical Properties of Materials
- MTSE 3060 Phase Transformations in Materials
- MTSE 3070 Electrical, Optical and Magnetic Properties of Materials
- MTSE 3080 Materials Processing
- MTSE 3090 Materials Science and Engineering Laboratory I
- MTSE 3100 Materials Science and Engineering Laboratory II
- MTSE 4010 Physical Metallurgy Principles
- MTSE 4030 Ceramic Science and Engineering
- MTSE 4050 Polymer Science and Engineering
- MTSE 4060 Materials Selection and Performance

- MTSE 4090 Senior Design I
- MTSE 4100 Senior Capstone Project
- MTSE electives (6 hours)

## Other required courses

- CHEM 1410 General Chemistry for Science Majors
- CHEM 1420 General Chemistry for Science Majors
- CHEM 1430 Laboratory Sequence for General Chemistry
- ENGR 2301 Statics
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- MTSE 3000 Fundamentals of Materials Science and Engineering - I
- MTSE 3001 Fundamentals of Materials Science and Engineering - II
- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics
- TECM 2700 Technical Writing

### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (45) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

## Other requirements

#### Foundation courses

MTSE foundation courses include the following courses.

Successful completion of foundation courses is based on achieving a C or higher in each course and a cumulative GPA of 2.0.

- MTSE 1100 Discover How and Why Materials "Matter"
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- CHEM 1410 General Chemistry for Science Majors
- CHEM 1420 General Chemistry for Science Majors
- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- ENGL 1310 First-Year Writing I
- TECM 1700 Introduction to Professional, Science, and Technical Writing
- TECM 2700 Technical Writing
- MTSE 3000 Fundamentals of Materials Science and Engineering - I

## Major transfer policy

Students enrolled at UNT can transfer into Materials Science and Engineering if they have completed the following courses with a C or better and a cumulative GPA of at least 2. 5. The courses are: CHEM 1410, CHEM 1430, CHEM 1420, ENGL 1310 or TECM 1700, MATH 1710, MATH 1720, MTSE 1100, TECM 2700

### Department policies

## Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2. 5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog. "

#### **Grad Track Options**

## Materials Science and Engineering, BS with grad track option leading to Materials Science and Engineering, MS

The Department of Materials Science and Engineering offers a grad track option for currently enrolled UNT undergraduate students majoring in materials science and engineering.

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

## Admission requirements and program policies

### Admission requirements

Students applying to the grad track option should be majors in the materials science and engineering BS program. Students are eligible to apply to the grad track option during their junior year, after completing at least 75 credit hours. Other requirements include:

- A cumulative GPA of 3.3 or higher is required at the time of application
- An average GPA of 3.5 or higher for materials science core courses taken (MTSE 3010, MTSE 3030, MTSE 3050 and MTSE 3070)

 A personal statement, curriculum vitae and two letters of recommendation from materials science and engineering faculty members

The student's application will be reviewed by both undergraduate and graduate advisors. Once approved, the student must apply to the Toulouse Graduate School within the first semester of their senior year.

### Program policies

After completing at least 90 credit hours and after authorization from undergraduate and graduate advisors, the student may begin taking graduate courses as electives for the BS requirements. Students should earn a B or higher in these graduate courses to be counted toward the MS degree.

Students admitted to the grad track option will be admitted to the MS on a conditional basis. Once the student has satisfied all course work for the BS degree and maintained a GPA of 3.0 or higher, he or she will be fully admitted to the MS program with all the rights and privileges of a graduate student.

The student must enroll in the graduate school in the long semester after finishing the BS degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in the graduate school in the long semester after finishing the BS degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

The student will be awarded the BS degree immediately upon successful completion of the requirements for the undergraduate degree.

## Program requirements

Students in the grad track option may choose 9 hours from the following graduate level courses to replace electives in the BS degree:

- MTSE 5070 Tribology of Materials
- MTSE 5200 Advanced Concepts of Metallurgical Science
- MTSE 5300 Science and Technology of Modern Ceramics
- MTSE 5400 Advanced Polymer Physics and Chemistry
- MTSE 5560 Compound Semiconductor Materials and Devices
- MTSE 5620 Scanning Electron and Ion Microscopy
- MTSE 5710 Computational Materials Science

If the student wishes to take other graduate courses to satisfy the grad track option requirements, he or she will need to obtain approval from both the undergraduate and graduate advisors in materials science and engineering. Students should earn a B or higher in these courses in order to be counted toward the MS degree.

See the Materials Science and Engineering, BS for the remainder of the requirements for the bachelor's degree.

## Materials Science and Engineering, BS with grad track option leading to Materials Science and Engineering, PhD

This grad track option is a BS to PhD accelerated program for undergraduate students. The students can take a maximum of 12 credit hours of graduate courses while completing the BS degree. These credits will be counted toward first the BS and then, following graduation, be transferred to the PhD degree.

The following is the step-by-step process:

- Student applies for the grad track to PhD option in the junior year (having completed at least 75 credit hours with a GPA of 3.5 or higher).
- After the application is approved and the student has completed at least 90 credit hours, the student can start taking the gradate courses that are approved for the grad track to PhD option as MTSE electives for the BS degree

- requirement. For the graduate courses to be counted toward the PhD degree later, the student must meet the minimum grade requirements of the courses in the PhD program.
- The student applies to the Toulouse Graduate School within the first semester of the senior year. The student needs to submit online application and all required documents for admission to the PhD MTSE program.
- 4. The student must enroll in the graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her PhD degree. If the student did not enroll in the graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will no longer be counted for the PhD degree even if the student comes back for graduate school in the future.
- Students in the BS-to-MS grad track program can apply to transfer to the BS-to-PhD grad track program any time with departmental approval.
- Once admitted to the PhD program, the student will have higher priority for funding (research and teaching assistantships) to support PhD study.

## Program requirements

Students may choose up to 12 hours from the following list of courses.

- MTSE 5000 Thermodynamics of Materials
- MTSE 5010 Bonding, Structure and Crystallography
- MTSE 5020 Mechanical Properties of Materials
- MTSE 5070 Tribology of Materials
- MTSE 5200 Advanced concepts in metallurgical science
- MTSE 5300 Science and Technology of Modern Ceramics
- MTSE 5400 Advanced Polymer Physics and Chemistry
- MTSE 5500 Electronic, Optical, and Magnetic Materials
- MTSE 5520 Physical and Chemical Basis of Integrated Circuit Fabrication
- MTSE 5560 Compound Semiconductor Materials and Devices
- MTSE 5610 Fundamentals of Surface and Thin Film Analysis
- MTSE 5620 Scanning Electron and Ion Microscopy
- MTSE 5710 Computational Materials Science

Students must also complete all other courses required for the Materials Science and Engineering, BS.

#### **Minors**

## Materials Science and Engineering minor

The minor in materials science and engineering requires a total of 18 semester credit hours:

## Required

- MTSE 3000 Fundamentals of Materials Science and Engineering - I
- Plus 15 hours of materials science and engineering courses, at least 6 of which should be chosen from the four core courses:

#### Core courses

- MTSE 3010 Bonding and Structure
- MTSE 3030 Thermodynamics and Phase Diagrams
- MTSE 3050 Mechanical Properties of Materials
- MTSE 3070 Electrical, Optical and Magnetic Properties of Materials

## Additional requirements

The remaining hours can be from any other 3000- or 4000-level materials science engineering courses.

# Department of Mechanical Engineering

Main Departmental Office Discovery Park, Room F115

3940 N. Elm Street, Suite F115 Denton, TX 76207-7102 940-565-2022 Fax: 940-565-2666

Web site: mechanical.engineering.unt.edu

#### Kuruvilla John, Professor and Chair

Seifollah Nasrazadani, Senior Director - Technology and Management

#### Faculty

The Department of Mechanical Engineering at the University of North Texas was created in the fall of 2020 when the Department of Engineering Technology merged with the Department of Mechanical and Energy Engineering. The Department of Mechanical Engineering is committed to academic excellence in undergraduate and graduate education and research in all areas pertinent to the discipline of mechanical engineering and in particular to construction engineering, energy and engineering management. The goals of the Department and its faculty are: (1) to provide high quality and innovative educational programs at the undergraduate and graduate levels; (2) to foster lifelong learning by promoting professionalism and ethical standards and helping students develop leadership qualities; (3) to pursue excellence in scholarly research in areas of mechanical engineering; and (4) to collaborate with engineers in industry, national laboratories, and government agencies in finding the solutions to national and global problems.

#### **Degree programs**

The department offers several undergraduate programs leading to the following degrees:

- Bachelor of Science in Engineering Technology (BSET) with a major in construction engineering technology
- Bachelor of Science in Engineering Technology (BSET) with a major in mechanical engineering technology
- Bachelor of Science (BS) with a major in mechanical and energy engineering

### **Majors**

## **Construction Engineering Technology, RSFT**

A Bachelor of Engineering Technology with a major in construction engineering technology is an applied degree for a career in engineering featuring a unique 50/50 mix of construction engineering and construction management to make you competitive in today's construction industry. Build a 6x6x7 house during your first year. Expand your Senior-Year Capstone project and consider the Grad-Track option to earn the BSET and MSET in 5 years.

The construction engineering technology major provides educational experiences for the development of technical knowledge and skills necessary in today's construction industry. The program provides education in both the management and technical aspects, thus providing optimum opportunities for employment. The program builds on a strong foundation in mathematics, science, engineering and general education. Knowledge and skills relative to the construction field such as surveying, cost estimating, construction materials, project scheduling, BIM, contracts and management, safety, and structures are acquired. Technical and management

skills are enhanced through courses offered by other engineering technology programs and the College of Business. The development of technical communication and presentation skills is a requirement throughout the curriculum.

Construction engineering technology is accredited by the Engineering Technology Accreditation Commission of ABET (www. abet.org)

#### **Program Education Objectives**

- 1. Students in graduate school
- 2. Employment in Construction Industry
- 3. Position in Construction Related Engineering Design Firms
- 4. Management Position in Construction Industry
- Achievement of Professional Designation, i.e., Professional Engineer; LEED AP; Certified Professional Contractor
- 6. Officer of Professional Association related to Construction Industry

#### **Student Outcomes**

- Estimating costs, estimating quantities, and evaluating materials for construction projects. (ABET 1)
- Utilizing measuring methods, hardware, and software that are appropriate for field, laboratory, and office processes related to construction. (ABET 1)
- Applying fundamental computational methods and elementary analytical techniques in sub-disciplines related to construction engineering. (ABET 1)
- Producing and utilizing design, construction, and operations documents. (ABET 1)
- Performing economic analysis and cost estimates related to design, construction, and maintenance of systems associated with construction engineering. (ABET 1)
- Selecting appropriate construction material and practices. (ABET 1)
- Applying appropriate principles of construction management, law, and ethics. (ABET 2)
- 8. Performing standard analysis and design in a least one subdiscipline related to construction engineering. ((ABET 4)
- Designing systems, components, or processes for broadly defined engineering technology problems appropriate to program educational objectives. (ABET 2)
- 10. Functioning effectively as a member or leader on a technical team. (ABET 5)
- Applying written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature. (ABET 3)
- An understanding of the need for and an ability to engage in self-directed continuing professional development.
- Knowing the impact of engineering technology solutions in a societal and global context. (ABET 2)
- A commitment to quality, timeliness, and continuous improvement.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science in Engineering Technology with a major in construction engineering technology.

## Hours required and general/college requirements

A minimum of 124 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering requirements.

## Major requirements, 75 hours

75 hours, chosen with the advice of an academic advisor within the department.

- ACCT 2010 Accounting Principles I (Financial Accounting)
- BCIS 3610 Basic Information Systems
- BLAW 3430 Legal and Ethical Environment of Business
- BLAW 4770 Real Estate Law and Contracts
- CNET 1160 Construction Methods and Materials \*
- CNET 2180 Building Construction Techniques \*
- CNET 2300 Construction Graphics and Modeling \*
- CNET 3150 Construction Contract Documents
- CNET 3160 Construction Cost Estimating
- CNET 3190 Construction Scheduling
- CNET 3410 Occupational Safety and Liability
- CNET 3430 Structural Analysis
- CNET 3440 Steel Structures
- CNET 3460 Soils and Foundations
- CNET 3480 Structural Design with Concrete, Timber and Other Materials
- CNET 4170 Construction Management
- CNET 4180 Problems in Project Management
- CNET 4620 Advanced Design in Cold-Formed Steel Structures
- CNET 4780 Senior Design I
- CNET 4790 Senior Design II
- ECON 1100 Principles of Microeconomics
- ENGR 2301 Statics
- ENGR 2332 Mechanics of Materials
- OPSM 3830 Operations Management
- 4 hours of technical electives

## Other requirements

- A grade of C or better is required for all major courses and elective courses counting toward the major.
- Courses taken to satisfy the technical options in the major must be approved by the academic advisor.

#### Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

## Other requirements

The mathematics courses needed are listed below:

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- ENGR 1030 Technological Systems \*\*\*
- PHYS 1710 Mechanics \*\*\* and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism \*\*

- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- CHEM 1410 General Chemistry for Science Majors
- CHEM 1430 Laboratory Sequence for General Chemistry
- TECM 2700 Technical Writing \* (required instead of ENGL 1320)

#### Foundation course

CNET foundation courses are MATH 1710, PHYS 1710, PHYS 1730, ENGR 1030, TECM 2700, CNET 1160, CNET 2180, and CNET 2300

Successful completion of foundation courses is based on achieving a C or higher in each course.

## Major transfer policy

Students enrolled at UNT can transfer into Construction Engineering Technology if they have completed the following courses with a C or better and a cumulative GPA of at least 2.5. The courses are: MATH 1710, CNET 1160, ENGR 1030, PHYS 1710/PHYS 1730, CNET 2180, and TECM 2700.

Successful completion of foundation courses is based on achieving a C or higher in each course.

## Department policies

#### Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

## **Construction Management, BS**

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Engineering requirements.

## Major requirements

Major of 52 hours, including:

- CNET 1160 Construction Methods and Materials
- CNET 2180 Building Construction Techniques
- CNET 2200 Surveying for Construction
- CNET 2300 Construction Graphics and Modeling
- CNET 3150 Construction Contract Documents
- CNET 3160 Construction Cost Estimating
- CNET 3190 Construction Scheduling
- CNET 3410 Occupational Safety and Liability
- CNET 3430 Structural Analysis
- CNET 3445 Steel Structures
- CNET 3465 Soils and Foundations
- CNET 3485 Structural Design with Concrete, Timber and other Materials
- CNET 4170 Construction Management
- CNET 4180 Problems in Project Management
- CNET 4625 Advanced Design in Cold-Formed Steel Structures
- CNET 4630 Construction Management for Mechanical, Electrical and Plumbing (MEP) Systems
- CNET 4785 Senior Design I
- CNET 4795 Senior Design II

## Other course requirements

- BLAW 3430 Legal and Ethical Environment of Business
- BLAW 4770 Real Estate Law and Contracts
- ENGR 1030 Technological Systems
- MGMT 3820 Management Concepts
- MGMT 3850 Foundations of Entrepreneurship
- MATH 1190 Business Calculus
- MATH 1710 Calculus I
- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I
   or
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II or
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- 9 additional hours of tech elective in consultation with advisor

#### Minor

No minor is required.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

## Other requirements

A grade of C or better is required for all major courses and elective courses counting toward the major.

## Department policies

Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion is a 2.5 GPA for all engineering foundation courses with a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

## Mechanical and Energy Engineering, BS

The Bachelor of Science with a major in mechanical and energy engineering combines the fundamentals of mechanical engineering with a broad specialization in subjects related to energy, manufacturing and design.

The Bachelor of Science degree with a major in mechanical and energy engineering follows an interdisciplinary and innovative curriculum that combines essentials of the classical discipline of mechanical engineering with the deeper knowledge of the dynamic field of energy studies. Thus, the BS degree combines the fundamentals of mechanical engineering with a broad specialization on subjects related to energy production, management, and distribution. The goal of the mechanical and energy engineering department is to provide a curriculum and course of training that will prepare undergraduates not only for today's challenges, but also for future challenges in a fast-paced, global, and diverse society. As a consequence, this program emphasizes the fundamentals, modern methods, processes and technologies of engineering science. It also gives students the tools to learn by themselves and to pursue lifelong learning. Graduates of this program are well-prepared for industry careers and pursuit of advanced engineering degrees.

The mechanical and energy engineering curriculum is very broad. It is similar to a traditional mechanical engineering curriculum with the notable addition of several required energy-related courses and elective courses that emphasize energy applications and materials. In their first year, students in this program will take preparatory courses in mathematics and the basic sciences, including physics, and chemistry. The required upper-division engineering courses are in the broad areas of energy-thermal-fluid science; mechanics and materials; dynamics, design and controls; and environmental impact of energy production and use. Technical elective courses range from alternative energy to nuclear power. The program also emphasizes studies in the humanities and social sciences, artistic ingenuity, professionalism, technical communication and engineering ethics.

The department also offers unique curriculum-integrated enrichment opportunities including undergraduate research, co-ops, and study abroad exchanges with international partner schools. Minors that provide breadth of experience from other disciplines, including mathematics and hospitality management, can also be integrated seamlessly into the department's four-year bachelor's degree plan.

The Bachelor of Science degree with a major in mechanical and energy engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET (abet.org), (111 Market Place, Suite 1050, Baltimore, MD 21202; 410-347-7700).

## **Program educational objectives**

- Graduates are successfully employed in mechanical and/or energy engineering positions and other related fields.
- Graduates engage in lifelong learning demonstrated by advanced education, professional development activities and/or other career-appropriate options.
- Graduates are prepared to successfully demonstrate technical and leadership competence through ethical conduct, teaming, communication and/or problem-solving skills learned in our program.

#### **Student outcomes**

Upon completion of the Bachelor of Science with a major in mechanical and energy engineering, students are enabled to achieve the following outcomes:

1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

3. an ability to communicate effectively with a range of audiences

4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

#### Degree requirements

## Hours required and general/college requirements

A minimum of 127 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering requirements.

## Major requirements

## Engineering fundamentals requirements

A minimum of 10 credit hours of

- ENGR 1304 Engineering Graphics
- ENGR 2405 Circuit Analysis or
- EENG 2610 Circuit Analysis
- MTSE 3000 Fundamentals of Materials Science and Engineering - I
- MTSE 3003 Fundamentals of Materials Science and Engineering Laboratory

### Major requirements

A minimum of 50 credit hours, including

- MEEN 1000 Discover Mechanical and Energy Engineering
- MEEN 2110 Engineering Data Analysis
- MEEN 2210 Thermodynamics I
- MEEN 2240 Programming for Mechanical Engineers
- MEEN 2301 Mechanics I
- MEEN 2302 Mechanics II
- MEEN 2332 Mechanics III
- MEEN 3100 Manufacturing Processes
- MEEN 3110 Thermodynamics II
- MEEN 3120 Fluid Mechanics
- MEEN 3130 Machine Elements
- MEEN 3210 Heat Transfer
- MEEN 3230 System Dynamics and Control
- MEEN 3240 Mechanical and Energy Engineering Laboratory I
- MEEN 3242 Mechanical and Energy Engineering Laboratory II
- MEEN 3250 Analytical Methods for MEE Engineers
- MEEN 4150 Mechanical and Energy Engineering Systems Design I
- MEEN 4250 Capstone Design in Mechanical and Energy Engineering

## Energy engineering electives

6 semester credit hours from the following courses

- MEEN 3125 Thermal Engineering Projects
- MEEN 4110 Renewable Energy
- MEEN 4112 Fundamentals of Nuclear Engineering
- MEEN 4300 Intermediate Thermodynamics
- MEEN 4310 Intermediate Heat Transfer
- MEEN 4315 Nanoscale Energy Transport Process
- MEEN 4320 Building Energy Systems
- MEEN 4330 Introduction to Combustion Science and Engineering
- MEEN 4332 Fundamentals of Air Pollution Engineering
- MEEN 4335 Computational Simulation of Building Energy Systems
- MEEN 4340 Energy Efficiencies and Green Building Design for Commercial Buildings
- MEEN 4350 Energy Efficiencies and Green Building for Residential Buildings
- MEEN 4410 Energy Harvesting System Design
- MEEN 4810 Topics in Mechanical and Energy Engineering

#### Technical electives

6 semester credit hours from the following courses

- MEEN 4120 Aerospace Fundamentals
- MEEN 4130 Failure of Deformable Bodies
- MEEN 4140 Finite Element Analysis
- MEEN 4151 Manufacturing of Renewable Biocomposites for Lightweight Energy Efficient Structure
- MEEN 4152 Composites and Lightweight Structures
- MEEN 4160 Mechanical Vibrations
- MEEN 4415 Smart Materials and Structures

- MEEN 4488 Introduction to Microfluidics
- MEEN 4510 Electronic Manufacturing Technologies
- MEEN 4800 Topics in Mechanical and Energy Engineering
- MEEN 4930 Undergraduate Research
- MFET 4190 Quality Assurance

## Other required courses

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- CHEM 1415 General Chemistry for Engineering Majors

or

- CHEM 1410 General Chemistry for Science Majors
- CHEM 1435 General Chemistry Laboratory for Engineering Majors

or

- CHEM 1430 Laboratory Sequence for General Chemistry
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- TECM 2700 Technical Writing

#### Minor

None required.

## Other requirements

### Foundation courses

MEEN foundation courses include MEEN 1000, MEEN 2210, MEEN 2301, MEEN 2302, ENGL 1310 or TECM 1700, MATH 1710, PHYS 1710/PHYS 1730.

Successful completion of foundation courses is based on achieving a C or higher in each course.

### Major transfer policy

Students enrolled at UNT can transfer into Mechanical and Energy Engineering if they have completed the following courses with a C or better and a cumulative GPA of at least 2. 5. The courses are: MEEN 1000, ENGL 1310 or TECM 1700, MATH 1710, MATH 1720, PHYS 1710 and PHYS 1730, TECM 2700.

#### Department policies

Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the

college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed. Successful completion for all engineering foundation courses is a C or better in each course.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for degree completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog. "

## Mechanical Engineering Technology, BSET

A Bachelor of Science in Engineering Technology with a major in mechanical engineering technology is an applied degree for a career in engineering, mechanical systems, materials, and manufacturing. Earn a Certificate in Manufacturing Engineering Technology or in Nuclear Power Technology and be even more competitive for a wider array of job opportunities with engineering firms. Expand your Capstone project and consider the Grad-Track option to earn the BSET and MSET in 5 years.

The mechanical engineering technology major is built upon a strong foundation of science, mathematics and technical course work designed to meet the diverse needs of the mechanical engineer. Mechanical engineering technology concepts are used in all types of industry and are applied directly to product and tool design and to assist in the manufacturing process. Courses in computer-aided design, product design and development, manufacturing processes and materials, fluid and thermal sciences and quality assurance provide the student with a broad range of applications for the pursuit of a career in mechanical engineering technology.

Mechanical engineering technology is accredited by the Engineering Technology Accreditation Commission of ABET (abet.org), (111 Market Place, Suite 1050, Baltimore, MD 21202; 410-347-7700).

#### **Program Education Objectives**

- Graduates are expected to perform all functions assigned to a Mechanical Engineering Technologist in the following areas of mechanical engineering practice including mechanical, thermal, and fluid systems design, materials and manufacturing processes,
- Graduates are expected to demonstrate an ability to define, formulate, and solve mechanical engineering problems through the application of competent technical and ethical capabilities.
- Graduates are expected to exercise communication and teamwork skills, demonstrate an appreciation of local and global social values, and display an understanding of the social, technical, and environmental implications of technology.

 Graduates are expected to demonstrate continued professional advancement through life-long learning opportunities, in-service training, and engagement with professional organizations.

#### **Student Outcomes**

- Graduates have an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines. (ABET 1)
- Graduates have an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology. (ABET 1)
- Graduates have an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes. (ABET 4)
- Graduates have an ability to apply creativity in the design of systems, components or processes appropriate to program objectives. (ABET 2)
- Graduates have an ability to function effectively on teams. (ABET 5)
- Graduates have an ability to identify, analyze and solve technical problems. (ABET 1)
- Graduates have an ability to communicate effectively. (ABET 3)
- Graduates have a recognition of the need for, and an ability to engage in lifelong learning.
- Graduates have an ability to understand professional, ethical and social responsibilities.
- Graduates have a respect for diversity and a knowledge of contemporary professional, societal and global issues.
- Graduates have a commitment to quality, timeliness, and continuous improvement.

## **Degree requirements**

## Hours required and general/college requirements

A minimum of 123 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Engineering requirements.

## Major requirements, 74 hours

74 hours, chosen with the advice of an academic advisor within the department.

- MEET 3550 Geometrical Dimensioning and Tolerancing
- MEET 3650 Design of Mechanical Components
- MEET 3940 Fluid Mechanics Applications
- MEET 3990 Applied Thermodynamics
- MEET 4050 Mechanical Design
- MEET 4350 Heat Transfer Applications
- MEET 4360 Experimental Thermal Sciences
- MEET 4780 Senior Design I
- MEET 4790 Senior Design II
- EENG 2610 Circuit Analysis
- EENG 2611 Circuit Analysis Lab
- ENGR 1304 Engineering Graphics \*
- ENGR 2301 Statics \*
- ENGR 2302 Dynamics
- ENGR 2332 Mechanics of Materials
- ENGR 3450 Engineering Materials

- MFET 3110 Machining Principles and Processes
- MFET 4190 Quality Assurance
- MFET 4200 Engineering Cost Analysis
- MFET 4210 CAD/CAM System Operations
- ELET 3980 Digital Control of Industrial Processes
- CSCE 1030 Computer Science I
- 3 hours of technical electives
- 6 hours of advanced technical electives

## Other course requirements

The mathematics courses needed are listed below:

- MATH 1710 Calculus I \*
- MATH 1720 Calculus II
- ENGR 1030 Technological Systems \*\*
- PHYS 1710 Mechanics \*\*\* and
- PHYS 1730 Laboratory in Mechanics \*
- PHYS 2220 Electricity and Magnetism \*\* and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- CHEM 1410 General Chemistry for Science Majors
   \*\* and
- CHEM 1430 Laboratory Sequence for General Chemistry
- TECM 2700 Technical Writing \* is required instead of ENGL 1320

### Notes

- \* satisfies MEET foundations requirement
- \*\* may be used to satisfy a portion of the University Core Curriculum
- \*\*\* satisfies MEET foundations requirement; also may be used to satisfy a portion of the University Core Curriculum

#### Minor

Optional.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Engineering.

## Other requirements

#### Foundation courses

MEET foundation courses include ENGR 1304, ENGR 2301, ENGL 1310 or TECM 1700, MATH 1710, PHYS 1710, PHYS 1730, TECM 2700

Successful completion of foundation courses is based on achieving a C or higher in each course.

## Major transfer policy

Students enrolled at UNT can transfer into Mechanical Engineering Technology if they have completed the following courses with a C or better. The courses are: ENGR 1304, ENGL 1310 or TECM 1700, MATH 1710, PHYS 1710, PHYS 1730, TECM 2700.

### Department policies

## Policy on Academic Performance, Progression, and Dismissal in the College of Engineering

Students in the College of Engineering will conduct themselves in a professional manner in their interaction with their peers, faculty, staff and the community in general. A student may be dismissed from the college for inappropriate conduct (please refer to the Code of Student Conduct).

Each semester, students are required to take engineering foundation courses and/or prerequisites to the engineering foundation courses until all foundation courses are successfully completed.

Successful completion of the foundation courses is required for enrollment in all 3000 and 4000 level courses.

A minimum grade of C is required in all courses required in a student's major for prerequisite completion. Courses include, but are not limited to, engineering, computing, mathematics, laboratory sciences, supporting area, technical elective, technical option, energy elective, and specialization courses.

A student making grades lower than C two times in the same course in any College of Engineering foundation course or in any course required by the major is subject to dismissal from the College of Engineering, pending a review by the Associate Dean for Undergraduate Studies in the College of Engineering.

A student must maintain good academic standing within the university. Please see "Academic status" and "Regulations governing students under academic suspension" in the Academics section of this catalog."

### **Grad Track Options**

# Construction Engineering Technology, BSET with grad track option leading to Engineering Technology, MS

The Department of Engineering Technology offers a grad track option for currently enrolled UNT undergraduate students majoring in construction engineering technology (CNET).

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

## Admission requirements and program policies

#### Admission requirements

Students applying to the grad track option should be majors in the construction engineering technology BSET program. Students are eligible to apply to the grad track option during their junior year. Approval will be considered after the student has completed at least 75 credit hours (a benchmark of eligibility is whether or not the student is ready to take CNET 4780 - Senior Design I in the following fall semester). Other requirements include:

- A cumulative GPA of 3.5 or higher is required at the time of application.
- Two letters of recommendation from construction engineering technology faculty members

The student's application will be reviewed by both the CNET undergraduate and graduate advisors. Once approved, the student must apply to the Toulouse Graduate School within the first semester of their senior year.

## Program policies

After completing at least 90 credit hours, the student is eligible to take specified graduate courses for credit toward the BSET and the MS with a major in engineering technology. Students should earn a B or higher in these courses to be counted toward the MS.

Students admitted to the grad track option will be conditionally admitted to the MS program. Students who satisfy all requirements of the BSET and who maintain a 3.0 or higher GPA will be fully admitted to the MS program.

Undergraduate students who have been accepted to the grad track option should complete all BSET degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses or enrollment in graduate-level course work will be suspended.

Students must enroll in graduate school in the long semester after finishing his or her BSET and should take the remaining graduate courses in the following year(s) to compete the MS. If the student does not enroll in graduate school in the long semester after finishing the BSET degree, those graduate course credit hours will not be counted for the MS degree even if the student comes back for graduate school in the future.

## Program requirements

Students in the grad track option must register for three graduate courses:

- MGMT 5240 Project Management
- MSET 5800 Studies in Engineering Technology

Plus one elective course selected from the following with the approval of the advisor:

- MSET 5200 Advanced Construction Scheduling
- MSET 5220 Building Information Modeling
- MSET 5230 Risk Management in Construction
- MSET 5900 Special Problems

The three graduate courses will replace CNET 4180, CNET 4620, and one technical elective.

See the BSET in Construction Engineering Technology for the remainder of the requirements for the bachelor's degree.

## Mechanical and Energy Engineering, BS with grad track option leading to Mechanical and Energy Engineering, MS

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

## Admission requirements and program policies

#### Application requirements and procedures

- Mechanical and energy engineering major.
- Junior status (must have completed at least 75 credit hours and be ready to enroll in the MEE Senior Design course the following fall semester).
- Minimum cumulative GPA of 3.3 at the time of application submission, with an average grade of 3.5 or higher for MEE core courses (MEEN 2210, MEEN 3110, MEEN 3120, MEEN 3250).
- Two letters of recommendation from MEE faculty members.
- The student's application will be reviewed by both the MEE undergraduate advisor and the MEE graduate advisor.

 Once the application is approved by the MEE advisors, the student must apply to the Toulouse Graduate School within the first semester of the senior year.

## Application procedures and program policies

The student must earn a grade of B or higher in each graduate course for the course to be counted toward the master's degree.

- After being admitted to the grad track program and having completed at least 90 credit hours, the student can start taking the specified graduate courses in place of the technical electives or energy electives in the bachelor's program.
- The student admitted to the grad track option will be admitted into the master's program on a conditional basis.
- Once the student has satisfied all course work for the bachelor's degree and maintained a 3.0 GPA or higher, he or she will be fully admitted into the master's program.

#### Policies related to completion of programs

- The student accepted to the grad track option should complete all requirements for the bachelor's degree and graduate within 12 months from the beginning of the semester in which first enrolled in a graduate course.
   If requirements are not completed within 12 months, enrollment in graduate-level courses will be suspended.
- The student must enroll in the graduate program the long semester after finishing the bachelor's degree and should take the remaining graduate-level courses in the following year(s) to complete the Master of Science with a major in mechanical and energy engineering. If the student does not enroll in the graduate program the long semester immediately following completion of the bachelor's degree, the graduate-level courses applied to the undergraduate degree may not be counted toward the Master of Science even if the student returns to UNT for graduate school in the future.

## Program requirements

Graduate courses that may be applied to the bachelor's degree:

- MEEN 5300 Advanced Thermodynamics (fall semester of year four)
- MEEN 5110 Alternative Energy Sources (spring semester of year four)
- MEEN 5315 Nanoscale Energy (spring semester of year four)

The above courses substitute for the following requirements of the bachelor's degree:

 the corresponding number of hours of technical and/or energy electives

See the Bachelor of Science with a major in mechanical and energy engineering for the remainder of the requirements for the bachelor's degree.

**Note**: The graduate courses taken in year four may be changed only if approved by both the MEE undergraduate coordinator and the MEE graduate advisor.

## Mechanical and Energy Engineering, BS with grad track option leading to Mechanical and Energy Engineering, PhD

The following is the step-by-step process:

 Student apply for the grad track with the BS to PhD grad track option in the junior year (having completed at least 75 credit hours with a GPA of 3.5 or higher).

- 2. After the application is approved and have completed at least 90 credit hours, the student can start taking the graduate courses that are approved for grad track with the BS to PhD grad track option as MEE electives for the BS degree requirement. For the graduate courses to be counted for the PhD degree later, the student must meet the minimum grade requirements of the courses in the PhD program.
- The student applies to the Toulouse Graduate School within the first semester of the senior year. The student needs to submit an online application and all required documents for admission to the PhD in MEE program.
- 4. The student must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her PhD degree. If the student did not enroll in graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will no longer be counted for the PhD degree, even if the student comes back for graduate school in the future.
- Students in the BS-to-MS grad track option can apply to transfer to the BS-to-PhD grad track option any time with departmental approval.
- TGS will be consulted for cases when students enrolled in the BS program with the BS-to-MS grad track option are transferred to the program with the BS-to-PhD grad track option.
- Once admitted to the PhD program, the student will have higher priority for funding (research and teaching assistantships) to support PhD study.

## Program requirements

Students may choose up to 12 hours from the following list of courses.

## 1. Materials and Manufacturing (Material Reliability and Manufacturing)

Required core courses

- MEEN 5410 Advanced Solid Mechanics
- MEEN 5520 Advanced Manufacturing (or Bioproducts or Automotive Manufacturing)
- MEEN 5800 Topics in Mechanical and Energy Engineering: Experimental Design
- MTSE 5100 Fundamental Concepts of Materials Science or MEEN 5440 Finite Element Analysis

#### Electives

- MEEN 5440 Finite Element Analysis
- MEEN 5152 Mechanics of Composites and Foams for Lightweight Structures
- MEEN 5420 Continuum Mechanics
- MTSE 5020 Mechanical Properties of Materials
- MTSE 5400 Advanced Polymer Physics and Chemistry
- MTSE 5550 Materials and Mechanics for MEMS Devices
- MTSE 5710 Computational Materials Science
- MTSE 6110 Applied Fracture Mechanics

#### 2. Mechanical Systems and Design

Required core courses

- MEEN 5140 Advanced Mathematical Methods for Engineers
- MEEN 5410 Advanced Solid Mechanics
- MEEN 5600 Feedback Control of Dynamic Systems
- MEEN 5640 Applied Engineering Vibrations\* (Cross listed as MFET 5140)

#### Electives

- MEEN 5440 Finite Element Analysis
- MEEN 5800 Topics in Mechanical and Energy Engineering: Experimental Design

- MEEN 5152 Mechanics of Composites and Foams for Lightweight Structures
- MEEN 5610 Sensors & Actuators
- MEEN 5800 Topics in Mechanical and Energy Engineering: Geothermal Heat Pumps
- MEEN 6200 Theory of Elasticity
- MTSE 6110 Applied Fracture Mechanics

#### 3. Modeling and Simulation

#### Required core courses

- MEEN 5140 Advanced Mathematical Methods for Engineers
- MEEN 5440 Finite Element Analysis
- MEEN 5220 Computational Fluid Dynamics and Heat Transfer\*
- MEEN 6000 Advanced Numerical Methods (or MTSE 5710 or CSCE 5230)

#### Electives

- MEEN 5311 Convective Heat Transfer II\*
- MEEN 5340 Advanced Fluid Mechanics\*
- MEEN 5420 Continuum Mechanics\*\*
- MEEN 5410 Advance Solid Mechanics
- MEEN 5315 Nanoscale Energy Transport
- CSCE 5160 Parallel Processing and Algorithms
- CSCE 5230 Methods of Numerical Computation
- CSCE 5420 Software Development
- CSCE 5810 Biocomputing
- MTSE 5710 Computational Materials Science\*\*

*Note*:Every student under the Modeling and Simulation track will pick from electives a group of courses either in the area of machanics (\*\*) or in the area of thermal-fluid sciences (\*), or both.

#### 4. Thermal-Fluid Systems

#### Required core courses

- MEEN 5140 Advanced Mathematical Methods for Engineers
- MEEN 5300 Advanced Thermodynamics
- MEEN 5311 Convective Heat Transfer II
- MEEN 5340 Advanced Fluid Mechanics

#### Electives

- MEEN 5000 Energy: The Fundamentals
- MEEN 5110 Alternative Energy
- MEEN 5200 Principles of HVAC
- MEEN 5220 Computational Fluid Dynamics and Heat Transfer
- MEEN 5310 Conduction and Radiation Heat Transfer
- MEEN 5315 Nanoscale Energy Transport
- MEEN 5330 Combustion Science and Engineering
- MEEN 5800 Topics in Mechanical and Energy Engineering: Geothermal Heat Pumps

#### 5. Energy

#### Required core courses

- MEEN 5000 Energy: The Fundamentals
- MEEN 5110 Alternative Energy
- MEEN 5800 Energy Harvesting
- MEEN 5140 Advanced Mathematical Methods for Engineers

#### Electives

- MEEN 5112 Nuclear Energy
- MEEN 5150 Thermal Energy Storage Systems and Applications

- MEEN 5200 Principles of HVAC
- MEEN 5240 Energy: A World Perspective
- MEEN 5310 Conduction and Radiation Heat Transfer
- MEEN 5330 Combustion Science and Engineering
- MEEN 5332 Air Pollution Control Engineering
- MEEN 5800 Topics in Mechanical and Energy Engineering: Geothermal Heat Pumps
- MEEN 5210 Solar Energy
- BIOL 6341 Advanced Environmental Impact Assessment
- EENG 5940 Renewable Electrical Power Systems

All remainning courses for the Mechanical and Energy Engineering, BS must be completed.

## Mechanical Engineering Technology, BSET with grad track option leading to Engineering Technology, MS

The Department of Engineering Technology offers a grad track option for currently enrolled UNT undergraduate students majoring in mechanical engineering technology (MEET).

In this grad track option, the student can take a maximum of nine (9) credit hours of graduate courses while completing the BS degree. After earning the BS degree, these credit hours can be counted toward the MS degree. Prior to registering for these courses, the student must be admitted to the grad track option and obtain approvals from the undergraduate and graduate coordinators.

#### **Program Education Objectives**

- Graduates are expected to perform all functions assigned to a Mechanical Engineering Technologist in the following areas of mechanical engineering practice including mechanical, thermal, and fluid systems design, materials and manufacturing processes,
- Graduates are expected to demonstrate an ability to define, formulate, and solve mechanical engineering problems through the application of competent technical and ethical capabilities.
- Graduates are expected to exercise communication and teamwork skills, demonstrate an appreciation of local and global social values, and display an understanding of the social, technical, and environmental implications of technology
- Graduates are expected to demonstrate continued professional advancement through life-long learning opportunities, in-service training, and engagement with professional organizations.

#### **Student Outcomes**

- Graduates have an appropriate mastery of the knowledge, techniques, skills and modern tools of their disciplines,
- Graduates have an ability to apply current knowledge and adapt to emerging applications of mathematics, science, engineering and technology,
- Graduates have an ability to conduct, analyze and interpret experiments and apply experimental results to improve processes.
- Graduates have an ability to apply creativity in the design of systems, components or processes appropriate to program objectives.
- 5. Graduates have an ability to function effectively on teams,
- Graduates have an ability to identify, analyze and solve technical problems,
- 7. Graduates have an ability to communicate effectively,
- Graduates have a recognition of the need for, and an ability to engage in lifelong learning,
- Graduates have an ability to understand professional, ethical and social responsibilities,

- Graduates have a respect for diversity and a knowledge of contemporary professional, societal and global issues.
- 11. Graduates have a commitment to quality, timeliness, and continuous improvement.

## Admission requirements and program policies

## Admission requirements

Students applying to the grad track option should be majors in the mechanical engineering technology BSET program. Students are eligible to apply for the grad track option during their junior year, after completing at least 75 credit hours (a benchmark of eligibility is whether or not the student is ready to take MEET 4780 - Senior Design I in the following fall semester). Other requirements include:

- A cumulative GPA of 3.5. or higher is required at the time of application
- Two letters of recommendation from mechanical engineering technology faculty members

The student's application will be reviewed by both undergraduate and graduate advisors. Once approved, the student must apply to the Toulouse Graduate School within the first semester of their senior year.

### Program policies

After completing at least 90 credit hours, the student is eligible to take specified graduate courses for credit toward the BSET and MS degrees. Students should earn a B or higher in these courses to be counted toward the MS degree.

Students admitted to the grad track option will be conditionally admitted to the MS program. Students who satisfy all requirements of the BSET degree and who complete the graduate courses required toward the MS will be evaluated for unconditional admission to the MS degree program.

Undergraduate students who have been accepted to the grad track option should complete all BSET degree requirements and graduate within 12 months of the first day of the semester for which they began taking graduate courses or enrollment in graduate-level course work will be suspended.

The student must enroll in the graduate school in the long semester after finishing the BSET degree and should take the remaining graduate courses in the following year(s) to complete the MS degree. If the student does not enroll in the graduate school in the long semester after finishing the BSET degree, those graduate course credit hours will not be counted for the MS degree, even if the student comes back for graduate school in the future.

## Program requirements

Students in the grad track option must register for three graduate courses. These three courses will replace nine (9) hours of technical electives currently required in the MEET undergraduate program.

- MSET 5020 Design of Experiments
- MSET 5040 Analytical Methods in Engineering Technology

Plus one course selected from:

- MSET 5030 Product Design and Development
- MSET 5100 Nontraditional Manufacturing Processes
- MSET 5120 Computer-Integrated Manufacturing
- MSET 5150 Applications of Electron Microscopy and Failure Analysis
- MSET 5160 Creep and Fatigue in Engineering Design and Systems Performance
- MSET 5800 Studies in Engineering Technology
- MSET 5900 Special Problems
- Technical course substitution (with approval of major professor)

See the Mechanical Engineering Technology, BSET for the remainder of the requirements for the bachelor's degree.

#### **Minors**

## **General Engineering Technology minor**

The minor in general engineering technology requires 18 semester hours (6 advanced), chosen with approval of the engineering technology department chair.

Contact the Department of Engineering Technology for information on pre-approved minors in construction, electronics, mechanical and nuclear engineering technology.

## **Mechanical and Energy Engineering minor**

The minor in mechanical and energy engineering requires a total of 18 semester credit hours.

## Required courses, 9 hours

- MEEN 2210 Thermodynamics I
- MEEN 2302 Mechanics II or
- ENGR 2302 Dynamics
- MEEN 2332 Mechanics III or
- ENGR 2332 Mechanics of Materials

## Additional courses, 9 hours

Chosen from the following:

- MEEN 3100 Manufacturing Processes
- MEEN 3110 Thermodynamics II
- MEEN 3120 Fluid Mechanics
- MEEN 3130 Machine Elements
- MEEN 3210 Heat Transfer
- MEEN 3230 System Dynamics and Control
- MEEN 3240 Mechanical and Energy Engineering Laboratory I
- MEEN 3242 Mechanical and Energy Engineering Laboratory II
- MEEN 4110 Renewable Energy
- MEEN 4140 Finite Element Analysis
- Or other 3000- or 4000-level MEEN courses with the approval of MEE undergraduate advisor

#### **Certificates**

## Energy Assessment of Buildings professional certificate

This professional certificate program provides both traditional students and practicing professionals with a learning experience that enhances their capabilities in building energy assessment. The program focuses on both basic engineering science and practical applications of building energy assessment methods. The program will help students gain knowledge required towards certification for a building energy modeling professional by ASHRAE, AEE or other professional organizations. Interested applicants must contact the department chairperson or the coordinator prior to registering for the program.

The certificate will be awarded to students who successfully demonstrate competency in the following courses (some of which may require prerequisites or permission of the program coordinator):

## Required courses, 15 hours

- MEEN 3220 Thermal-Fluid Science for Buildings
- MEEN 4320 Building Energy Systems
- MEEN 4335 Computational Simulation of Building Energy Systems
- MEEN 4340 Energy Efficiencies and Green Building Design for Commercial Buildings
- MEEN 4350 Energy Efficiencies and Green Building for Residential Buildings

## **Undergraduate Academic Certificates**

## Electromechanical Systems and Mechatronics certificate

Electromechanical Systems and Mechatronics covers from basic circuits topic to controls.

Students who receive this certificate will have fundamental knowledge in controlling electromechanical systems. The Certificate will be administered by the college of engineering and is open to all majors on campus.

## Requirements, 12 hours

Students will need to complete 4 of the following courses to receive the certificate:

- EENG 2620 Signals and Systems
- EENG 3510 Electronics I (Devices and Materials)
- EENG 3520 Electronics II
- EENG 4310 Advanced Topics in Control Systems Design
- MEEN 2302 Mechanics II
- MEEN 3130 Machine Elements
- MEEN 3230 System Dynamics and Control
- MEEN 4760 Introduction to Robotics and Automation

## Manufacturing Engineering Technologies certificate

## Certificate requirements, 15 hours

#### Required courses

- MFET 3110 Machining Principles and Processes
- MFET 4190 Quality Assurance
- MFET 4200 Engineering Cost Analysis
- MFET 4210 CAD/CAM System Operations

#### **Electives**

#### Select one elective out of the following- four courses:

- MEET 3550 Geometric Dimensioning and Tolerancing
- MEET 3750 Digital Manufacturing
- MEET 4100 Fundamentals of Product and Process Design and Development
- MFET 4220 CNC Programming and Operation

# College of Health and Public Service

Main Office Chilton Hall, Room 289

Mailing address: 1155 Union Circle #311340 Denton, TX 76203-5017 940-565-2239 Fax: 940-565-4663

Web site: www.hps.unt.edu HPS Undergraduate Advising Chilton Hall, Room 112

Mailing address: 1155 Union Circle #305248 Denton, TX 76203-5017 940-565-4115 Fax: 940-565-2352

#### Nicole Dash, Dean

Chandra Carey, Academic Associate Dean Julia Heck, Associate Dean for Research

The College of Health and Public Service is composed of seven academic departments and several centers and community-based programs. Undergraduate and graduate degree programs focus primarily on applied behavioral and professional disciplines. Degree programs are designed to integrate theory and practice and include a strong emphasis on student participation in the Dallas-Fort Worth region and beyond. Graduates are prepared to address diverse and complex social issues such as aging, disability, disaster management and recovery, criminal justice, health disparities, and public safety, and find solutions to challenges in public administration, public health, and urban design. We have seven academic departments with undergraduate and graduate programs, the Center for Public Management, the UNT Speech and Hearing Center, UNT WISE and a number of professional development and clinical training programs to facilitate careers to address a global society. Further information on graduate degrees is available in the Graduate Catalog.

HPS students are trained to lead nonprofits, become educators, researchers and professionals who strengthen the diverse communities we serve, with thoughtful, inclusive, and equitable practices as audiologists, behavior analysts, city managers, emergency managers, health care administrators, public safety administrators, public health specialists, rehabilitation counselors, speech language pathologists, social workers, urban planners, and more.

Fields of study include gerontology, audiology, behavior analysis, criminal justice, emergency administration and planning, public administration, public health, rehabilitation, social work, speechlanguage pathology, nonprofit studies, urban policy and planning, and alternative dispute resolution.

Degree programs in the College of Health and Public Service require specific courses contained in parts of the University Core Curriculum (see "University Core Curriculum" in the Academics section of this catalog) to satisfy particular degree requirements. Students may consult academic advisors for a list of required courses. Students may be required to take extra courses if they fail to take these courses.

#### **Academic advising**

Students who select a major leading to an undergraduate degree within the College of Health and Public Service should contact HPS Undergraduate Advising to schedule an appointment.

Advisors help students select courses and answer questions concerning degree plans, application of transfer credit, individual career needs, and general academic requirements, policies and procedures.

#### **Programs of study**

The college offers undergraduate programs in the following areas:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Social Work

## Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree requirements and core requirements should consult an academic advisor.

#### **Bachelor of Arts**

Candidates for the Bachelor of Arts must meet the following requirements.

- Hours required and general/college requirements: A
  minimum of 120 semester hours, of which 42 must be
  advanced, and fulfillment of degree requirements for the
  Bachelor of Arts degree as specified in the "University Core
  Curriculum" in the Academics section of this catalog and
  the College of Health and Public Service requirements.
- Major requirements: Completion of all requirements for a major as specified by the respective department.
- 3. Other course requirements: See individual program.
- Minor requirements: Completion of all requirements for a minor as specified by the respective department.
- Electives: Varies with individual program. Any approved UNT courses the student and advisor deem appropriate to the degree may be selected. Caution must be exercised to ensure the student fulfills the university requirement of 42 hours of advanced-level course work.
- Other requirements: at least 24 hours of upper-division work in residence.

#### **Bachelor of Science**

Requirements for the Bachelor of Science degree include the following.

- Hours required and general/college requirements: A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements.
- Major requirements: Completion of all requirements for a major as specified by the respective department.
- 3. Other course requirements: See individual program.
- 4. Minor requirements: A minor, where required, of not fewer than 18 hours, including 6 hours of advanced work.
- Electives: Varies with individual program. Any approved UNT courses the student and advisor deem appropriate to the degree may be selected. Caution must be exercised to ensure the student fulfills the university requirement of 42 hours of advanced-level course work.
- 6. Other requirements: at least 24 hours of upper-division work in residence.

#### **Bachelor of Social Work**

Requirements for the Bachelor of Social Work degree include the following:

- Hours required and general/college requirements: A
  minimum of 120 semester hours, of which 42 must be
  advanced, and fulfillment of degree requirements for
  the Bachelor of Social Work degree as specified in the
  "University Core Curriculum" in the Academics section
  of this catalog and the College of Public Affairs and
  Community Service requirements.
- Major requirements: Completion of all requirements for a major as specified by the respective department.
- 3. Other course requirements: See individual program.
- Minor requirements: Completion of all requirements for a minor as specified by the respective department.
- Electives: Any approved UNT courses the student and advisor deem appropriate to the degree may be selected. Caution must be exercised to ensure the student fulfills the university requirement of 42 hours of advanced-level course work
- Other requirements: at least 24 hours of upper-division work in residence.

# Department of Audiology and Speech-Language Pathology

Main Departmental Office 907 W. Sycamore

Mailing address: 1155 Union Circle #305010 Denton, TX 76203-5017 940-565-2481 Fax: 940-565-4058

Website: aslp.hps.unt.edu

Kamakshi Gopal, Chair

**Faculty** 

The disciplines of Audiology and Speech-Language Pathology emphasize the scientific study of human auditory-verbal communication with reference to disorders involving speech, language and hearing. The emphasis of the department is to provide an educational and research setting where students learn models and theories of normal communicative function, and appropriate rationale, techniques and procedures for the evaluation and management of people with speech, language and hearing disorders.

In addition to classroom instruction in the area of normal and disordered communication, the department maintains a clinical facility for students to acquire practical observation and experience through clinical services offered to clients by the UNT Speech and Hearing Center. Concomitant research labs are integral to the learning process of students.

### **Programs of study**

Programs offered by the department are listed below.

The B.S. degree in Audiology and Speech-Language Pathology offers an avenue for students to obtain licensure in Texas as an Assistant in Audiology or Assistant in Speech-Language Pathology and pursue graduate degrees in speech-pathology, audiology, or other health professions, including teaching, psychology, medicine, gerontology, etc. An assistant has a limited scope of practice and is under the supervision of a licensed and certified speech-language pathologist or audiologist. The master's degree in speech-language pathology is required for licensure in Texas and for clinical certification by the American Speech-Language-Hearing Association (ASHA) to practice as a Speech-Language Pathologist. A doctoral degree in audiology is required for licensure in Texas and for clinical certification by ASHA to be an Audiologist.

The program provides basic preparation in the normal development and functioning of speech, language and hearing, and introductory courses concerned with communication disorders. Undergraduates are introduced to the clinical aspects of speech-language pathology and audiology through course work, clinical experiences and laboratory work at the University of North Texas Speech and Hearing Center. All course selections must be approved by an undergraduate advisor or the department chair.

#### **UNT Speech and Hearing Center**

The UNT Speech and Hearing Center is open throughout the year for services to all UNT students and the public. The center provides professional evaluation and remediation of disorders of articulation, language, voice and fluency. Services also include hearing testing, fitting for hearing aids and hearing protection devices, and aural rehabilitation for persons with impaired hearing.

Most services are free to enrolled students, but fees for services are charged to faculty, staff and their families. A limited number of fee waivers are available.

#### **Majors**

## Audiology and Speech-Language Pathology, BS

A Bachelor of Science with a major in audiology/speech-language pathology gives a person the skills needed to assess and treat people with speech, language and hearing disorders, through a curriculum centered on practical experience.

### **Degree requirements**

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog.

## Major requirements, 39 hours

Completion of at least 39 hours including:

- ASLP 2015 Nature of Communication Disorders \*
- ASLP 2020 Phonetics \*
- ASLP 3010 Clinical Methods in Audiology and Speech-Language Pathology I
- ASLP 3025 Anatomical Bases of Speech and Hearing
- ASLP 3030 Speech and Hearing Sciences
- ASLP 3035 Language Development
- ASLP 3040 Introduction to Audiology
- ASLP 4035 Speech Sound Disorders
- ASLP 4040 Introduction to Language Disorders
- ASLP 4045 Basic Rehabilitative Audiology
- ASLP 4050 Neurological Bases of Speech and Hearing
- ASLP 4060 Clinical Methods in Audiology and Speech-Language Pathology II
- ASLP 4070 Topics in Speech-Language Pathology and Audiology

## Other course requirements

The following courses must be completed with a grade of C or better before enrolling in ASLP 3030 and the subsequent numbered courses and each course may only be retaken once.

- MATH 1680 Elementary Probability and Statistics
- BIOL 1112 Contemporary Biology
- PHYS 1270 Science and Technology of Musical Sound

or

PHYS 1315 - Introduction to the World of Physics

## Additional requirements

## Laboratory science, 3–4 hours in addition to the University Core Curriculum

Choose one from the following:

- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory

or

CHEM 1360 - Context of Chemistry

## Foreign language

Attain 2040 and 2050 level in one foreign language or pass appropriate proficiency exams through the Department of World Languages, Literatures and Cultures (Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Latin, Portuguese, Russian or Spanish). American Sign Language is also an option offered through the Department of Audiology and Speech-Language Pathology.

#### 18 additional hours

Students majoring in audiology and speech-language pathology are required to complete 18 hours outside of the department. Students may elect one of the following:

- a. A minor of at least 18 hours, including at least 6 advanced hours:
- 18 hours, including 9 advanced, selected from two or more departments outside the Department of Audiology and Speech-Language Pathology (selected in consultation with the student's faculty advisor); or
- c. Choose one of the following interdisciplinary specializations totaling 18 hours:

#### Global disorders

- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- EDSP 3210 Educational Aspects of Exceptional Learners
- PSYC 3620 Developmental Psychology
- PSYC 4620 Abnormal Child Psychology
- RHAB 3100 Disability and Society
- RHAB 4200 Physical and Psychosocial Aspects of Disability

#### Child

- BEHV 2300 Behavior Principles I
- HDFS 2033 Parenting
- HDFS 3123 Child Development for Non-Majors
- PSYC 3620 Developmental Psychology
- PSYC 4620 Abnormal Child Psychology
- RHAB 3000 Microcounseling

#### Adult

- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- PSYC 3480 Adult Development and Aging
- RHAB 3000 Microcounseling
- RHAB 3100 Disability and Society
- SOCI 1510 Introduction to Sociology
- SOCI 4550 Sociology of Aging

#### Lifespan

- AGER 4800 The Social Context of Aging: Global Perspectives
- HDFS 3113 Infant and Child Development
- HDFS 3123 Child Development for Non-Majors
- HDFS 4133 Adolescence and Emerging Adulthood
- SOCI 1510 Introduction to Sociology
- SOCI 4550 Sociology of Aging

#### Health Professions Student Certificate

Students choosing to complete the Health Professions Student Development certificate complete 18 hours of courses and the other requirements as detailed in the certificate requirements.

See the ASLP advisor in the HPS advising office for specific instructions on completing the requirements.

#### Minor

See "Additional Requirements" above.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Health and Public Service.

## Other requirements

Major should be declared and degree audit prepared with the ASLP Advisor in the HPS Advising Office.

To graduate with a major in audiology and speech-language, a student must:

- Maintain a GPA of 2.5 in the major.
- Earn a grade of C or better in all ASLP courses. Students earning less than a C in any one of the ASLP courses will be allowed to retake that course only once.

#### **Minors**

## Audiology and Speech-Language Pathology minor

Minors must observe the system of prerequisites for courses.

The Audiology and Speech-Language Pathology Undergraduate Director is available for consultation on the minor in audiology and speech-language pathology.

### Courses

A minor in audiology and speech-language pathology requires a total of 18 semester hours from the following:

- ASLP 2015 Nature of Communication Disorders
- ASLP 2020 Phonetics
- ASLP 3010 Clinical Methods in Audiology and Speech-Language Pathology I
- ASLP 3025 Anatomical Bases of Speech and Hearing
- ASLP 3030 Speech and Hearing Sciences
- ASLP 3035 Language Development
- ASLP 3040 Introduction to Audiology
- ASLP 4035 Speech Sound Disorders
- ASLP 4040 Introduction to Language Disorders
- ASLP 4045 Basic Rehabilitative Audiology
- ASLP 4050 Neurological Bases of Speech and Hearing

## Department of Behavior Analysis

Main Office Chilton Hall, Room 360

Mailing address: 1155 Union Circle #310919 Denton, TX 76203-5017 940-565-2274 Fax: 940-565-2467

Web site: hps.unt.edu/behv/welcome-behavior-analysis

#### Manish Vaidya, Chair

Faculty

The department offers a major in applied behavior analysis and a minor in behavior analysis for students interested in learning to apply behavioral principles to produce positive change in individual behavior and social systems.

The department promotes a humanistic application of behavioral principles through consultation with area agencies and institutions. The department offers students experience in laboratory and applied research and practical experience in the application of behavior technology.

### **Majors**

## **Applied Behavior Analysis, BS**

People with a BA in Applied Behavioral Analysis are competitive for positions in a variety of fields. These jobs generally involve working directly with client populations or helping more experienced behavior analysts with projects and research.

Candidates for the Bachelor of Science with a major in applied behavior analysis must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements.

## Major requirements

Major of 34 semester hours, including

- BEHV 2300 Behavior Principles I
- BEHV 2700 Behavior Principles II
- BEHV 3440 Data Collection and Analysis
- BEHV 3550 Behavior Change Techniques
- BEHV 3660 Survey of Applied Behavior Analysis Literature
- BEHV 3770 Building Skills with Behavior Technology
- BEHV 4010 Functional Analysis and Problem Behavior
- BEHV 4310 Behavior Principles and Self-Management
- BEHV 4400 Organizational Behavior Management
- BEHV 4750 Capstone Course in Applied Behavior Analysis

#### Minor

A minor of 18 hours is optional. Minors considered likely to give graduates of the program a competitive edge include, but are not limited to, aging, anthropology, biological sciences, business foundations, chemistry, computer science, criminal justice, emergency administration, health promotion, library and information sciences, rehabilitation and sociology.

## Other course requirements

None.

## **Electives**

Sufficient electives to satisfy the advanced hour requirement and/or the minimum total hours (120) for the degree.

## Other requirements

- Minimum GPA of 2.7 in behavior analysis courses.
- At least 30 hours must be completed at UNT.

#### **Minors**

## **Behavior Analysis minor**

Undergraduate students majoring in a compatible field (e.g., rehabilitation, sociology, psychology, health promotion, hospitality management, merchandising, management or other service professions) may pursue a minor in behavior analysis.

## Prerequisites for other courses

- BEHV 2300 Behavior Principles I
- BEHV 2700 Behavior Principles II
- BEHV 3440 Data Collection and Analysis

### Additional requirements

Any other undergraduate courses in behavior analysis may be taken to complete the minor of 18 hours. Six hours of the minor must be advanced.

# Department of Criminal Justice

Main Office Chilton Hall, Room 265

Mailing address: 1155 Union Circle #305130 Denton, TX 76203-5017 940-565-2562 Fax: 940-565-2548

Web site: cjus.hps.unt.edu

Jody Sundt, Chair

Faculty

The Department of Criminal Justice educates students in the theoretical, practical and empirical aspects of criminal justice in preparation for professional service in both governmental and private entities and in preparation for graduate studies.

Criminal justice faculty come from a diverse range of educational and professional backgrounds reflecting the breadth of the criminal justice discipline, and they enhance the instructional process through their own research activities.

The department works with criminal justice agencies and organizations to promote knowledge and understanding of the people, processes and practices relevant to this dynamic field of study.

Undergraduate majors take a series of core criminal justice courses that provide a foundation regarding the key components of the criminal justice system, including law enforcement, criminal law, corrections, research methods and criminological theory. Students expand their knowledge in these areas and customize their curriculum by selecting from a broad range of criminal justice electives such as those regarding juvenile justice, computer crime and victimology. Internship and study abroad opportunities are available. Both campus-based and online criminal justice courses are offered.

#### **Majors**

### Criminal Justice, BS

A Bachelor of Science with a major in criminal justice educates you in the theoretical, practical and empirical aspects of criminal justice in preparation for your career or for graduate studies.

Candidates for the Bachelor of Science degree with a major in criminal justice must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements.

## Major requirements

48 hours, including 42 hours in criminal justice:

- CJUS 2100 Crime and Justice in the United States
- CJUS 3500 Diversity Issues in Criminal Justice
- CJUS 3201 Criminal Law
- CJUS 3300 Police Systems
- CJUS 3400 Correctional Systems
- CJUS 3600 Criminology
- CJUS 3700 Ethical Issues in Criminal Justice

- CJUS 4700 Research Methods in Criminal Justice
- CJUS 4901 Senior Seminar: Criminal Justice and Public Policy
- 15 hours of advanced criminal justice elective courses (which may be used to customize an area of interest)

## Supporting courses, 6 hours

- SOCI 1510 Introduction to Sociology
- PSYC 1630 General Psychology I

## Other course requirements

 TECM 2700 - Technical Writing (or its equivalent) (may not be used in place of ENGL 1320)

### Communication skills, 3 hours from

One of the following courses (or their equivalents).

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2040 Public Speaking
- COMM 2140 Advocating in Public

#### Minor

None required

#### **Electives**

18–27 hours (i.e., the number of elective hours needed to fulfill the degree requirement of 120 hours)

## Other requirements

All students entering the Criminal Justice program must have a cumulative grade point average of at least 2.0 or otherwise be in good academic standing.

#### **Grad Track Options**

## Criminal Justice, BS with grad track option leading to Criminal Justice, MS

The Department of Criminal Justice offers a grad track option for existing UNT undergraduate students majoring in criminal justice. In this grad track option, students can take up to 6 hours in the first semester of their senior year and up to 6 hours in the second semester of their senior year.

## Admission requirements

All criminal justice faculty will work to identify exceptional students in the undergraduate program. The graduate committee in the department will ultimately decide which students will be invited to apply for the pathway. Students who are invited must complete all the application requirements and processes required of all students who apply to the Master of Science with a major in criminal justice.

## Program requirements

- CJUS 5600 Advanced Criminological Theory (corresponds with CJUS 3600 - Criminology)
- CJUS 5000 Criminal Justice Policy (corresponds with CJUS 4901 - Senior Seminar: Criminal Justice and Public Policy)
- CJUS 5700 Evaluation and Research Methodologies (corresponds with CJUS 4700 - Research Methods in Criminal Justice)
- CJUS 5500 Seminar in Criminal Justice Administration (corresponds with CJUS 4500 - Administration of Criminal Justice Agencies)

- CJUS 5200 Legal Aspects of the Criminal Justice System (corresponds with CJUS 4200 - Criminal Procedure)
- CJUS 5620 Seminar in Victimology (corresponds with CJUS 4650 - Victimology)
- CJUS 5900 Special Problems (corresponds with CJUS 4900 - Special Problems)

For the remainder of the bachelor's degree requirements, please see Criminal Justice, BS.

#### **Minors**

### **Criminal Justice minor**

A minor in criminal justice requires completion of 18 semester hours.

### Required courses

- CJUS 2100 Crime and Justice in the United States
- CJUS 3201 Criminal Law
- CJUS 3600 Criminology

### Plus 9 hours

Nine additional hours of criminal justice courses

## Department of Emergency Management and Disaster Science

Main office Chilton Hall, Room 302

Mailing address:

1155 Union Circle #310637 Denton, TX 76203-5017 940-369-7445

Web site: emds.hps.unt.edu

Gary R. Webb, Chair

#### Faculty

The Department of Emergency Management and Disaster Science educates students in the theoretical and empirical underpinnings of emergency management. The department's programs aim to provide students with the knowledge and skills necessary to enter the emergency management profession and prepare them for graduate studies. Primary emphasis is placed upon the human dimensions of hazards and disasters and enhancing community and societal resilience to a wide range of threats.

The department is home to the emergency administration and planning program, which was established in 1983 as the nation's first bachelor's degree program in emergency management. Since the program's inception, the department has maintained close relationships with the Federal Emergency Management Agency (FEMA) Region 6 headquarters in Denton. Due to its close proximity to campus, students have opportunities to visit the facilities and FEMA representatives regularly serve as guest lecturers in classes.

The department's faculty come from diverse educational and professional backgrounds and bring a breadth of knowledge and experience to the classroom. They have written books on emergency management topics and they have been published in many of the top scholarly journals on hazards, disaster and emergency management. Importantly, faculty have received significant external funding for their research from numerous sources, including the National Science Foundation and the Texas Department of Public Safety.

Undergraduate majors take a series of core courses that provide a foundation for understanding the key phases of disasters, including preparedness, response, recovery and mitigation. Students expand their knowledge in these areas by selecting from a broad range of emergency management electives on such topics as terrorism, floodplain management, private sector issues and international disasters. To apply knowledge and skills learned in classes, students also participate in an internship program, which gives them valuable hands-on experience working for various organizations in the public, private and non-profit sectors.

### **Majors**

## Emergency Administration and Planning, BS

A Bachelor of Science degree in Emergency Administration and Planning helps you develop valuable skills in disaster planning, creative problem solving, critical thinking, and interpersonal communication. These skills are essential in coordinating activities that promote public safety and community resilience to the impacts of natural and technological hazards.

#### **Degree requirements**

Candidates for the Bachelor of Science with a major in emergency administration and planning must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours for all EADP students, 42 must be advanced. All students must fulfill the degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements: 42 hours in the university core, 48 hours in the major, 18 hours for the required minor, plus electives to total 120 required semester hours.

## Major requirements

Required courses for all EADP students are:

- EADP 3010 Principles of Emergency Management
- EADP 3020 Methods in Emergency Management
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3045 Disaster Response and Recovery
- EADP 3055 EOC Design and Operations
- EADP 4050 Social Vulnerability in Disasters
- EADP 4080 Capstone Course in Emergency Management

## The remaining hours for the major may be selected from

- EADP 2020 Images of Disasters in Film and Media
- EADP 2700 Current Issues in Emergency Management
- EADP 4000 Hazardous Materials Planning and Management
- EADP 4010 Public Health and Disasters
- EADP 4015 Flood Plain Management
- EADP 4020 Managing Disasters at the National Level
- EADP 4030 Continuity Planning for Crises
- EADP 4040 International Disasters
- EADP 4060 Emerging Technology and Disasters
- EADP 4065 Disaster Exercise Design
- EADP 4090 Terrorism and Emergency Management
- PADM 3000 Public Administration
- PADM 3700 Issues in Public Administration
- PADM 4130 American Intergovernmental Relations
- PADM 4450 Public Policy Analysis
- BIOL 3160 Conservation Biology
- GEOG 2180 Geosystems, Environment and Society
- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 3050 Introduction to Cartography
- GEOG 3120 Medical Geography
- GEOG 4170 Field Methods and Mapping
- GEOG 4240 Meteorology
- GEOG 4400 Introduction to Remote Sensing
- MGMT 4180 Workplace Health and Safety
- BAAS 3000 Pathways to Civic Engagement
- PADM 4210 Introduction to Philanthropy and Fundraising
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4230 Social Evolution of Contemporary Volunteerism
- PADM 4240 Volunteer Management Concepts and Applications

- PADM 4250 Community Development and Collaborative Planning
- PADM 4260 Volunteer Program Planning and Evaluation
- RMIN 4600 Corporate Risk Management
- SOCI 3550 Collective Behavior
- SOCI 3560 Sociology of Disasters

## Other course requirements

 TECM 2700 - Technical Writing (may be used to satisfy the Communication [English Composition and Rhetoric] requirement of the University Core Curriculum)

## Life and Physical Sciences requirement

Choose one of the following to satisfy 3 hours of the Life and Physical Sciences requirement of the University Core Curriculum.

- BIOL 1132 Environmental Science
- GEOL 1610 Introduction to Geology
- GEOG 1710 Earth Science

### Internship

*Pre-career* (students with no professionally relevant work experience) – A major of 48 hours; 42 hours plus 6 hours of internship classes (EADP 4800 and EADP 4810).

*In-career* (students with professionally relevant work experience) – A major of 42 hours. No internship required.

## Minor requirements

A minor of at least 18 hours; 6 must be advanced.

### **Electives**

At least 15 hours. Courses may be selected from any offered at UNT that the student and the advisor deem appropriate to the degree.

## Other requirements

- A grade of C or better and a minimum GPA of 2.5 on all courses in the major.
- At least 30 hours must be completed at UNT.

#### **Minors**

## Emergency Administration and Planning minor

Undergraduate students majoring in a compatible field (e.g., social and behavioral sciences, business, management, political science/public administration and geography) may pursue a minor in emergency administration and planning.

The minor requires 18 hours.

## Requirements

All EADP minors will complete EADP 3010, EADP 3035, and EADP 3045.

- EADP 3010 Principles of Emergency Management
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3045 Disaster Response and Recovery
- 9 additional hours are required for the minor, all of which must be selected from a list of selected EADP courses

#### Note

The remaining 9 hours may be chosen from any EADP-prefix course (except EADP 4080, EADP 4800 and EADP 4810).

## Department of Public Administration

Public Administration Departmental Office Chilton Hall, Room 204

Mailing address: 1155 Union Circle #310617 Denton, TX 76203-5017 940-565-2165 Fax: 940-565-4466

Web site: padm.unt.edu

Brian K. Collins, Chair

#### **Programs of Study**

The Department of Public Administration offers graduate programs leading to a PhD in Public Administration and Management and a Master of Public Administration (MPA) degree. It also offers the BA in Nonprofit Leadership Studies, the BA in Urban Policy and Planning and a minor in Public Administration, Nonprofit Leadership Studies, Urban Policy and Planning and Alternative Dispute Resolution. Additionally, the program offers two certificates, one in Alternative Dispute Resolution and the other in Volunteer and Community Resource Management. The curriculum in the MPA program emphasizes a combination of courses and practical experience leading to entry-level management positions for students beginning their professional careers and job advancement for students already in government service. All faculty members have experience in government and maintain contact with managers and professional associations, such as the International City/ County Management Association and the American Society for Public Administration. The MPA at the University of North Texas is accredited by the Network of Schools of Public Policy, Affairs, and Administration (1029 Vermont Avenue NW, Suite 1100, Washington, DC 20005; 202-628-8965). The curriculum conforms to NASPAA standards. Detailed information on the MPA program may be found in the Graduate Catalog.

Undergraduate students may wish to select public administration, nonprofit management, urban policy and planning, or alternative dispute resolution as a complement to most any major. These areas of concentration are vital to the success of any undergraduate. Students may choose a number of options, for instance, a major in political science or emergency administration and planning with a minor in public administration; a major in applied arts and sciences with public administration, nonprofit management or alternative dispute resolution as one of the professional development areas, or a minor in any of these areas. Consult the appropriate sections in this catalog for specific details.

#### Graduate Study

Master's and doctoral degree programs are available in public administration. For more information, consult the *Graduate Catalog*.

#### **Majors**

## Nonprofit Leadership Studies, BA

This program is designed for students who are looking for opportunities to pursue a professional career serving in the nonprofit sector. The program is structured to accommodate students who transfer to UNT from a community college or for those who start as freshmen. A major strength of the program is its close affiliation with nonprofit organizations within the Dallas-Fort Worth region.

Candidates for the Bachelor of Arts degree with a major in Nonprofit Leadership Studies must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements: 42 hours in the university core, 33 hours in the major, 15 hours in supporting courses for the major, plus electives to total 120 required semester hours.

## Major requirements

Completion of a minimum of 33 hours from the Nonprofit Leadership Studies curriculum, of which 27 must be advanced.

Students should complete 3000-level courses before enrolling in 4000-level courses. Prerequisites are given in course descriptions and in the online schedule of classes at www.unt.edu/registrar.

## Nonprofit Leadership Studies, 33 hours

- PADM 3010 Foundations of Philanthropy and Nonprofits
- PADM 3020 Public Management
- PADM 4050 Negotiation and Dispute Resolution
- PADM 4200 Leadership Theory and Practice for Volunteer Managers
- PADM 4210 Introduction to Philanthropy and Fundraising
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4240 Volunteer Management Concepts and Applications
- PADM 4250 Community Development and Collaborative Planning
- PADM 4260 Volunteer Program Planning and Evaluation
- PADM 4300 Nonprofit Leadership Capstone
- PADM 4310 Community Service Internship

## Supporting Courses for the Major, 15 Hours

Choose five from the following:

- PADM 2000 Discover the City: Placemaking in the World
- PADM 2100 Cultural Competency in Urban Governance
- PADM 3000 Public Administration
- PADM 3030 Topics in Human Services
- PADM 3200 Creating Innovative Cities
- PADM 3420 Bureaucracy and Public Policy
- PADM 3700 Issues in Public Administration
- PADM 4000 Mediation
- PADM 4010 Family Mediation
- PADM 4020 Dispute Resolution in the Workplace
- PADM 4030 Dispute Resolution in a Global Workplace
- PADM 4040 Crisis Intervention
- PADM 4070 Arbitration Basics
- PADM 4130 American Intergovernmental Relations
- PADM 4170 Methods in Urban Planning Research and Analysis
- PADM 4450 Public Policy Analysis

- PADM 4610 Topics in Community Service
- PADM 4230 Social Evolution of Contemporary Volunteerism
- COMM 2040 Public Speaking
- JOUR 3410 Public Relations for Non-Profits
- MGMT 3850 Foundations of Entrepreneurship or
- MGMT 4235 Social Entrepreneurship

## Other course requirements

### Internship

The internship in the Nonprofit Leadership Studies program is intended to prepare students for their careers by providing them real-world experience in the field. Experiential education is an ideal way to help students excel academically as well as professionally. Students register for PADM 4310 Community Service Internship in either the fall or spring semester of their last year to gain hands-on experience in a supervised setting. Students must meet individual employer's requirements and obtain consent from the undergraduate program coordinator.

## Electives, 30 hours

Courses may be selected from any offered at UNT that the student and the advisor deem appropriate to the degree.

Math 1680 is strongly recommended, though not required.

## Other requirements

- Must have a grade of C or better for entering the program
- A grade of C or better in all courses in the major
- Must have a minimum cumulative GPA of 2.0 for graduation

#### Minor

None required.

## **Urban Policy and Planning, BA**

This program is designed for students who are looking for opportunities to pursue a professional career in urban policy and planning. The program is structured to accommodate students who transfer to UNT from a community college or for those who start as freshmen. A major strength of the program is its close affiliation with city planning departments within the Dallas-Fort Worth region.

Candidates for the Bachelor of Arts degree with a major in Urban Policy and Planning must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Health and Public Service.

Requirements: 42 hours in the university core, 33 hours in the major, 12 hours of Urban Policy and Planning electives, plus 33 hours of free electives to total 120 required semester hours.

## Major requirements, 10 courses or 33 hours

Completion of a minimum of 30 hours from the Urban Policy and Planning curriculum.

Students should complete 2000 and 3000-level courses before enrolling in 4000-level courses. Prerequisites are given in course descriptions and in the online schedule of classes at registrar.unt.edu

- GEOG 3500 Introduction to Geographic Information Systems
- PADM 2120 Introduction to Urban and Regional Planning
- PADM 3210 Population Demographics and Urban Planning
- PADM 3220 Land Use and Transportation Planning
- PADM 3410 Financial Aspects of Government
- PADM 4170 Methods in Urban Planning Research and Analysis
- PADM 4180 Urban Planning Studio
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4250 Community Development and Collaborative Planning
- PADM 4450 Public Policy Analysis

## General Urban Policy and Planning Electives, 12 hours

Select 4 courses or 12 hours from the following list:

- COMM 2040 Public Speaking
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 4015 Flood Plain Management
- GEOG 3010 Economic Geography
- GEOG 3100 United States and Canada: Economies, Cities and Sustainability
- GEOG 4210 Urban Geography
- GEOG 4220 Applied Retail Geography
- GEOG 4230 Location Intelligence: Business GIS Concepts and Applications
- GEOG 4590 Advanced GIS Programming
- PADM 2000 Discover the City: Placemaking in the World
- PADM 2100 Cultural Competency in Urban Governance
- PADM 3000 Public Administration
- PADM 3020 Public Management
- PADM 3030 Topics in Human Services
- PADM 3200 Creating Innovative Cities
- PADM 3420 Bureaucracy and Public Policy
- PADM 3700 Issues in Public Administration (May be repeated)
- PADM 4000 Mediation
- PADM 4020 Dispute Resolution in the Workplace
- PADM 4030 Dispute Resolution in a Global Workplace
- PADM 4040 Crisis Intervention
- PADM 4050 Negotiation and Dispute Resolution
- PADM 4070 Arbitration Basics
- PADM 4130 American Intergovernmental Relations
- PADM 4200 Leadership Theory and Practice for Volunteer Managers
- PADM 4210 Introduction to Philanthropy and Fundraising
- PADM 4260 Volunteer Program Planning and Evaluation
- PADM 4900 Special Problems

- PADM 4920 Cooperative Education in Economic Development or Regional/Sectoral Analysis
- PSCI 4020 Urban Politics

## Free Electives, 33 hours

Courses may be selected from any offered at UNT that the student and the advisor deem appropriate to the degree.

## Other requirements

- Must have a minimum C or better for entering the program
- A grade of C or better in all courses in the major
- Must have a minimum cumulative GPA of 2.0 for graduation

#### **Minors**

## **Alternative Dispute Resolution minor**

A minor in alternative dispute resolution requires a total of 21 hours.

## Four required courses

- COMM 3320 Communication and Conflict Management
- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PADM 4060 Practicum in Mediation and Dispute Resolution

## Plus three courses from the following list

Chosen in consultation with an undergraduate advisor in the ADR program and representing at least two different academic departments:

- BLAW 3430 Legal and Ethical Environment of Business
- CJUS 3210 Judicial and Legal Systems
- MGMT 3870 Management Research Methods
- PADM 4010 Family Mediation
- PADM 4020 Dispute Resolution in the Workplace
- PADM 4030 Dispute Resolution in a Global Workplace
- PADM 4040 Crisis Intervention
- PADM 4070 Arbitration Basics
- PSYC 3640 Marital Adjustment

Students interested in this minor should contact Leslie Roberts in the Department of Public Administration at Leslie.Roberts@unt.edu.

## **Nonprofit Leadership Studies minor**

A minor in Nonprofit Leadership Studies minor requires 18 semester credit hours (6 courses).

In addition to earning a minor, students also have the opportunity to earn a certificate in volunteer and community resource management and prepare for a certificate in non-profit management leadership. Students wishing to minor in Nonprofit Leadership Studies should consult the HPS academic advisor for specific program requirements.

## Field courses, 18 hours

Students select 18 hours from the list of courses below.

- JOUR 3410 Public Relations for Non-Profits
- PADM 3010 Foundations of Philanthropy and Nonprofits

- PADM 3020 Public Management
- PADM 4050 Negotiation and Dispute Resolution
- PADM 4200 Leadership Theory and Practice for Volunteer Managers \*, \*\*
- PADM 4210 Introduction to Philanthropy and Fundraising
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4240 Volunteer Management Concepts and Applications \*\*
- PADM 4250 Community Development and Collaborative Planning \*\*
- PADM 4260 Volunteer Program Planning and Evaluation \*\*
- PADM 4300 Nonprofit Leadership Capstone \*
- PADM 4310 Community Service Internship

#### Notes

- \* Students pursuing the leadership of community and nonprofit organizations minor must take these courses.
- \*\*Students pursuing the 12 semester credit hour certificate in volunteer and community resource management must take PADM 4240, PADM 4250 and PADM 4260, in addition to PADM 4200.

#### **Public Administration minor**

A minor in public administration requires 18 hours, 9 of which must be at the upper-division level. Up to 6 hours of the minor may be in emergency administration and planning.

## Required

- PADM 3000 Public Administration
- PADM 3020 Public Management

#### Plus 12 hours

Plus 12 hours, at least 3 of which must be at the PADM upperdivision level.

- PADM 2100 Cultural Competency in Urban Governance
- PADM 2120 Introduction to Urban and Regional Planning
- PADM 3010 Foundations of Philanthropy and Nonprofits
- PADM 3210 Population Demographics and Urban Planning
- PADM 3410 Financial Aspects of Government
- PADM 3420 Bureaucracy and Public Policy
- PADM 3700 Issues in Public Administration
- PADM 4130 American Intergovernmental Relations
- PADM 4250 Community Development and Collaborative Planning
- PADM 4450 Public Policy Analysis

## **Urban Policy and Planning minor**

This program is designed for students who are interested in planning, policy, local government issues, transportation planning, and a mixture of urban and suburban challenges.

A minor in Urban Policy and Planning requires 18 semester credit hours, 9 hours of required courses plus 9 hours chosen from the courses listed below.

#### Requirements

 PADM 2120 - Introduction to Urban and Regional Planning

- PADM 4250 Community Development and Collaborative Planning
- PADM 4450 Public Policy Analysis

## Plus 9 hours selected from the list below

- PADM 3020 Public Management
- PADM 3210 Population Demographics and Urban Planning
- PADM 3220 Land Use and Transportation Planning
- PADM 3410 Financial Aspects of Government
- PADM 4220 Proposal Writing and Grants Administration
- EADP 3035 Hazard Mitigation and Preparedness
- GEOG 3500 Introduction to Geographic Information Systems

## **Undergraduate Academic Certificates**

## Alternative Dispute Resolution certificate

A certificate in alternative dispute resolution requires a total of 12 hours.

## Required courses, 9 hours

- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PADM 4060 Practicum in Mediation and Dispute Resolution

## Elective course, 3 hours

3 hours chosen from the following:

- PADM 4010 Family Mediation
- PADM 4020 Dispute Resolution in the Workplace
- PADM 4030 Dispute Resolution in a Global Workplace
- PADM 4040 Crisis Intervention
- PADM 4070 Arbitration Basics

## Volunteer and Community Resource Management certificate

The Volunteer and Community Resource Management Certificate is an official UNT credential that appears on a student's transcript. It is designed for students who are specifically interested in working with volunteers to help address a particular community issue or need.

To obtain the undergraduate certificate, a student must complete 12 hours of course work—9 hours of required courses and 3 hours of electives.

Individuals interested in obtaining this certificate must be enrolled at UNT and indicate their intention of completing the certificate with their academic advisor. For more information on this certificate, please contact the program advisor.

Students should apply to receive the certificate the semester they successfully complete all the necessary course work. Successful completion means that students must have a cumulative average of 3.0 (B) or higher in their four certificate courses. Any course with a final grade less than a "C" will not count toward this credential irrespective of the cumulative grade point average in certificate courses.

Applications for the certificate are available in the College of Health and Public Service Advising Office in Chilton Hall. Applications are first reviewed by the Advising Office and then submitted to the Registrar's Office for processing.

## Required courses, 9 hours

- PADM 4240 Volunteer Management Concepts and Applications
- PADM 4250 Community Development and Collaborative Planning
- PADM 4260 Volunteer Program Planning and Evaluation

## Elective course, 3 hours

3 hours chosen from:

- PADM 4200 Leadership Theory and Practice for Volunteer Managers
- PADM 4220 Proposal Writing and Grants Administration

# Department of Rehabilitation and Health Services

Main Office Chilton Hall, Room 218

Mailing address: 1155 Union Circle #311456 Denton, TX 76203-5017 940-565-2488 Fax: 940-565-3960

Web site: rhs.hps.unt.edu

#### Rachita Sharma, Interim Chair

Bradley McDaniel, Coordinator of Undergraduate Rehabilitation Program

Justin Watts, Coordinator of Graduate Rehabilitation Program

#### Faculty

The Department of Rehabilitation and Health Services offers three undergraduate degree programs in addiction studies, public health and a long-standing degree in rehabilitation studies. In addition to the BS degrees, the department offers minors in public health, rehabilitation studies, addiction studies, and applied gerontology. The department also offers two certificate programs, one in rehabilitation studies, and the other in substance use treatment. Students who complete a BS in rehabilitation studies are eligible for the State of Texas Qualified Mental Health Provider-Community Services (QMHP-CS) credential. Comparatively, students who complete either the major or the minor in addiction studies are eligible to take the test for licensing as a chemical dependency counselor (LCDC) in the state of Texas.

Upon graduation, students are qualified for positions in a variety of nonprofit, governmental, and for-profit programs serving individuals with mental health concerns, substance use disorders, intellectual and developmental disabilities and physical disabilities. Labor market trends forecast continued growth in human service professions. The undergraduate degrees also prepare students for entry into graduate programs in rehabilitation counseling, often with advanced standing.

The department's undergraduate programs are structured to meet the needs and interests of students transferring from community colleges. The 30-hour major is designed to allow students the opportunity to carefully select complimentary electives or to specialize in specific areas of rehabilitation such as substance use treatment. Our college advisors can assist students in determining the best electives, minors and/or certificates available to meet their career objectives. Transfer students receive close advising to facilitate articulation and to maximize their credits.

Extensive practical experience in community placements is combined with comprehensive classroom curricula to build an indepth and well-rounded program. Students are able to receive highly individualized academic support from instructors. We require our students to engage in service learning and professional activities to gain experience and develop their skills. To this end, we have three active student organizations – North Texas Rehabilitation Association, Active Minds, and Eagle Peer Recovery – that students can participate in during their academic career.

A College of Health and Public Service degree program advisor plays a significant role in the development of a degree plan that meets the individual student's needs and interests.

#### **Programs of study**

The department offers an undergraduate majors in addiction studies, public health rehabilitation studies; minors; and undergraduate academic certificates. (See the complete list, below.)

#### Majors

- Addiction Studies, BS
- Public Health, BS
- Rehabilitation Studies, BS
- Rehabilitation Studies, BS with Grad Trak option leading to Rehabilitation Counseling, MS

#### Minors

- Applied Gerontology
- Addiction Studies
- Public Health
- Rehabilitation Studies

#### **Undergraduate Academic Certificates**

- Rehabilitation Studies
- Specialist in Aging
- Substance Use Disorders Treatment

#### **Rehabilitation scholarships**

Students majoring in rehabilitation studies are eligible to apply for the Ken Miner Scholarship; the Fort Worth TRA Scholarship, and the Dan Minahan Memorial Scholarship. Applications are available on the department website. Students interested in applying for these scholarships should contact the department.

### **Majors**

## **Addiction Studies, BS**

The BS in Addiction Studies prepares students and professionals who wish to continue career development to work directly with individuals with substance use disorders and process addictions (e.g. gambling, disordered eating, etc.) in order to facilitate long-term recovery, autonomy and improved quality of life.

Candidates for the Bachelor of Science degree with a major in Addiction Studies must meet the following requirements.

## Hours required and general/college requirements

A minimum of 120 semester credit hours. Completion of 42 hours in the University Core Curriculum, 36 hours in the major, and 12 hours in electives. Students should complete an additional 30 hours of free electives. Prerequisites are given in course descriptions and in the online schedule of classes at www.unt.edu/registrar.

#### Major requirements

#### Addiction studies, 30 hours

- ADDS 3975 Addictions
- ADDS 4075 Drugs and Alcohol
- ADDS 4175 Addiction Treatment Models
- ADDS 4275 Alcohol, Drugs and Disability
- ADDS 4375 Addiction Counseling and Groups
- ADDS 4575 Current Issues in Substance Use Disorders
- ADDS 4675 Addictions Counseling Competencies
- ADDS 4775 Ethical and Professional Issues in Addiction Practices
- ADDS 4800 Studies in Addiction
- ADDS 4881 Addictions Practicum

#### Rehabilitation studies, 6 hours

- RHAB 3000 Microcounseling
- RHAB 4500 Assessment in Rehabilitation

### Other course requirements

12 hours of elective course work selected with and approved by academic advisor.

#### Minor

Minor is optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Health and Public Service.

### Other requirements

- Completion of at least 300-hours of field work in ADDS Addictions Practicum.
- A minimum Grade Point Average of 2.3 is required for graduation.

## **Public Health, BS**

Dr. Ami Moore, Public Health Program Coordinator

This degree program prepares students interested in gaining the knowledge to identify, prevent and solve community health problems. Public Health prepares students with knowledge and skills to promote health. It draws on knowledge from the social, behavioral, and health sciences.

Our degree program is well suited for student invested in building health communities here in the DFW area, nationally and globally. We are situated in an academic department which promotes interdisciplinary solutions to health issues that affect diverse communities across the lifespan.

#### Degree requirements

The following requirements must be satisfied for a Bachelor of Science in Public Health.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science in Public Health degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Health and Public Service requirements.

## Major requirements

Completion of 42 hours in the university core, 39 hours in the major, 9 hours in Public Health electives, plus electives to total 120 required semester hours.

Students should complete an additional 30 hours of free electives. Prerequisites are given in course descriptions and in the online schedule of classes at www.unt.edu/registrar.

#### Public health core, 39 hours

- PUBH 1010 Introduction to Public Health
- PUBH 2010 Epidemiological Concepts and Methods for Public Health
- PUBH 2015 Research Methods in Public Health
- PUBH 3010 Social Justice and Behavioral Foundations in Public Health
- PUBH 3020 Community Health Education
- PUBH 3025 Environmental Health
- PUBH 3030 Global Public Health
- PUBH 4015 Ethics in Public Health
- PUBH 4020 Biostatistics
- PUBH 4050 Public Health and Health Policy
- PUBH 4060 Public Health Management and Leadership

- PUBH 4070 Public Health Informatics
- PUBH 4080 Public Health Capstone

### Public Health Electives, 9 hours

Choose any 3 of the following:

- AGER 4020 Psychology of Death and Dying
- AGER 4780 Aging Programs and Services
- COMM 3220 Health Communication
- EADP 3010 Principles of Emergency Management
- EADP 3045 Disaster Response and Recovery
- EADP 4010 Public Health and Disasters
- EADP 4050 Social Vulnerability in Disasters
- EADP 4090 Terrorism and Emergency Management
- GEOG 3120 Medical Geography
- GEOG 4560 Introduction to Python Programming
- GEOG 4580 GIS in Health
- PADM 4200 Leadership Theory and Practice for Volunteer Managers
- PHIL 2600 Ethics in Science
- PHIL 3440 Bioethics
- RHAB 3000 Microcounseling
- RHAB 3100 Disability and Society
- ADDS 4075 Drugs and Alcohol
- RHAB 4200 Physical and Psychosocial Aspects of Disability
- ADDS 4275 Alcohol, Drugs and Disability
- RHAB 4300 Introduction to Psychiatric Rehabilitation
- SOCI 3120 Sociology of Health and Illness
- SOCI 3560 Sociology of Disasters
- SOWK 4430 Applied Social Welfare Policy

## Electives, 30 credit hours

Courses may be selected from any offered at UNT that the student and the advisor deem appropriate to the degree.

#### Rehabilitation Studies, BS

Dr. Bradley McDaniels, Coordinator of Undergraduate Rehabilitation Program

Students who graduate with a Bachelor of Science with a major in rehabilitation studies often pursue careers where they serve individuals who have physical, mental and emotional disabilities and help them become productive and active citizens. This program provides extensive practical experience in community placements.

Candidates for the Bachelor of Science degree with a major in rehabilitation studies must meet the following requirements:

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements.

## Major requirements

27 hours in rehabilitation studies:

- RHAB 3000 Microcounseling
- RHAB 3100 Disability and Society
- RHAB 3900 Case Management in Rehabilitation
- RHAB 4100 Rehabilitation Service Delivery Systems

- RHAB 4200 Physical and Psychosocial Aspects of Disability
- RHAB 4300 Introduction to Psychiatric Rehabilitation
- RHAB 4500 Assessment in Rehabilitation
- RHAB 4700 Employment Services
- RHAB 4880 Rehabilitation Practicum

### Plus an addictions course, 3 hours

ADDS 4275 is recommended for all majors.

## Other course requirements

None.

## Minor requirements

Minor of 18 hours, of which 6 must be advanced, may be selected with the approval of the academic advisor. Students are advised to give careful consideration to career goals when selecting their minor area of study. A minor is not required.

#### Electives

Electives may be required to satisfy the advanced hour requirement and/or the minimum total hours (120) required for the degree.

## Other requirements

 Demonstration of at least 200 hours of field work and a minimum major grade point average of 2.3 is required for graduation

Students interested in majoring in rehabilitation studies should make an appointment with the rehabilitation studies academic advisor.

## **Grad Track Options**

# Rehabilitation Studies, BS with grad track option leading to Rehabilitation Counseling, MS

Rehabilitation studies undergraduate students accepted into the Grad Track Pathway will first earn their BS with a major in rehabilitation studies and, following successful completion of the graduate program, their MS with a major in rehabilitation counseling.

## Admission requirements and program policies

The admissions criteria for students applying to the Grad Track Pathway is consistent with the admission processes and procedures for all applicants to our graduate program. Applicants are required to have completed at least 75 credit hours of their bachelor's degree.

Applicants to the Grad Track Pathway will submit:

- an application designed for Grad Track Pathway applicants;
- a signed copy of the Conditional Admission and Advisor Course Approval Form (available from the Toulouse Graduate School);
- a current copy of their unofficial transcript;
- a self-statement of purpose as to why they are interested in the Grad Track Pathway, as well as addressing the rehabilitation counseling program required self-statement questions:
- a resume of their work experience;
- two letters of recommendation (one academically-related and one employment-related); and
- completion of an interview with two faculty members from our department.

Successful applicants will meet the definition of "Exceptional Undergraduate Student." They will be those students who:

- are in their junior year of the rehabilitation studies program and have completed 90 credit hours;
- have a cumulative GPA of 3.5 or higher at the time of their application; and
- whose resume, self-statement, letters of recommendation, and demonstration of interpersonal and professional skills during the interview are considered to be of high quality by the faculty in the department.

As is the process for graduate program applicants, faculty will conduct a holistic review of each applicant to the Grad Track Pathway. The holistic review is guided by a rubric created for graduate program applicants that provides an assessment of each applicant's:

- academic/intellectual merit (e.g., assessment of GPA, quality of letters of recommendation, quality of written self-statement);
- employment experience (e.g., employment-related letters of recommendation, work experience in the field), interview (demonstration of communication skills, professionalism, appropriate self-awareness, interpersonal skills, and appropriate self-disclosure); and
- broader impact (e.g., potential to contribute to profession, discipline and/or society, and potential to advance diversity by broadening global understanding and/or diverse points of view)

Faculty who conduct the interview, review and rank the applicant's application as being in the top 5% (excellent), 10% (very good), 25% (good), 50% (average) or less than 50% (below average) and then present the application to the admisson committee in the department. Only applicants to the Grad Track Pathway program who rank in the top 5-10% and have the approval of the undergraduate and graduate coordinators, as well as the student's academic advisor and the majority of faculty present at the meeting in which applications are reviewed, will be accepted into the Grad Track Pathway. Applications will be accepted until July 15 for the fall semester Grad Track Pathway classes, and November 30 for the spring semester courses.

Successful applicants are conditionally admitted to the Grad Track Pathway after completing 90 credit hours in their undergraduate degree program. Acceptance to the Grad Track Pathway does not imply the student has been fully admitted into the graduate school, however, and the student must first complete his or her bachelor's degree before acceptance into the graduate program. Applicants will be provided with a document that explains the application process and will state that, if accepted into the Grad Track Pathway, the student understands that he or she is only conditionally accepted into the graduate program and must maintain a 3.2 GPA and be in good standing in the program before being accepted into the graduate program. Students whose GPA falls to between a 3.2 and 2.8 will be required to submit a new application to the graduate program (including a new statement of purpose, letters of recommendation, resume and interview) as well as submit current GRE scores in order to be reconsidered for the graduate program.

## Program requirements

- RHAB 5700 Introduction to Rehabilitation Counseling (for RHAB 4100 Rehabilitation Service Delivery Systems)
- RHAB 5770 Research and Program Evaluation course (for RHAB 4500 - Assessment in Rehabilitation)
- RHAB 5732 Principles of Psychiatric Rehabilitation (for RHAB 4300 Introduction to Psychiatric Rehabilitation)
- RHAB 5735 Alcohol and Other Drug Abuse Counseling Models (for ADDS 4275 Alcohol, Drugs and Disability)

#### Courses available for credit as an upper level elective:

- RHAB 5715 Disability Issues in Human Development (3 credit hours)
- RHAB 5718 Transition Issues in Rehabilitation (3 credit hours)

#### **Minors**

#### **Addiction Studies minor**

The minor in addiction studies is designed for students interested in working with persons experiencing addictive disorders. The minor may fulfill the educational requirements for licensure as a chemical dependency counselor. Courses cover all levels of alcohol and drug use, as well as other behavioral addictions; their symptomatology, personal and social impacts, and treatment.

Effective September 1, 2017, HB 1508 created new laws that require entities that provide educational programs leading to an occupational license to notify all applicants and enrollees of the implications of a felony conviction which may make you ineligible for a license upon program completion. The law requires that this information be provided to all persons who are enrolled or apply in a counseling or related program without regard to whether the person has been convicted of a criminal offense.

You may review current guidelines used by the Texas Education Agency to determine the eligibility of the person to be licensed on the TEA's website at https://tea.texas.gov/Texas\_Educators/Investigations/National\_Criminal\_History\_Checks-FAQs/. You also have a right to request a criminal history evaluation letter from the TEA and the process and form available online at https://tea.texas.gov/Texas\_Educators/Investigations/Preliminary\_Criminal\_History\_Evaluation-FAQs/

## Required courses

- ADDS 3975 Addictions
  - or
- ADDS 4075 Drugs and Alcohol and
- ADDS 4175 Addiction Treatment Models

## Plus four of the following

- ADDS 4275 Alcohol, Drugs and Disability
- ADDS 4375 Addiction Counseling and Groups
- RHAB 4500 Assessment in Rehabilitation
- ADDS 4675 Addictions Counseling Competencies

#### Licensure

Students seeking licensure are strongly advised to take:

- ADDS 4375 Addiction Counseling and Groups
- RHAB 4500 Assessment in Rehabilitation
- ADDS 4675 Addictions Counseling Competencies

## **Applied Gerontology minor**

Undergraduate students majoring in such compatible fields as social and behavioral sciences; health sciences; public health; kinesiology; recreation; learning technologies; or business may develop a multidisciplinary minor (18 semester hours) in applied gerontology in consultation with an advisor.

## Required courses

The minor is 18 hours. It includes 3 required courses.

- AGER 3480 Psychology of Adult Development and Aging
- AGER 4550 Sociology of Aging
- AGER 4780 Aging Programs and Services

#### **Public Health minor**

The Public Health Minor has been designed for students looking for an introduction to the field and its disciplines. The curriculum offers complementary studies to students who are on a pre-medical track; those majoring in fields that incorporate a health focus, such as rehabilitation studies or kinesiology; or those interested in environmental science or public policy. The course work covers the concepts and applications of public health in a variety of the specific disciplines related to overall community health outcomes.

## Requirements

The minor is 18 hours. It includes 5 required courses and one elective option.

- PUBH 1010 Introduction to Public Health
- PUBH 2010 Epidemiological Concepts and Methods for Public Health
- PUBH 3010 Social Justice and Behavioral Foundations in Public Health
- PUBH 3025 Environmental Health
- PUBH 4050 Public Health and Health Policy

## Elective options

Students must select one elective from the remaining Public Health core courses.

- PUBH 3020 Community Health Education
- PUBH 3030 Global Public Health
- PUBH 4015 Ethics in Public Health
- PUBH 4020 Biostatistics
- PUBH 4060 Public Health Management and Leadership
- PUBH 4070 Public Health Informatics
- PUBH 4080 Public Health Capstone (may only be taken in last semester of senior year)
- PUBH 4900 Special Problems

#### **Rehabilitation Studies minor**

Because of its compatibility with other human service fields, rehabilitation provides an appropriate minor for students majoring in such areas as psychology, social work, recreation, aging, health education and criminal justice.

## Requirements

- RHAB 3100 Disability and Society
- RHAB 4200 Physical and Psychosocial Aspects of Disability
- RHAB 4700 Employment Services
- Plus three other rehabilitation courses selected by the student and the advisor.

## Undergraduate Academic Certificates

## **Applied Gerontology certificate**

An undergraduate academic certificate in applied gerontology requires 12 hours.

## Required courses, 12 hours

- AGER 4500 Long-Term Care Case Management with Older Adults
- AGER 4550 Sociology of Aging
- AGER 4750 Sexuality and Aging
- AGER 4780 Aging Programs and Services

## Eligibility requirements

In order to qualify for the certificate in applied gerontology, a student must meet the following eligibility requirements. Contact the College of Health and Public Service advising office for more information.

- 1. Applicant must have completed two years of college.
- Applicant must be accepted to UNT through Undergraduate Admissions

#### **Rehabilitation Studies certificate**

The undergraduate academic certificate in rehabilitation studies provides students with the fundamental knowledge and skills for interaction with individuals with disabilities. This certificate is recommended for students in other disciplines who seek a basic understanding of the disability experience or who wish to add disability-related knowledge and skills to their professional preparation.

Courses are available both on campus and online.

## Required courses, 12 hours

Students must complete four courses, including:

- RHAB 3100 Disability and Society
- RHAB 3900 Case Management in Rehabilitation
- RHAB 4200 Physical and Psychosocial Aspects of Disability
- RHAB 4700 Employment Services

## **Substance Use Disorders Treatment certificate**

The undergraduate academic certificate in substance use treatment provides a basic foundation for becoming a licensed chemical dependency counselor (for information about waivers of educational requirements under §140.405, visit www.dshs.state.tx.us/lcdc and navigate to "Rules and Regulations"). Completion of the certificate also contributes to skills applicable in any human service field.

## Required courses, 12 hours

- ADDS 4075 Drugs and Alcohol
- ADDS 4175 Addiction Treatment Models
- RHAB 4500 Assessment in Rehabilitation
- ADDS 4675 Addictions Counseling Competencies

## **Department of Social Work**

Main Office Chilton Hall, Suite 300

Mailing address: 1155 Union Circle #305370 Denton, TX 76203-5017 940-565-3437

Web site: hps.unt.edu/sowk/social-work

Cassidy Baker, Chair

#### Faculty

Social work addresses societal concerns and the well-being of people to ensure they have equal access to resources, services and opportunities. Social workers encourage change by striving to end discrimination, oppression, poverty and other forms of social injustice. They work in many different settings, including:

- child welfare and family service agencies
- community mental health or substance abuse treatment centers
- nonprofit, government or private human service programs
- retirement centers, nursing homes or other aging programs for older people and their families
- school or community programs to meet the needs of children

Our program provides a solid foundation in the knowledge, skills and values necessary for the social work field and prepares students for the required state licensing exam.

We offer many opportunities to work with the community, practice skills, get involved in social work organizations and network. As part of our curriculum, we have service learning projects in the introductory courses and practice courses that apply classroom knowledge to real-life situations.

Our faculty members are well-known researchers and practitioners with experience working in diverse areas. Their research has been published in recognized journals and presented regularly at national conferences.

The Social Work program is accredited by the Council on Social Work Education (1701 Duke St., Suite 200; Alexandria, VA 22314; telephone 703-683-8080). This accreditation means we meet or exceed strict academic standards for excellence in social work education.

#### **Pre-majors**

## Social Work pre-major

## Pre-major courses and requirements

The Bachelor of Social Work degree program is fully accredited by the Council on Social Work Education (1725 Duke Street, Suite 500, Alexandria, VA 22314-3457; 703-683-8080, ext. 205).

Students may indicate an intention of majoring in social work at any point during the early part of their academic career by declaring a pre-social work major. They may consult with the College of Health and Public Service social work advisors regarding degree requirements at any time. However, formal acceptance into the social work major occurs only after successful completion of the designated pre-major courses, completion of a semester-by-semester course plan with the social work advisor, and submission and approval of a formal application for admission. Applications to the major are due on approximately the 30th calendar day of the term/ semester in which pre-major courses are in process or are completed. Applications are accepted during the fall and spring terms/semesters only. The number of available slots is limited, so admission may be restricted. An application form and instructions are available in the department office. Students must adhere to the program's course sequencing and prerequisite schedule.

### Pre-major courses, 9 hours

- SOWK 1450 Introduction to Social Work (with a minimum grade of C)
- SOWK 2430 Policies, Issues and Programs in Social Welfare (with a minimum grade of C)
- SOWK 3000 Foundations of Interviewing and Interpersonal Skills (with a minimum grade of C)

### **Majors**

### Social Work, BSW

The Bachelor of Social Work degree program prepares students for a career in helping vulnerable populations. Students learn the professional skills necessary to assist people in overcoming challenges associated with abuse, poverty, homelessness, addiction, disability, illness, and discrimination. Social workers practice in a variety of areas including health care, child welfare, substance abuse treatment, aging, and criminal justice.

### **Program Requirements**

## Application to the major and pre-major courses

The Bachelor of Social Work degree program is fully accredited by the Council on Social Work Education (1725 Duke Street, Suite 500, Alexandria, VA 22314-3457; 703-683-8080, ext. 205).

Students may indicate an intention of majoring in social work at any point during the early part of their academic career by declaring a pre-social work major. They may consult with the College of Health and Public Service social work advisors regarding degree requirements at any time. However, formal acceptance into the social work major occurs only after successful completion of the designated pre-major courses, degree audit, a semester-by-semester course plan with the social work advisor, and submission of a formal application for admission. Applications to the major are due on approximately the 30th calendar day of the term/semester in which pre-major courses are in process or are completed. Applications are accepted during the fall and spring terms/semesters only. The number of available slots is limited, so admission may be restricted. An application form and instructions are available on the website. Students must adhere to the program's course sequencing and prerequisite schedule. The degree program culminates with a fieldbased practicum that consists of a required 12-credit-hour block. During the practicum, students practice social work skills in an agency placement for approximately 32-35 hours per week over the course of one semester, for a total of no less than 480 hours of

## Pre-major courses, 9 hours

- SOWK 1450 Introduction to Social Work (with a minimum grade of C)
- SOWK 2430 Policies, Issues and Programs in Social Welfare (with a minimum grade of C)
- SOWK 3000 Foundations of Interviewing and Interpersonal Skills (with a minimum grade of C)

## Degree requirements

Candidates for the Bachelor of Social Work must meet the following requirements:

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Social Work degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Health and Public Service requirements.

## Major requirements

The social work major consists of 54 hours in social work and related required courses.

## Other course requirements

Students are required to follow social work course sequencing as outlined below; however, students may choose to also take outside courses while enrolled in the program.

#### Pre-major requirements

- Finish pre-major courses: SOWK 1450, SOWK 2430, SOWK 3000.
- Obtain a degree audit from the College of Health and Public Service advising office.
- Complete a semester-by-semester plan from social work program advisor.
- Submit application to the social work program.

## First semester after admission to the major (junior year)

- SOWK 3500 Human Behavior and the Social Environment I
- SOWK 3610 Social Work Practice I
- SOWK 3870 Social Work Research and Practice
- SOWK 4540 Human Diversity for the Helping Professions

## Second semester after admission to the major (junior year)

- SOWK 4000 Ethics and Professionalism in Practice
- SOWK 4500 Human Behavior and the Social Environment II
- SOWK 4400 Social Work Practice II
- SOWK 4880 Quantitative Methods of Social Research

## Third semester after admission to the major (senior year)

- SOWK 4430 Applied Social Welfare Policy
- SOWK 4610 Social Work Practice III

## Fourth semester after admission to the major (senior year)

- SOWK 4870 Social Work Integrative Seminar
- SOWK 4875 Social Work Field Practicum

#### Social Work Elective

Select one of the following:

- SOWK 4725 Theory and Practice in Mental Health
- SOWK 4700 Child Welfare Practice and Services
- SOWK 3525 Violence in Families

#### Minor

None required.

#### Electives

Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours (120) required for the degree.

#### Other requirements

Must make formal application for acceptance to the

#### program;

- Must have a minimum grade of C in all social work courses;
- Must have a minimum 2.25 GPA;
- Must adhere to program policies and course sequencing;
- Must adhere to the National Association of Social Workers (NASW) and State of Texas codes of ethics.

#### **Minors**

#### **Human Services minor**

Human services is an emerging professional identity and there is a high demand for trained human service workers in many settings.

## Required courses

A minor in human services requires the completion of:

- RHAB 3000 Microcounseling
- SOWK 1450 Introduction to Social Work

#### Plus four courses selected from

- RHAB 3100 Disability and Society
- RHAB 4200 Physical and Psychosocial Aspects of Disability
- RHAB 3900 Case Management in Rehabilitation
- ADDS 4075 Drugs and Alcohol
- RHAB 4100 Rehabilitation Service Delivery Systems
- ADDS 4275 Alcohol, Drugs and Disability
- SOWK 2430 Policies, Issues and Programs in Social Welfare
- SOWK 3500 Human Behavior and the Social Environment I
- SOWK 3870 Social Work Research and Practice
- SOWK 4540 Human Diversity for the Helping Professions

#### Area requirements

Students must take courses from at least two of the following areas: social work, addictions and rehabilitation studies.

### **Undergraduate Academic Certificates**

### **Trauma-Informed Care certificate**

Trauma is a major issue in society that results in increased risk across a number of societal concerns. Trauma-informed care is a powerful framework that offers hope in addressing these issues. It provides a means to better recognize the symptoms of trauma, understand its impact, and develop the knowledge base and skills to address the needs of individuals with trauma histories.

This certificate is interdisciplinary and can benefit a wide-range of professions interacting with individuals who have experienced trauma (for example, social work, rehabilitation, psychology majors, criminal justice personnel, healthcare professionals, educators, and many other professional domains). It consists of four required courses across the domains of mental health, substance use, child welfare, and family violence (total of 12 credit hours).

## Requirements

- SOWK 4325 The Intersection of Trauma and Substance Use
- SOWK 3525 Violence in Families
- SOWK 4700 Child Welfare Practice and Services
- SOWK 4725 Theory and Practice in Mental Health

### **College of Information**

Main Office Discovery Park, Room E290 3940 N. Elm St. Denton, TX 76207-7102

Mailing address: 1155 Union Circle #311068 Denton, TX 76203-5017

940-369-8164 Fax: 940-369-8525 Web site: ci.unt.edu

#### Kinshuk, Dean

Shobhana Chelliah, Associate Dean of Research and Development

Yunfei Du, Associate Dean of Academics

The College of Information situates itself at the intersection of people, technology and information. Its faculty, staff and students invest in innovative research, collaborative partnerships and student-centered education to serve a global information society. The college is dedicated to serving state, regional, national and global communities by preparing information leaders and innovators; forging the creation of transformative and translational knowledge; and sharing knowledge that addresses information challenges and problems. The college's goals are to

- provide exemplary learning opportunities and instruction facilitated through varied formats, technology-rich environments and an accomplished faculty who embrace diversity in all college endeavors;
- contribute leading-edge research, scholarship and creative pursuits for a global informational society; and
- nurture the professional endeavors of faculty and staff, the university and the general public through outstanding leadership, consulting, community engagement and continuing education.

### **University Core Requirements and degree** requirements

The University of North Texas core curriculum is listed in the "University Core Curriculum Requirements" in the Academics section of this catalog. Each program within the college requires specific courses to satisfy particular degree requirements. Students who have questions regarding degree requirements and course requirements should contact the College advising office at ciadvising@unt.edu, or consult a degree program advisor in the Department of Information Science, Department of Linguistics, or Department of Learning Technologies.

#### **Programs of study**

Programs of study are listed under each department.

#### **Minors**

#### **Team Science minor**

Team Science is a multidisciplinary field that concentrates on the interpersonal, intrapersonal, organizational, physical, environmental, technological, societal, and political contextual factors in the workplace. Team Science touches on the collaborative functioning of teams and small groups in the workplace, often involving cross-disciplinary and cross-functional groups. The UNT-TSci program studies the antecedent conditions, collaborative processes, and outcomes associated with teams and small groups. Topics studied within this program include: group dynamics, team processes, leadership, team leadership, team training, team evaluation, team cognition, intergroup conflict, change theory, complexity leadership theory, decision-making/problem-solving skills, and systems thinking - along with a preview of the technologies used to support teams and small groups in the workplace.

#### 24 hours required

#### Team Science Characteristics (12 hours)

- LTEC 3610 Principles of Team Science
- LTEC 3620 Team Building
- LTEC 3630 Team Dynamics
- LTEC 3640 Leadership and Team Leadership

#### Team Science Techniques (12 hours)

- LTEC 4640 Team Coaching
- LTEC 4610 Team Cognition
- LTEC 4620 Team Decision Making
- LTEC 4630 Evaluation, Measurement and ROI

### Department of Information Science

Main Office Discovery Park, Room E292

Mailing address: 1155 Union Circle #311068 Denton, TX 76203-5017 940-565-3736or 877-ASK-SLIS Fax: 940-565-3101

TDD access: 800-735-2989 E-mail: lis-chair@unt.edu

Web site: http://informationscience.unt.edu/

#### Jiangping Chen, Chair

#### **Faculty**

The Bachelor of Science with a major in information science at the University of North Texas will equip graduates with the knowledge needed to build competencies in important and emerging areas such as:

- information organization,
- information architecture,
- · information seeking and analysis,
- health informatics,
- knowledge management,
- · digital content and digital curation, and
- information systems.

The BS with a major in information science prepares students for a career at the intersection of information, people and technology. Students earning this degree are able to customize their program by developing focused areas of study (concentrations) or by choosing a minor or certificate in another field.

Information has increased in importance, opening the door to exciting opportunities. A key component of the information science program is its flexibility. Courses are offered in a variety of formats, including face-to-face, online and blended, that allows you to balance classes with full-time or part-time employment.

#### Academic advising

Advising on courses, programs and related questions is available through the college advising office, Discovery Park, Room C232; 940-565-2445; ci-advising@unt.edu. All students should have an approved degree audit on file as early as possible, but not later than the beginning of the final 60 hours of courses. Out of state students must contact the college advising office for advising clearance before registering for classes. Calls and visits by prospective students are welcomed from 9 a.m. to 5 p.m. Monday through Friday.

### Bachelor of Science with a major in information science

The bachelor's program goal is to provide general educational preparation for students planning to enter the information professions. The bachelor's program objectives are for students to demonstrate knowledge and skills related to:

- the roles and impacts of information policies, practices, and information itself on diverse populations in a rapidly changing technological and global information society;
- human information needs and behavior in order to develop and implement information systems and services that meet user needs:
- professional practices necessary to succeed in informationrelated occupations and to pursue the professional master's degree; and
- the philosophy, principles, and legal and ethical responsibilities of the field.

#### Requirements

Recognizing that each student is unique, with different interests and career goals, each application is reviewed on its own merit. Because the interdisciplinary nature of the profession attracts people with diverse backgrounds, students are encouraged to discuss their interests and concerns with an advisor from the department. Students must be admitted to the university in order to be accepted in the information science program.

To enroll in more than 6 hours of courses in the department, students must have the following:

- at least sophomore standing and
- a cumulative grade point average of at least 2.5.

For graduation, candidates to the Bachelor of Science with a major in information science must meet the following requirements:

#### University requirements

- A student must have completed a minimum of 120 semester hours, of which 42 must be upper level.
- See University Core Curriculum Requirements in the Academics section of this catalog for university core curriculum requirements.

#### Information science major requirements

- At least 33 hours including 18 hours of required courses in one of the program concentrations, and at least 15 additional hours selected with the approval of the department.
- Cross-functional—45 hours may be completed or transferred from related areas and programs as approved by the department. Students must contact an advisor in the information science program to determine the 45 hours of course work needed to complete the cross-functional area of the degree.
- A minimum grade point average of 2.5 is required on all courses counted toward the major.

#### **Program Concentrations**

#### **Data Science**

Data Science is an emerging field involving systematic and methodological approach to managing and manipulating large data sets. The concentration in Data Science is designed to help graduates gain skills and experiences in designing, implementing and transforming data sets into actionable knowledge. IT provides them with the knowledge and competencies needed to work with analytic tools and technologies.

#### Human Language Technology

Human Computer Technology is an evolving interdisciplinary field that includes computational linguistics, natural language processing, machine translation and artificial intelligence. The concentration provides graduates with the knowledge needed to work with language based technologies such as speech recognition, speech synthesis, machine translation, search engines and computer assisted services. Graduates will have a better understanding of human computer interaction issues and interfaces.

#### Information science and knowledge organization

Provides graduates with the necessary skills and competencies associated with the collection, classification, storage, retrieval, manipulation, packaging and dissemination of information. It prepares graduates to work with information in a variety of formats and different organizational settings.

#### Project and knowledge management

Provides graduates with the knowledge and the understanding of the convergence of project management and knowledge management, including the use of associated tools and technologies. It prepares them to assume project management responsibilities including project initiation, planning, scheduling, implementation, knowledge retention and knowledge transfer.

#### Information management and health informatics

Provides graduates with the skills and competencies needed to work in a healthcare environment and work with health information such as patient information, medical records, medical imaging and clinical research data. Students in the program will explore how to effectively use technology to improve the efficiency and quality of healthcare including reducing cost, increasing patient access, and improving diagnosis and treatment.

#### Digital content and information systems

Provides graduates with practical knowledge needed to manage the increasingly growing volume of digital information. Graduates will have a better understanding of the tools and technologies needed to manage large amounts of data and complex information systems. Students enrolled in the program will have a better understanding of human—computer interaction issues and interfaces.

#### **Scholarships**

There are various scholarships for which information science majors who are entering freshmen, transfer students or continuing students may apply. For specific information and application forms, contact the department chair, administrative assistant, or visit the web page: <a href="http://informationscience.unt.edu/scholarships-and-awards">http://informationscience.unt.edu/scholarships-and-awards</a>.

#### **Majors**

#### Data Science, BS

The Bachelor of Science in Data Science is designed to meet the rising workforce demand on professional in data management, big data, and data analytics fields. It prepares students for careers in the data science with a broad knowledge of the tools, techniques, and methods needed to work with data and information in an information intensive environment. Some of the areas this program is concerned with include data management, data modeling, big data, data analytics, data and information visualization, information organization, Internet applications development, game design and technology. The program helps students to acquire the type of skills, critical thinking, and competencies needed in data science and digital data management, as well as one of the professional fields. The program will educate a new generation of information professionals, particularly those students with science background pursuing an analytic related field.

### Hours required and general university requirements

A minimum of 120 semester hours, of which 42 must be advanced. See "University Core Curriculum" in the Academics section of this catalog.

### Pre-Data Science Requirements, 15 hours

- MATH 1650 Pre-Calculus
- MATH 1680 Elementary Probability and Statistics
- CSCE 1030 Computer Science I
- CSCE 1040 Computer Science II

#### Major requirements, 24 hours

- INFO 3010 Introduction to Data Science
- INFO 3020 Introduction to Computation with Python
- INFO 4050 Statistical Methods for Data Science and Analysis
- INFO 4501 Principles of Data Science and Analytics
- INFO 4670 Data Analysis and Knowledge Discovery
- INFO 4707 Data Modeling and Data Warehousing
- INFO 4730 Digital Curation and Preservation
- INFO 4907 Data Visualization

#### Professional field, 24 hours

A professional field of 24 hours from information science or a related field, such as computer science, statistics, business analytics, digital communications analytics, health data analytics, and education analytics.

#### Information Science professional field

- INFO 4080 Research Methods and Evaluation
- INFO 4203 Information Indexing and Organization
- INFO 4206 Information Retrieval Systems
- INFO 4230 Records Management Operations
- INFO 4306 Project Management for Information Systems
- INFO 4307 Knowledge Management Tools and Technologies
- INFO 4365 Health Sciences Information Management
- INFO 4745 Information Architecture

#### Business Analytics professional field

- BCIS 3610 Basic Information Systems
- DSCI 2710 Data Analysis with Spreadsheets
- DSCI 3710 Business Statistics with Spreadsheets
- DSCI 3870 Management Science
- DSCI 4330 Enterprise Applications of Business Intelligence/Analytics
- DSCI 4510 Modeling for Business Intelligence
- DSCI 4520 Introduction to Data Mining
- DSCI 4700 Analytics for Decision Making

#### Minor

None.

#### Electives, 15 hours

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree.

Advanced courses in a related field such as computer science, statistics, business analytics, digital communications analytics, health data analytics, and education analytics.

- BCIS 3615 Visual Display of Business Information
- BCIS 3630 Object-Oriented Programming for Business
- BCIS 3680 Enterprise-Oriented Programming
- BCIS 4610 Analysis of Business Information Systems
- BCIS 4620 Introduction to Database Applications
- BCIS 4630 Fundamentals of Information Technology Security
- BCIS 4660 Introduction to Data Warehousing
- BCIS 4690 Information Technology Management
- BCIS 4720 Web-Based Information Technologies

#### Other course requirements

INFO 4970 - Information Science Seminar

#### Other requirements

A grade of "C" or higher is required in all Pre-Data Science, Major Courses, Professional Field, and Supporting Field courses. A 2.0 UNT, 2.0 Overall, and 2.7 Professional/Supporting Field GPA is required for graduation.

### Information Science with a concentration in Data Science, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.
- To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.
- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.
- Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner.

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - O Information organization and management
  - Information users and their needs
  - Data modeling and database design
  - Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - O Digital Content and Information Systems
  - O Human Language Technology
  - Information Management and Health Informatics
  - O Information Science and Knowledge Organization
  - Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

#### Concentration in Data Science

- INFO 4501 Principles of Data Science and Analytics
- INFO 4907 Data Visualization
- INFO 4707 Data Modeling and Data Warehousing
- INFO 4050 Statistical Methods for Data Science and Analysis
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### Cross-functional

Cross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

# Information Science with a concentration in Digital Content and Information Systems, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice

and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.
- To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.
- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.
- Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner.

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - Information organization and management

- Information users and their needs
- Data modeling and database design
- Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - O Digital Content and Information Systems
  - O Human Language Technology
  - O Information Management and Health Informatics
  - O Information Science and Knowledge Organization
  - Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

### Concentration in digital content and information systems

- INFO 4206 Information Retrieval Systems
- INFO 4710 Information Technology Management
- INFO 4730 Digital Curation and Preservation
- INFO 4745 Information Architecture
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### Cross-functional courses

Cross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor.

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

# Information Science with a concentration in Human Language Technology, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.

 To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.
- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.
- Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner.

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - O Information organization and management
  - O Information users and their needs
  - O Data modeling and database design
  - O Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - O Digital Content and Information Systems
  - O Human Language Technology
  - O Information Management and Health Informatics
  - O Information Science and Knowledge Organization

- Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

### Concentration in human language technology

- INFO 4730 Digital Curation and Preservation
- LING 3070 Introduction to Linguistics
- LING 4050 Morphology
- LING 4130 Discovering Language from Data
- LING 4140 Computational Linguistics
- INFO 4900 Special Problems
- LING 4900 Special Problems

#### Cross-functional courses

Cross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor.

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

# Information Science with a concentration in Information Management and Health Informatics, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.
- To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.
- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.
- Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner.

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - Information organization and management
  - O Information users and their needs
  - O Data modeling and database design
  - O Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - O Digital Content and Information Systems
  - Human Language Technology
  - O Information Management and Health Informatics
  - O Information Science and Knowledge Organization
  - O Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

### Concentration in information management and health informatics

- INFO 4365 Health Sciences Information Management
- INFO 4637 Medical Informatics
- INFO 4670 Data Analysis and Knowledge Discovery
- INFO 4710 Information Technology Management
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### Cross-functional courses

Cross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor.

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

# Information Science with a concentration in Information Science and Knowledge Organization, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.
- To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.

- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.
- Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - O Information organization and management
  - O Information users and their needs
  - O Data modeling and database design
  - O Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - Digital Content and Information Systems
  - O Human Language Technology
  - O Information Management and Health Informatics
  - O Information Science and Knowledge Organization
  - Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

### Concentration in information science and knowledge organization

- INFO 4203 Information Indexing and Organization
- INFO 4206 Information Retrieval Systems
- INFO 4223 Introduction to Metadata for Information Organization
- INFO 4710 Information Technology Management

- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### Cross-functional courses

ross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor.

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

# Information Science with a concentration in Project and Knowledge Management, BS

The Bachelor of Science with a major in information science equips graduates with the knowledge, skills and abilities to work in work in a variety of current and emerging areas in the information field. Information science focuses on the intersection of people, information and technology. Students gain a foundation in the discipline and professional practice through a set of core courses, a selection of specializations and through multiple experiential learning experiences.

The Bachelor of Science with a major in information is recognized as a STEM undergraduate degree. It is a professional degree designed to prepare the student for a career and/or further studies in the practice and the discipline at the intersection of people, information and technology.

#### **Program Goals**

Program Goals for the Bachelor of Science in Information Science:

- To prepare learners with the knowledge, skills, and abilities to construct and deliver solutions, services, and processes at the intersection of people, information, and technology.
- To develop in learners their capabilities to analyze, design, implement, evaluate, manage, and lead to address and meet social, organizational, and individual information needs.
- To provide learners with rigorous courses, experiential learning, and real-world opportunities leading to successful and worthwhile careers in the information field.

#### **Program Outcomes**

Program Outcomes for the Bachelor of Science in Information Science indicate specific, demonstrable (measurable), and learnercentered statements of the knowledge and skills graduates of the program will be able to demonstrate:

- Collect, analyze, and interpret data to identify and understand people's information needs and behaviors.
- Design, implement, and evaluate user-centered technical systems and applications to meet people's information needs and behaviors.
- Use and/or construct processes and procedures to solve problems related to organizing, managing, and preserving data, information, and knowledge for diverse user groups.
- Discuss, explain, and discuss professional, social, policy, ethical, legal, and security issues and responsibilities of information professionals and researchers.
- Employ and practice excellent written and spoken communication and effective interpersonal skills whether working in teams or as an individual.

 Recognize that you are responsible for your learning and demonstrate abilities to be an independent and life-long learner.

#### Degree requirements

Students must be admitted to the university prior to being accepted in the information science program. Students must meet all general requirements for admission to undergraduate study as stated in the Admission section of this catalog. To enroll for more than 6 hours of courses in the Department of Information Science, students must have the following:

- At least sophomore standing
- At least junior standing is required to enroll for more than 12 hours in the department.
- A cumulative grade point average of at least 2.5.

### Hours required and general/college requirements

A minimum of 120 semester hours, 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in "General degree requirements" and the Requirements of this catalog: University Core Curriculum in the Academics section of this catalog.

### Bachelor of science degree requirements

Information science majors must complete 33 credit hours of coursework in the following categories:

- Five required core courses totaling 15 credit hours; these required courses cover the following main topics:
  - Introduction to information, information science, and information technologies
  - O Information organization and management
  - O Information users and their needs
  - O Data modeling and database design
  - O Professional preparation and career development
- A required concentration comprising 6 required courses totaling 18 credit hours; current concentrations are:
  - Data Science
  - O Digital Content and Information Systems
  - O Human Language Technology
  - O Information Management and Health Informatics
  - Information Science and Knowledge Organization
  - O Project and Knowledge Management
- A capstone experience in the form of a 3 credit hour course as one of the six required courses for each concentration.

### Concentration in project and knowledge management

- INFO 4230 Records Management Operations
- INFO 4306 Project Management for Information Systems
- INFO 4307 Knowledge Management Tools and Technologies
- INFO 4710 Information Technology Management
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### Cross-functional courses

Cross-functional electives comprising 45 credit hours, with at least 9 credit hours at the upper level (courses numbered 3000 and above). Cross-functional elective are determined in consultation with the academic advisor.

Students should work closely with the director of the BS-IS program and the college advising office when choosing cross functional electives. The program recommends specific elective courses to enhance students' preparation for professional information work. These electives fulfill total number of hours required for degree and to meet advanced hour requirement.

#### Other requirements

Students must maintain a minimum grade point average (GPA) of 2.5 across all Information Science major courses taken.

#### **Grad Track Options**

# Information Science, BS with grad track option leading to Information Science, MS

The Department of Information Sciences offers a grad track option for existing UNT undergraduate students with a major in information science (IS). In this grad track option, students can take a maximum of 9 credit hours of graduate courses while completing the information science BS degree. These credits will be counted toward first the bachelor's degree and then the Master of Science in Information Science.

Prior to registering for the specified graduate courses, the student must have been admitted to the grad track option and obtained approvals from the appropriate undergraduate and/or graduate advisors

### Admission requirements and program policies

#### Admission requirements

- Students should be a major in the UNT information science Bachelor of Science program.
- A student may apply for the grad track option during his/ her junior year (and must have completed at least 75 credit hours at the time of application to grad track).
- Minimum of 3.5 cumulative GPA required at the time of application submission.
- The student will provide two recommendation forms from Information Science faculty members who can evaluate the student's ability to complete graduate level work.
- The application will be reviewed by the College of Information (COI) advising and admissions student support services office and both the undergraduate and graduate advisors.
- Once approved, the student must apply to Toulouse Graduate School within the first semester of the senior year.

#### Program policies

- After completing 90 credit hours, the student can start taking the graduate courses as grad track electives for the BS degree requirement with a major in information science (IS). The accepted graduate courses for the IS grad track are listed below. If the student wants to take other graduate courses for the grad track credits, he/she needs to obtain approvals from the LIS department chair, or the graduate faculty advisor, and the director or assistant director of the College of Information (COI) advising and admissions student support services office. For these graduate course to be counted toward requirements for the MS degree, the student should earn a B or above in the approved graduate courses.
- The students admitted to the grad track option will be admitted into the MS program on a conditional basis. Once the student has satisfied all course work for the bachelor's degree and maintained a 3.0 or higher GPA on the specified graduate courses, he/she will be fully admitted to the MS program.

- 3. Undergraduate students who have been accepted to a grad track option should complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they start taking graduate courses, or enrollment in graduate level course work will be suspended.
- 4. The student must enroll in graduate school in the next long semester after finishing his/her bachelor's degree and should take the remaining graduate courses in the following 12 months to complete his/her MS degree. If the student does not enroll in graduate school in the next long semester after finishing his/her bachelor's degree, those graduate course credit hours taken as part of grad track will not be applied to the MS degree, even if the student comes back for graduate school in the future.

#### Program requirements

- INFO 5080 Research Methods and Analysis (replaces INFO 4080 Research Methods and Evaluation)
- INFO 5230 Records Management (replaces INFO 4230 -Records Management Operations)
- INFO 5306 Project Management for Information Systems (replaces INFO 4306 - Project Management for Information Systems)
- INFO 5615 Electronic Databases and Information Services (replaces INFO 4615 Electronic Information Services)
- INFO 5814 Web Content Development and Maintenance (replaces an INFO 3000/4000 elective)
- INFO 5305 Systems Analysis and Design (replaces an INFO 3000/4000 elective)
- INFO 5707 Data Modeling for Information Professionals (replaces an INFO 3000/4000 elective)

### Information Science, BS with grad track option leading to Library Science, MS

The Department of Information Science offers a grad track option for existing UNT undergraduate students with a major in information science. In this grad track option, students can take a maximum of 9 credit hours of graduate courses while completing the information science BS. These credits will be counted toward first the BS degree and then the Master of Science in Library Science.

Prior to registering for the specified graduate courses, the student must have been admitted to the grad track option and obtained approvals from the appropriate undergraduate and/or graduate advisors

### Admission requirements and program policies

#### Admission requirements

- Students should be a major in the UNT information science Bachelor of Science program.
- A student may apply for the grad track option during his/ her junior year (and must have completed at least 75 credit hours at the time of application to grad track).
- Minimum of 3.5 cumulative GPA required at the time of application submission.
- The student will provide two recommendation forms from Information Science faculty members who can evaluate the student's ability to complete graduate-level work.
- The application will be reviewed by the College of Information (COI) advising and admissions student support services office and both the undergraduate and graduate advisors.
- Once approved, the student must apply to Toulouse Graduate School within the first semester of the senior year.

#### Program policies

- After completing 90 credit hours, the student can start
  taking the graduate courses as grad track electives for
  the information science degree requirement with a
  concentration in library science (LS). The accepted graduate
  courses for the LS grad track are listed below. If the student
  wants to take other graduate courses for the grad track
  credits, he/she needs to obtain approvals from the LIS
  department chair, or the graduate faculty advisor, and the
  director or assistant director of the College of Information
  (COI) advising and admissions student support services
  office. For these graduate course to be counted toward
  requirements for the MS degree, the student should earn a B
  or above in the approved graduate courses.
- The students admitted to the grad track option will be admitted into the MS program on a conditional basis.
   Once the student has satisfied all course work for the BS degree and maintained a 3.0 or higher GPA on the specified graduate courses, he/she will be fully admitted to the MS program.
- Undergraduate students who have been accepted to a grad track option should complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they start taking graduate courses, or enrollment in graduate-level course work will be suspended.
- 4. The student must enroll in graduate school in the next long semester after finishing his/her BS degree and should take the remaining graduate courses in the following 12 months to complete his/her MS degree. If the student does not enroll in graduate school in the next long semester after finishing his/her BS degree, those graduate course credit hours taken as part of grad track will not be applied to the MS degree, even if the student comes back for graduate school in the future.

#### Program requirements

- INFO 5080 Research Methods and Analysis (replaces INFO 4080 - Research Methods and Evaluation)
- INFO 5230 Records Management (replaces INFO 4230 -Records Management Operations)
- INFO 5300 Management of Information Agencies (replaces INFO 4300 - Administration of Information Agencies)
- INFO 5306 Project Management for Information Systems (replaces INFO 4306 - Project Management for Information Systems)
- INFO 5400 Information Resources Development (replaces INFO 4400 - Evaluation and Development of Information Resources)
- INFO 5615 Electronic Databases and Information Services (INFO 4615 - Electronic Information Services)

#### **Minors**

### Digital Content and Information Systems minor

A minor in digital content and information systems requires 18 hours and is open to all majors. Courses offered by other departments may be applied to the minor if approved by the information science advisor. For more information, contact the main office at 940-565-3736.

#### Required courses, 18 hours

- INFO 4206 Information Retrieval Systems
- INFO 4710 Information Technology Management

- INFO 4730 Digital Curation and Preservation
- INFO 4745 Information Architecture
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### **Human Language Technology minor**

Students must complete the following 18 hours to earn the human language technology minor.

#### Required courses

- INFO 4730 Digital Curation and Preservation
- LING 3070 Introduction to Linguistics
- LING 4050 Morphology
- LING 4130 Discovering Language from Data
- LING 4140 Computational Linguistics
- LING 4900 Special Problems
- INFO 4900 Special Problems

### **Information Management and Health Informatics minor**

A minor in information management and health informatics requires 18 hours and is open to all majors. Courses offered by other departments may be applied to the minor if approved by the information science advisor. For more information, contact the main office at 940-565-3736.

#### Required courses, 18 hours

- INFO 4365 Health Sciences Information Management
- INFO 4637 Medical Informatics
- INFO 4670 Data Analysis and Knowledge Discovery
- INFO 4710 Information Technology Management
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

### **Information Science and Knowledge Organization minor**

A minor in information science and knowledge organization requires 18 hours and is open to all majors. Courses offered by other departments may be applied to the minor if approved by the information science advisor. For more information, contact the main office at 940-565-3736.

#### Required courses, 18 hours

- INFO 4203 Information Indexing and Organization
- INFO 4206 Information Retrieval Systems
- INFO 4223 Introduction to Metadata for Information Organization
- INFO 4710 Information Technology Management
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

### **Project and Knowledge Management** minor

A minor in project and knowledge management requires 18 hours and is open to all majors. Courses offered by other departments may be applied to the minor if approved by the information science advisor. For more information, contact the main office at 940-565-3736.

#### Required courses, 18 hours

- INFO 4230 Records Management Operations
- INFO 4306 Project Management for Information Systems
- INFO 4307 Knowledge Management Tools and Technologies
- INFO 4710 Information Technology Management
- INFO 4910 Special Problems
- INFO 4970 Information Science Seminar

#### **Undergraduate Academic Certificates**

#### **Rural library management certificate**

#### Required courses, 12 hours

Students who are interested in earning an undergraduate academic certificate in rural library management must take the following four courses (12 hours):

- INFO 4325 Advanced Topics in Rural Libraries
- INFO 4350 Library Partnership and Community Outreach
- INFO 4615 Electronic Information Services
- INFO 4750 Managing Automation Projects

#### Note:

These four courses must be successfully completed within a fourvear time frame.

All students pursuing an undergraduate academic certificate must meet regular UNT admission requirements. Candidates for admission to the undergraduate academic certificate program must meet the minimum academic standards for the academic discipline. Post-baccalaureate students are eligible to pursue an undergraduate academic certificate.

## Department of Learning Technologies

Main Office Discovery Park, Room G150

Mailing address: 3940 N. Elm Street Denton, TX 76207-7102 940-565-2057 Fax: 940-565-4194

Web site: www.lt.unt.edu

Yunjo An, Chair

Faculty

Learning technologies continue to change the face of learning and training internationally, nationally, regionally and statewide. The degree programs in the Department of Learning Technologies are nationally and internationally known for preparing future educators and technology professionals to advance knowledge of technology tools and their applications. Faculty members within the department continue this leadership role through scholarship, grant acquisition, teaching and service activities.

Learning technologies graduates play key roles in a wide variety of educational and business settings such as principals of schools, technology coordinators, web designers and developers, technical consultants, higher education faculty, instructional designers, and researchers. Their impact on learning technologies will continue to evolve and expand over the next few decades. The vision of the learning technologies department is to provide students with knowledge and experience that add value to learning technologies through research, product development, and application of current tools to solve educational problems.

#### **Academic advising**

Advising on courses, programs and related questions is available through the college advising office, Discovery Park, Room C232; 940-565-2445; ci-advising@unt.edu. Students are encouraged to contact their advisors each term/semester for help with program decisions and enrollment. All students should have an approved degree audit on file as early as possible, but not later than the beginning of the final 30 hours of courses. See individual programs below for more information. Calls and visits by prospective students also are welcomed from 8 a.m. to 5 p.m. Monday through Friday.

#### Learning technologies

The program in learning technologies offers a minor in computer education, as well as a number of elective and service courses designed to enhance the preparation of classroom teachers and corporate professionals by providing opportunities for them to learn about and integrate technology.

#### **Majors**

#### Learning Technologies, BAS

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Applied Sciences degree as specified by the University Core Curriculum in the Academics section of this catalog and the College of Information requirements.

#### Major requirements, 66 hours

Broken down into Area of Specialization, Technical and Professional Foundations, and Technical and Professional Development Concentrations

#### Area of Specialization, 21 hours

Comprised of courses related to a specific applied STEM occupation, field, or subject. This component may include traditional or applied STEM courses completed for an Associate of Applied Science (AAS) degree at a community college. In addition, technical credit received by active-duty military or veterans may be applied to this degree plan. Other students who have not created an area of specialization through courses taken in a community college or in the military, may create one by selecting a primary STEM area of study in consultation with the appropriate advisors.

### Technical and Professional Foundations, 21 hours

#### The four (4) required foundations courses include:

The four (4) required foundations courses include:

- LTEC 3000 Foundations of Learning Technologies in STEM
- LTEC 3100 New Horizons for Learning Technologies in STEM
- LTEC 3200 Leadership and Ethical Practices for STEM Professionals
- LTEC 4741 Learning Technologies Capstone

### The remaining three (3) foundations courses may be selected from the following courses:

- INFO 4745 Information Architecture
- LTEC 3220 Computer Graphics in Education and Training
- LTEC 3260 Web Authoring
- LTEC 3530 Data Communications
- LTEC 4040 Organizational Development and Performance Improvement
- LTEC 4050 Entrepreneurship and Performance Improvement
- LTEC 4060 Project Management and Applied Technology Performance Improvement
- LTEC 4100 Technology Integration
- LTEC 4160 Advanced Computer Applications in Education and Training
- LTEC 4550 Network Systems Administration
- LTEC 4560 Internet Services Administration

### Technical and Professional Development Concentrations, 24 hours

Consists of one or two separate multidisciplinary STEM concentrations, developed in collaboration between the BAS program and other appropriate disciplinary units. Each concentration will consist of a minimum of 12 credit hours that serve to enhance the skills a student has acquired through prior education or are complimentary to the student's career plans. Prerequisite and/ or a series of prerequisite courses may be required for certain concentrations. This component may include traditional or applied STEM courses completed for an Associate of Applied Science (AAS) degree at a community college. In addition, technical credit received by active-duty military or veterans may be applied to this degree plan.

#### Minor requirements

None required.

#### Electives, 12 hours

Varies with individual program. Any approved UNT courses the student and the advisor deem appropriate to the degree may be selected. Caution must be exercised to ensure the student fulfills the university requirement of 36 hours of advanced-level coursework. This component may include traditional or applied STEM courses completed for an Associate of Applied Science (AAS) degree at a community college. In addition, technical credit received by active-duty military or veterans may be applied to this degree plan.

#### Other requirements

- a total of 36 hours of upper-division work
- at least 24 hours of upper-division work in residence
- a total of 60 hours of applied or traditional STEM coursework (may come from major requirements or electives)

#### **Minors**

#### **Computer Education minor**

A minor in computer education requires 18 semester hours.

#### Required courses, 9 hours

- LTEC 2100 Surviving the Information Age
- LTEC 3220 Computer Graphics in Education and Training
- LTEC 3260 Web Authoring

#### Additional requirements

 The remaining 9 hours must be advanced LTEC courses at the 3000 or 4000 level.

#### **Department of Linguistics**

Main Office Discovery Park, Room B201

Mailing address: 1155 Union Circle #311068 Denton, Texas 76203-5017

940-565-4552

E-mail: ling-info@unt.edu Web site: linguistics.unt.edu

#### Sadaf Munshi, Chair

The linguistics department offers a BA with a major in linguistics and a BA with a minor in information science.

The Bachelor of Arts with a major in linguistics offers students a comprehensive overview of the history of the field and a strong foundation in the core areas of phonetics, phonology, morphology, syntax and semantics. A major goal of the BA program is to stimulate student curiosity about language and cultural diversity. Of general interest to our students, but of special interest to those interested in teaching English as a second language, are courses on English grammar and the methods of teaching English. Courses are also offered on theories of second language acquisition and English language variation and change. Courses in computational linguistics can help prepare students for jobs in the tech industry or for further study in computational linguistics and/or natural language processing.

The BA with a major in linguistics provides students opportunities for working with data with an eye to discovering predictable linguistic patterns (linguistic problem solving). Students learn how to read, write, and present syntheses of relevant published work and to arrive at their own original theoretical formulations. The Scientific Methods course and the Capstone course train students in original research, which includes evaluating and reporting on existing findings using appropriate citation methods and creating and reporting on original experiments and arguments. CNN lists linguistics as the second most overlooked job possibility for new graduates. A degree in linguistics makes students competitive for jobs in fields such as:

- language education
- language testing service
- teaching English as a Second/Foreign Language
- speech & hearing language pathology and audiology
- language documentation/fieldwork
- natural language processing
- codes and code-breaking
- law forensic linguistics
- translation/interpretation
- advertising
- marketing
- publishing

Because linguistics provides students with the skills to analyze language, companies like Microsoft, Google and Apple are also eager to hire students with linguistics degrees. Read more on the Linguistic Society of America web site (www.linguisticsociety.org).

The strengths of the linguistics program lie in our established TESOL program and research areas in language variation and change, language documentation, computational linguistics, and the linguistic analysis of literature. Since moving to the College of Information in Fall 2014, we have added a new research focus in language technology and language data curation. Our international collaborations currently are with Mexico, India, Pakistan and China. Our overall goal is to contribute to the global understanding of the nature of language, and to provide students ample opportunities to conduct and disseminate original research. We strongly encourage and support student participation at conferences and public speaking venues

#### Academic advising

Advising on courses, programs, and related questions is available through the college advising office, Discovery Park, Room C232; 940-565-2445; ci-advising@unt.edu. All students should have an approved degree plan audit on file as early as possible, but not later than the beginning of the final 60 hours of courses. Calls and visits by prospective students are welcomed from 8 a.m. to 5 p.m., Monday through Friday.

#### **Majors**

#### Linguistics with a concentration Teaching English in a Global Environment, BA

A Bachelor of Arts with a major in linguistics ensures that you receive the proper training and knowledge to have a successful career in the field of linguistics. The curriculum allows you to immerse yourself in the study of language and to understand its structure, use, design and application.

#### Degree requirements

The following requirements must be satisfied for a Bachelor of Arts with a major in linguistics and a Teaching English in a Global Environment concentration.

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Applied Sciences degree as specified by the University Core Curriculum in the Academics section of this catalog and the College of Information requirements.

#### Major requirements, 42 hours

#### Required courses, 27 hours

- LING 3070 Introduction to Linguistics
- LING 3080 Language and Society
- LING 3090 Discourse Analysis: Talking and Telling
- LING 4040 Phonetics and Phonology: The Sound Patterns of Language
- LING 4050 Morphology
- LING 4060 Scientific Methods
- LING 4130 Discovering Language from Data
- LING 4950 Senior Capstone Field Experience

### Teaching English in a Global Environment concentration, 12 hours

- LING 4020 Structure of Modern English
- LING 4030 Acquisition of English as a Second Language
- LING 4080 Teaching English as a Second Language
- LING 4410 World Englishes

#### Plus 3 hours selected from

- LING 1020 Speech for International Students
- LING 2040 Endangered Languages
- LING 2050 The Language of Now: Pop Culture, Technology and Society
- LING 2060 Language and Computers
- LING 3040 The Politics of Language
- LING 3050 Communication Across Species
- LING 4070 History of the English Language

- LING 4010 English Language in America
- LING 4090 Semantics and Pragmatics
- LING 4100 Poetics
- LING 4120 Migration and Language Contact
- LING 4140 Computational Linguistics

#### Foreign language, 3–12 hours

Students must attain Intermediate II (2050) level (prerequisite for 2050 course is 2040; prerequisite for 2040 course is 1020; prerequisite for 1020 course is 1010).

#### Minor

Linguistics majors who would like to study cutting-edge practices and technologies managing linguistic data for computational and quantitative analysis may choose to minor in Information Science.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Information.

#### Other requirements

A minimum grade point average of 2.5 is required on all courses counted toward the major.

#### Linguistics, BA

A Bachelor of Arts with a major in linguistics ensures that you receive the proper training and knowledge to have a successful career in the field of linguistics. The curriculum allows you to immerse yourself in the study of language and to understand its structure, use, design and application.

#### Degree requirements

The following requirements must be satisfied for a Bachelor of Arts with a major in linguistics.

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog.

#### Major requirements, 42 hours

#### Required courses, 27 hours

- LING 3070 Introduction to Linguistics
- LING 3080 Language and Society
- LING 3090 Discourse Analysis: Talking and Telling
- LING 4040 Phonetics and Phonology: The Sound Patterns of Language
- LING 4050 Morphology
- LING 4055 Syntax
- LING 4060 Scientific Methods
- LING 4130 Discovering Language from Data
- LING 4950 Senior Capstone Field Experience

#### Plus 15 hours selected from

- LING 1020 Speech for International Students
- LING 2040 Endangered Languages

- LING 2050 The Language of Now: Pop Culture, Technology and Society
- LING 2060 Language and Computers
- LING 2070 Language and Discrimination
- LING 3040 The Politics of Language
- LING 3050 Communication Across Species
- LING 4010 English Language in America
- LING 4020 Structure of Modern English
- LING 4030 Acquisition of English as a Second Language
- LING 4070 History of the English Language
- LING 4080 Teaching English as a Second Language
- LING 4090 Semantics and Pragmatics
- LING 4100 Poetics
- LING 4120 Migration and Language Contact
- LING 4140 Computational Linguistics
- LING 4410 World Englishes

#### Foreign language, 3–12 hours

Students must attain Intermediate II (2050) level (prerequisite for 2050 course is 2040; prerequisite for 2040 course is 1020; prerequisite for 1020 course is 1010).

#### Minor

Linguistics majors who would like to study cutting-edge practices and technologies managing linguistic data for computational and quantitative analysis may choose to minor in Information Science.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Information.

#### Other requirements

A minimum grade point average of 2.5 is required on all courses counted toward the major.

#### **Grad Track Options**

### Linguistics, BA with Grad Track option leading to Linguistics, MA

Students must be current UNT Linguistics majors to be considered for the Grad Track program. They must have completed 75 credit hours when they apply and 90 credit hours before taking graduate level courses. The student must have a GPA of 3.5 or higher to be considered for the Grad Track program. Additionally, the student will submit two letters of recommendation from Linguistics Faculty members who can attest to the student's ability to do graduate level coursework. Once approved, the student must apply to the MA program and Toulouse Graduate School during the first semester of their senior year.

The department will allow the full 12 hours of grad credit.

#### Requirements

- LING 5090 Pedagogical Grammar
- LING 5300 Phonology
- LING 5305 Morphology
- LING 5310 Syntax
- LING 5330 Sociolinguistics
- LING 5350 Typology

- LING 5380 Linguistic Field Methods
- LING 5410 Computational Linguistics
- LING 5530 Semantics & Pragmatics
- LING 5550 Corpus Linguistics
- LING 5580 Language and Gender

#### **Minors**

#### **Linguistics minor**

To minor in linguistics, students must complete 18 hours.

#### Required courses

- LING 3070 Introduction to Linguistics
- LING 4040 Phonetics and Phonology: The Sound Patterns of Language
- LING 4050 Morphology
- LING 4055 Syntax

#### Plus 6 hours selected from

- LING 3090 Discourse Analysis: Talking and Telling
- LING 4010 English Language in America
- LING 4020 Structure of Modern English
- LING 4070 History of the English Language
- LING 4130 Discovering Language from Data
- LING 4140 Computational Linguistics

## College of Liberal Arts and Social Sciences

Main Office

General Academic Building, Room 210

Mailing address: 1155 Union Circle #305189 Denton, TX 76203-5017 940-565-2497

Web site: www.class.unt.edu

Dean's Office for Undergraduates and Student Advising

General Academic Building, Room 220

940-565-2051 Fax: 940-565-4529

Web site: class.unt.edu/office-student-advising

#### Tamara L. Brown, Executive Dean

Jean B. Schaake, Associate Dean Steven Cobb, Associate Dean Kathryn Cullivan, Associate Dean

Our mission is to kindle the thirst for truth, justice, and beauty; to foster cultural literacy and scientific investigation; and to cultivate thinking, speaking, and writing abilities characterized by clear expression and logically coherent, evidence-based arguments. We see these as the values, forms of knowledge, and skills most needed by citizens of a democracy and by productive members of the global workforce.

We pursue instruction, research and service across a broad spectrum of arts, humanities and social sciences disciplines. As a direct result of these activities, we deliver lively, stimulating programs of study in a thought-provoking, intellectual climate. We emphasize the creation of specialized learning links with other areas of knowledge provided by other colleges, with the ultimate goal being to foster an understanding of the complex, multi-faceted world around and beyond us.

Consistent with the goals of providing a comprehensive, relevant education, the College of Liberal Arts and Social Sciences prepares students to acquire certain key, basic proficiencies:

- written and oral communication;
- working knowledge of a foreign language and foreign culture beyond the two years expected before entering college;
- understanding and appreciation of the various fields of learning represented by historical inquiry, the visual and performing arts, the processes of thought in the humanities and philosophy, and the investigation of the causes and consequences of human actions pursued in the social sciences; and
- appropriate levels of knowledge and critical ability in a chosen discipline and its method of inquiry.

Students in the College of Liberal Arts and Social Sciences will receive the intellectual stimulation and the conceptual framework to explore critically the interconnected worlds of self and society. They will acquire the necessary literacies and broad-based exposure to the main elements of human experience that initiate the lifelong process of being an educated person and, that in most instances, also provide the means to enter graduate schools or a variety of careers.

The college consists of the following departments and areas of study:

Aerospace Studies
Anthropology
Communication Studies
Dance and Theatre
Economics
English
Geography and the Environment
History
Integrative Studies

International Studies
Jewish and Israel Studies
Latino Culture, Economy and Policy
Media Arts
Military Science
Philosophy and Religion
Political Science
Psychology
Social Science
Sociology
Spanish
Technical Communication
Women's and Gender Studies
World Languages, Literatures and Cultures

CLASS also includes the Frank W. And Sue Mayborn School of Journalism. See the Frank W. and Sue Mayborn School of Journalism section of the catalog for more information.

#### **Academic advising**

Academic advisors and counselors are available in the College of Liberal Arts and Social Sciences Dean's Office for Undergraduates and Student Advising in the General Academic Building, Room 220, to assist students in the development and pursuit of meaningful educational goals.

The College of Liberal Arts and Social Sciences Dean's Office for Undergraduates and Student Advising has trained academic advisors who are assigned to specific majors. The academic advisors prepare students' degree audits, assist majors with core curriculum issues and requirements for their chosen major, and process graduation applications. Faculty advisors in the department assist the students in their major.

Students starting college at UNT after high school graduation are part of the Take Flight: CLASS First Year Advising program! These students are invited to use the CLASS-Y Scholar Suite in GAB 207 as a study lounge and hub for Academic Advising. The Take Flight Advising Team has four dedicated Academic Counselors for you who will meet with you for individual appointments, specialized academic workshops, and events.

#### **Degree requirements**

The basic structure of all bachelor's degrees consists of a large set of general education requirements common to all degrees (University Core Curriculum – 42 hours at UNT), a small set of requirements unique to the school or college offering the degree (college requirements), a set of requirements defining a major field of study as determined by a department (major/professional/concentration – a minimum of 24 hours, including 12 advanced hours earned at UNT), and electives chosen freely or in consultation with an advisor to reach the minimum number of hours required for the degree. A lesser field of study, a minor (minimum of 18 hours), is optional unless specified in the degree requirements. All degrees require that 30 hours be earned at UNT and that at least 42 hours are at the advanced level (3000- and 4000-level courses).

#### **Degree audit**

A degree audit is an official document of the university that lists all the courses needed to complete a chosen degree and shows how all of the courses completed are applied toward the degree. Students should file for a degree audit when certain of their major by making an appointment with the faculty advisor in the major department. Transfer students will need to bring:

- copies of transfer transcripts;
- catalog descriptions of transfer courses; and
- the initial Core Curriculum Transfer Evaluation from orientation.

After the degree audit advising session with the faculty advisor, the degree audit request form is sent to the Dean's Office for Undergraduates and Student Advising (GAB, Room 220) for preparation of the degree audit. Within a few weeks, an official degree audit will be emailed to the student's official UNT email address. Students may view their degree audit online at

mydegreeaudit.unt.edu anytime or obtain an updated copy each term/semester from GAB, Room 220. Academic advisors in GAB, Room 220, are available by appointment to assist students with questions that may arise as they chart their progress.

#### **Programs of study**

The college offers the following undergraduate degrees:

- Bachelor of Arts
- Bachelor of Fine Arts
- Bachelor of Science
- Bachelor of Science in Economics
- Minors in a variety of disciplines see individual departments
- Academic certificates

Candidates for the Bachelor of Arts and Bachelor of Science degrees must satisfy all "General degree requirements" for the bachelor's degree listed in the Academics section of this catalog, and all requirements of the Liberal Arts and Social Sciences degree requirements listed below. Candidates for the Bachelor of Fine Arts degree must satisfy all requirements for the bachelor's degree listed in the Academics section of this catalog.

### Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree requirements and core requirements should consult an academic advisor.

#### **Bachelor of Arts degree requirements**

Candidates for the Bachelor of Arts must meet the following requirements.

- Hours Required for the Degree: Completion of a minimum of 120 total semester hours; 42 must be advanced.
- General University Requirements: See «General Degree Requirements» in the Academics section of this catalog.
- College of Liberal Arts and Social Sciences Degree Requirements: See «Liberal Arts and Social Sciences degree requirements" in this section of the catalog for specific requirements and list of approved courses. See specific degree audit for exact hours.
- Major Requirements: A major as specified by the department with at least 24 semester hours; 12 hours of advanced work in the major must be completed at UNT.
- 5. **Minor:** See individual major.
- 6. Electives: See individual major.
- 7. Other Course Requirements: See individual major.
- Other Requirements: Completion of all other requirements for a major and a minor as specified by the respective departments.

#### **Bachelor of Fine Arts degree requirements**

Candidates for the Bachelor of Fine Arts degree must meet the following requirements.

- Hours Required for the Degree: Completion of a minimum of 120 total semester hours; 42 must be advanced.
- General University Requirements: See «General Degree Requirements» in the Academics section of this catalog.
- Major Requirements: Major in dance is available.
   See the Department of Dance and Theatre for specific requirements.
- 4. **Minor:** See individual major.
- 5. Electives: See individual major.

- 6. Other Course Requirements: See individual major.
- Other Requirements: Completion of all other requirements for a major or minor as specified by the respective departments.

#### **Bachelor of Science degree requirements**

Candidates for the Bachelor of Science must meet the following requirements.

- Hours Required for the Degree: Completion of a minimum of 120 total semester hours; 42 must be advanced.
- General University Requirements: See "General Degree Requirements" in the Academics section of this catalog.
- Major Requirements: A major as specified by the department with at least 24 semester hours; 12 hours of advanced work in the major must be completed at UNT.
- 4. Minor: See individual major.
- 5. Electives: See individual major.
- 6. Other Course Requirements: See individual major.
- Other Requirements: Completion of all other requirements for a major and a minor as specified by the respective departments.

#### Core curriculum

Candidates for the Bachelor of Arts and Bachelor of Science degrees in the College of Liberal Arts and Social Sciences must complete the University Core and the Liberal Arts and Social Sciences degree requirements shown below. Candidates for the Bachelor of Science degree may have other options for the foreign language requirement. Candidates for the Bachelor of Fine Arts degree must satisfy the requirements of the University Core Curriculum. Students should see the departmental advisor for their major for more information.

#### **University Core Curriculum**

- Communication (English Composition and Rhetoric) (6
  hours): See approved list in the Academics section of this
  catalog.
- 2. **Mathematics (3 hours):** See "University Core Curriculum Requirements" in the Academics section of this catalog.
- Life and Physical Sciences (6 hours): See "University Core Curriculum Requirements" in the Academics section of this catalog.
- American History (6 hours): See approved list in the Academics section of this catalog.
- 5. **Government/Political Science (6 hours):** See approved list in the Academics section of this catalog.
- Creative Arts (3 hours): See approved list in the Academics section of this catalog.
- Language, Philosophy and Culture (3
  hours): See approved list in the Academics section of this
  catalog.
- 8. **Social and Behavioral Sciences (3 hours):** See approved list in the Academics section of this catalog.
- Core Option Courses (6 hours): See approved list in the Academics section of this catalog.

#### **Liberal Arts and Social Sciences degree requirements**

The following requirements are in addition to the University Core Curriculum requirements for Bachelor of Arts degrees. Students in the Mayborn School of Journalism follow the requirements listed under Mayborn School of Journalism Degree Requirements.

### Foreign Language, 3–12 hours (or proficiency)

Must attain Intermediate II (2050) level (prerequisite for 2050 course is 2040; prerequisite for 2040 course is 1020; prerequisite for 1020 course is 1010). Students pursuing a Bachelor of Science degree in Psychology are required to complete the Foreign Language requirement.

#### Distribution Requirement (6 hours)

Courses that will allow students to possess a greater understanding of cultural diversity and global issues, as well as communication and digital skills necessary to be competitive in the workforce.

# Cultural Diversity and Global Issues (3 advanced hours in one course taken at UNT)

Courses focused on cultural diversity in regional, national or international contexts, depending on the nature of the course.

3 hours from an approved Study Abroad program can substitute for this requirement.

- ANTH 3140 Latinos in the U.S.
- ANTH 3210 Meso America
- ANTH 3400 Peoples and Cultures of Africa
- ANTH 3700 Peoples and Cultures of South Asia
- COMM 3320 Communication and Conflict Management
- COMM 3620 Intercultural Communication
- COMM 4240 Rhetoric and Popular Culture
- COMM 4260 Performance and Culture
- COMM 4640 Latin@ Rhetorics
- ECON 3150 Economics of Discrimination
- ECON 4100 Comparative Economic Systems
- ECON 4650 Urban Economics
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4245 Postcolonial Literature and Theory
- ENGL 4250 Latinx Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 4260 African American Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4650 Literature and the Environment
- ENGL 4670 Gender and Sexuality in Literature
- FREN 3040 France Today
- FREN 3045 Topics in the Francophone World
- GEOG 3010 Economic Geography
- GEOG 3770 Latin America: Geography and Globalization
- GERM 3050 Topics in German Literature
- GERM 3060 Advanced German I (Oral Communication)
- HIST 4060 Russia in the 20th and 21st Centuries
- HIST 4114 Race and Gender in British Imperial Wars 1830-present
- HIST 4171 Latin America: The Colonial Experience, 1492–1821
- HIST 4495 United States Food History
- JAPN 3020 Advanced Japanese I
- JOUR 4240 Comparative International Media Systems
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- MRTS 3470 International Film History to 1945
- MRTS 3475 International Film History from 1945
- MRTS 4360 Global Media
- PHIL 4150 Feminism
- PHIL 4700 Environmental Ethics
- PSCI 3105 Political Economy of Race, Gender and Immigration

- PSCI 3702 Latin American Politics
- PSCI 3704 U.S.-Latin American Relations
- PSYC 4030 Multicultural Psychology
- PSYC 4040 Psychology of Race in the U.S.
- SOCI 4250 Gender and Society
- SOCI 4990 Sociology Capstone
- SPAN 3110 Introduction to Hispanic Literature
- SPAN 4310 Survey of Spanish Literature
- SPAN 4320 Survey of Spanish Literature
- SPAN 4360 Survey of Spanish-American Literature
- SPAN 4370 Survey of Spanish-American Literature
- TECM 3550 Content Strategy in Technical Communication
- THEA 3040 World Theatre After 1700
- WGST 3100 LGBTQ Studies
- WGST 3500 Feminist Foundations
- WGST 4100 Feminist and Womanist Theories
- WLLC 3010 Global Diversity
- WLLC 3100 Arab Cultures in Film and Music
- WLLC 3310 The Best of French Pop Culture
- WLLC 3600 Japanese Popular Culture
- WLLC 3700 Classical Mythology
- WLLC 3800 Russian Folklore and Magic

See your academic advisor or www.class.unt.edu/advising for more information and a list of additional approved

# Communication and Digital Skills (3 advanced hours in one course taken at UNT)

Courses focused on developing written, oral or visual communication skills using discipline-specific digital technologies.

- ANTH 3110 Indigenous Peoples of North America
- ANTH 3300 Peoples and Cultures of the Pacific
- COMM 3420 Communication and New Technology
- COMM 3720 Small Group Communication
- COMM 3820 Social Media Perspectives
- COMM 4320 Communications and Virtual Gaming
- ECON 4450 Strategic Behavior Across Market Structures
- ECON 4630 Research Methods for Economists
- ENGL 3110 Academic Writing in the Humanities
- ENGL 4440 Milton
- FREN 3070 Advanced French Grammar and Composition
- FREN 3075 Writing in French: Style and Technique
- FREN 3095 French for Science and Technology
- GEOG 3000 Geo-literacy: Thinking in Space
- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4580 GIS in Health
- GERM 3034 Advanced German Grammar
- GERM 3070 Advanced German II (Written Communication)
- HIST 3450 Islam and its Empires
- HIST 4271 Hollywood and the Wild West
- JAPN 3030 Advanced Japanese II
- JOUR 4270 Strategic Social Media

- MRTS 3210 Audio Production
- MRTS 3220 Multi Camera Studio Production
- MRTS 3230 Film Style Production
- MRTS 3500 Video Photography, Editing and Reporting for Digital Media
- MRTS 3525 Content Development for Digital Media
- PHIL 3450 Philosophy of Technology
- PHIL 4200 Science, Technology and Society
- PSCI 3160 Mass Media in American Politics
- PSCI 3310 Political Theory: Quest for Justice
- PSCI 3320 Political Theory: The State and its Critics
- PSYC 4600 History and Systems
- SOCI 3280 Quantitative Data Analysis
- TECM 3200 Information Design for Electronic Media
- WLLC 3200 Chinese Culture and Society
- WLLC 3400 The Holocaust and Film
- WLLC 3810 Russian Popular Culture

See your academic advisor or www.class.unt.edu/advising for more information and a list of additional approved courses.

#### **Teacher certification**

The College of Liberal Arts and Social Sciences encourages students to explore teaching as a career option. The student's departmental advisor or academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with course requirements for certification. Students seeking certification for grades 6-12 or EC-12 must also complete the required 21 hours in upper-level education courses (EDCI 3800, EDCI 3830, EDCI 4060, EDCI 4070, EDCI 4108, EDSE 4118, EDCI 4840) and meet all GPA requirements to apply for state certification. In order to enroll in the first required education courses, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105. All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC), www.tea. state.tx.us. Students interested in post-baccalaureate certification or pursuing a master's degree with certification must make application and meet all admission requirements of the Toulouse School of Graduate Studies.

#### Teacher certification areas

Secondary

Communication (Speech)

Dance

English (English Language Arts and Reading)

History

Social Science (Social Studies)

All-Level (Grades EC-12)

French

German

Spanish Theatre

CLASS also includes the Frank W. And Sue Mayborn School of Journalism. See the Frank W. and Sue Mayborn School of

Journalism section of the catalog for more information.

#### **Scholarships**

#### Dean's List Scholarship

An endowment fund to supporting undergraduate students enrolled in a degree program within the College of Liberal Arts and Social Sciences who have demonstrated academic promise. Applications are available during February and March.

#### The Eagles with Mettle Scholarship

A scholarship from Michael P. Murphy to provide for undergraduate College of Liberal Arts and Social Sciences students who qualify as middle income at the University of North Texas.

#### The Edges and Intersections Scholarship

A scholarship supporting students enrolled in a degree program within the College of Liberal Arts and Social Sciences who have demonstrated academic promise and have an interest in the intersection between art and technology.

#### The Charles T. and Mildred L. Newell Memorial Scholarship

A scholarship supporting undergraduate students enrolled in a degree program within the College of Liberal Arts and Social Sciences who have demonstrated academic promise.

#### The Fenton Wayne Robnett Endowed Scholarship in Social Sciences Teaching Certification

An endowment fund supporting undergraduate students enrolled in any social sciences at the University and pursuing a secondary teaching certificate.

#### The Finseth Hawkins Scholarship

A scholarship for undergraduate students whose gender identity is different than the sex assigned at birth and who are transitioning or have completed transition and are enrolled in the College of Liberal Arts and Social Sciences.

#### Jim Stewart International Studies Major Scholarship

A scholarship supporting undergraduate students majoring in International Studies at the University of North Texas.

#### The Voertman-Ardoin Memorial Scholarship

A fund supporting students enrolled in a degree program within the College of Liberal Arts and Social Sciences; preference given to students enrolled in English or Philosophy and to first generation students. Applications are available during February and March.

#### Voertman-Ardoin Scholarship in Liberal Arts

A fund supporting students enrolled in a degree program within the College of Liberal Arts and Social Sciences.

#### **AM Willis Endowed Scholarship**

An endowment fund supporting a scholarship supporting undergraduate and graduate students enrolled in a degree program within the College of Liberal Arts and Social Sciences who have demonstrated academic promise.

#### **Majors**

#### **Integrative Studies, BA**

A Bachelor of Arts with a major in integrative studies provides the flexibility to enroll in classes that align with your individual interests and enhance your career objectives. It gives you the opportunity to create a tailored major.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in integrative studies.

### Hours required and general/college requirements

Students must complete a minimum of 120 semester hours, of which 42 must be advanced, and fulfill all degree requirements as specified in the "University Core Curriculum" in the Academics section of this catalog.

#### Major requirements

The 36-hour integrative studies major is comprised of 12 hours in each of three fields chosen by the student and approved by his or her academic counselor. A minimum of 6 advanced hours is required in each field.

- At least one field must be chosen from among those offered in the College of Liberal Arts and Social Sciences.
- b. If more than one field is chosen from outside the College of Liberal Arts and Social Sciences, both may not be selected from the same school or college.

- No more than one field may be selected from a single department within the College of Liberal Arts and Social Sciences
- A minimum grade of C is required in each course counting toward the major.

#### Minor

None required.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic counselor in the College of Liberal Arts and Social Sciences.

#### Additional information

For more information concerning this major, including how previously earned college credit will apply toward the degree, contact an academic counselor in the Dean's Office for Undergraduates and Student Advising, College of Liberal Arts and Social Sciences, GAB, Room 220.

#### **Integrative Studies, BS**

A Bachelor of Science with a major in integrative studies provides the flexibility to enroll in classes that align with your individual interests and enhance your career objectives. It gives you the opportunity to create a tailored major including communication and global perspectives necessary to be competitive in the workforce.

#### Degree requirements

The following requirements must be satisfied for a Bachelor of Science with a major in integrative studies.

### Hours required and general/college requirements

Students must complete a minimum of 120 semester hours, of which 42 must be advanced, and fulfill all degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog.

#### Major requirements

The 36-hour integrative studies major is comprised of 12 hours in each of three fields chosen by the student and approved by his or her academic counselor. A minimum of 9 advanced hours is required in each field.

- At least one field must be chosen from among those offered in the College of Liberal Arts and Social Sciences.
- b. If more than one field is chosen from outside the College of Liberal Arts and Social Sciences, both may not be selected from the same school or college.
- c. No more than one field may be selected from a single department within the College of Liberal Arts and Social Sciences
- A minimum grade of C is required in each course counting toward the major.

#### Other course requirements

In addition to 36 hours in the major, students must complete two courses (6 hours) from:

 Group 1, Technical, professional and scientific communication. An advanced level course that will significantly enhance the student's ability to communicate effectively in his or her field, with emphasis on practical written and verbal skills.  Group 2, Global leadership and intercultural perspectives. An advanced level course that will emphasize large-scale connectivity by broadening the student's cultural and global leadership experience and understanding of global challenges and issues.

Courses must be chosen from a predetermined list, in consultation with an academic counselor (GAB 220) for inclusion in the students' degree audit. Note: With counselor approval, foreign language (2040 and 2050) may be substituted for this requirement.

#### Minor

None required.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree.

#### Additional information

For more information concerning this major, including how previously earned college credit will apply toward the degree, contact an academic counselor in the Dean's Office for Undergraduates and Student Advising, College of Liberal Arts and Social Sciences, GAB, Room 220.

### Social Science (teacher certification), BA

A Bachelor of Arts with a major in social science (secondary teacher certification) prepares you for a career in public or private education. Additionally, you will possess a greater understanding of cultural diversity and global issues, as well as communication and digital skills necessary to be competitive in the workforce.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in social science (teacher certification).

### Hours required and general/college requirements

Students must complete a minimum of 120 semester hours, of which 42 must be advanced, and fulfill all degree requirements for the Bachelor's degree as specified in "University Core Curriculum" in the Academics section of this catalog and College of Liberal Arts and Social Sciences requirements.

#### Major requirements, 57 hours

The Bachelor of Arts with a major in social science and a composite teaching field in social studies requires:

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- ECON 4100 Comparative Economic Systems or
- ECON 4850 International Trade
- GEOG 1200 Global Societies
- GEOG 2170 Culture, Environment and Society
- 3 hours of advanced Group B: Human Geography (see Department of Geography and the Environment section of this catalog for list of courses)
- HIST 1050 World History to the Sixteenth Century
- HIST 1060 World History from the Sixteenth Century
- HIST 2610 United States History to 1865
- HIST 2620 United States History Since 1865

- HIST 4700 Texas
- 3 hours of advanced Group A: U.S. History (see Department of History section of this catalog for list of courses)
- 3 hours of advanced Group B: European history (see Department of History section of this catalog for list of courses)
- 3 hours of advanced Group C: African-, Asian-, Middle Eastern or Latin American history (see Department of History section of this catalog for a list of courses)
- PSCI 2305 US Political Behavior and Policy
- PSCI 2306 US and Texas Constitutions and Institutions
- 3 hours of advanced Field A: American Government and Politics (see Department of Political Science section of this catalog for a list of courses)
- PSYC 1630 General Psychology I
- SOCI 1510 Introduction to Sociology

#### Other course requirements

- GEOG 1710 Earth Science
- UCRS 4700 Social Studies Teaching Methods

#### Other requirements

Students must also complete the required 21 hours in upper-level education courses and meet all GPA requirements to apply for state certification. Students must apply to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.gov.

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

#### Minor

None required.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Social Science, BA

After earning a Bachelor of Arts with a major in social science, you will have a greater understanding of societal needs, diverse cultures and individual responsibility. You will possess a greater understanding of culture diversity and global issues, as well as communication and digital skills necessary to be competitive in the workforce.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in social science.

### Hours required and general/college requirements

Students must complete a minimum of 120 semester hours, of which 42 must be advanced, and fulfill all degree requirements for the Bachelor's degree as specified in the "University Core Curriculum" in the Academics section of this catalog and College of Liberal Arts and Social Sciences requirements.

#### Major requirements

An interdisciplinary major in social science for the Bachelor of Arts degree requires 48 semester hours in the social sciences, 24 of which must be advanced and must include 18 hours in one field chosen from anthropology, economics, geography (human geography only), history, philosophy, political science, psychology, social work or sociology, plus 30 hours in at least two other of these fields.

#### Minor

None required.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Additional information

For more information concerning this major, contact an academic counselor in the Dean's Office for Undergraduates and Student Advising, College of Liberal Arts and Social Sciences GAB, Room 220

#### **Minors**

#### **LGBTQ Studies minor**

Our program facilitates students' interactions with faculty members across the university that are working on and studying LGBTQ related topics in a variety of disciplines. The courses they offer as part of the minor examine the diversity of global gender and sexual identities, communities, practices, and politics and develop student's abilities to critically engage LGBTQ+ identified individuals' complex relations to the culture and experience of a heterosexual majority.

Students interested in the minor should contact the Director of Women's and Gender Studies at:

General Academic Building, Room 467 1155 Union Circle #305097 Denton, TX 76203-5017 Phone: 940-565-2098

### E-mail: wmst@unt.edu Requirements:

A minor in LGBTQ Studies may be earned by successfully completing 18 semester hours.

#### Required courses:

- WGST 3100 LGBTQ Studies (taught in Fall only)
- WGST 4100 Feminist and Womanist Theories (taught in Spring only)
- 9 hours (any level) from approved list of courses
- 3 advanced hours (3000-4000 level) from approved list of courses

#### Electives courses

The electives are chosen from an inventory of courses representing a variety of disciplines in the university curriculum. All LGBTQ Studies students are encouraged to meet with the director of Women's and Gender Studies and the advising staff in order to design an academic plan that best complements the major interests of the student.

A comprehensive list of available courses, as well as extensive information on the LGBTQ Studies program, can be found online at womensstudies.unt.edu.

#### **Social Science minor**

A minor in social science requires 6 hours in one department and 12 hours in another department, including 6 advanced hours. Courses may be chosen from the following areas: anthropology, economics, geography (Human Geography only), history, philosophy, political science, psychology, social work and sociology.

#### Women's and Gender Studies minor

A minor in Women's & Gender Studies may be earned by successfully completing 18 semester hours, including:

- WGST 2100 Introduction to Women's and Gender Studies
- WGST 4100 Feminist and Womanist Theories (taught in Spring only)
- Four additional 3-hour courses approved for Women's & Gender Studies credit.

Nine of the 18 hours taken must be advanced hours. The electives are chosen from an inventory of more than 60 gender-related courses representing nearly every discipline in the university curriculum. All Women's & Gender Studies students are encouraged to meet with the director and the advising staff in order to design an academic plan that best complements the major interests of the student.

A comprehensive listing of available courses, as well as extensive information on the women's and gender studies program, can be found online at womensstudies.unt.edu.

Our program facilitates students' interactions with more than 40 members of the Women's & Gender Studies affiliated faculty, expanding understandings of gender differences, cultural diversity, and social changes while strengthening critical thinking and communication skills. Internships provide opportunities for students to experience working at a variety of non-profit organizations in the Denton and Dallas areas.

Students interested in this minor should contact the Director of Women's and Gender Studies at:

General Academic Building, Room 467 1155 Union Circle #305097 Denton, TX 76203-5017

**Phone:** 940-565-2098 **E-mail:** wmst@unt.edu

### **Undergraduate Academic Certificates Jewish and Israel Studies certificate**

The Jewish and Israel Studies certificate is an undergraduate academic certificate that enables students and members of the community the flexibility to pursue Jewish and Israel Studies without commitment to the full minor. The required course work in Jewish and Israel Studies promotes interdisciplinary work which will allow students to pursue topics within Jewish and Israel Studies that are most relevant to their career paths and to gain knowledge of the religion, cultures and historical experiences of the Jewish people. The certificate also aims to promote Jewish and Israel Studies in the DFW community.

The Jewish and Israel Studies certificate is open to all majors and to others who are not full-time students. It is administered by the Jewish and Israel Studies program in the College of Liberal Arts and Social Sciences.

To earn a certificate in Jewish and Israel Studies, students must complete 12 hours of Jewish and Israel Studies courses with a grade of C or above. At least nine hours must be upper-division 3000- and 4000-level courses. Students may choose these courses from the entirety of the Jewish and Israel Studies course offerings (listed on our web site, www.jewishstudies.unt.edu) in at least two departments. Three hours of internship credit can be accepted after approval by the director of the Jewish and Israel Studies Program.

For more information or to sign up for the certificate, contact Jewish and Israel Studies at jewish-studies@unt.edu or 940-369-8926.

### Latina/o and Mexican-American Studies certificate

A certificate in Latina/o and Mexican-American studies requires a total of 15 hours.

#### Required courses, 6 hours

Choose six hours from two different departments from the following:

- ANTH 3140 Latinos in the U.S.
- ANTH 3220 Mayan Culture
- ANTH 4300 Migrants and Refugees
- ENGL 4250 Latinx Literature
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- PSCI 3101 Latino Politics
- PSCI 3102 U.S. Immigration Policy
- SPAN 3140 Mexican Civilization
- THEA 4370 Contemporary Chicana/Chicano Theatre

#### Remaining 9 hours

Select nine hours from at least two departments from the following courses (or other courses as approved by the advisor):

- SOCI 2070 Introduction to Race and Ethnic Relations
- ANTH 3140 Latinos in the U.S.
- ANTH 3210 Meso America
- ANTH 3220 Mayan Culture
- ANTH 4300 Migrants and Refugees
- ECON 3150 Economics of Discrimination
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 3912 Topics in American Literature (when taught as "Freedom and Identity in Mexican American Literature")
- ENGL 4250 Latinx Literature
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4155 Mexican American Autobiography
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4171 Latin America: The Colonial Experience, 1492–1821
- HIST 4172 Modern Latin America: 1810-Present
- HIST 4180 Colonial Mexico and the Spanish Southwest
- HIST 4190 Mexico, 1810–Present
- HIST 4261 Topics in United States History (when taught as "History of Tejanos/as")
- HIST 4263 Topics in African-, Asian- or Latin American History
- MUET 3080 Studies in Latin-American Music (when taught as "Mexican Musical Life Across Border")

- PSCI 3101 Latino Politics
- PSCI 3102 U.S. Immigration Policy
- PSCI 3103 U.S. Immigration Politics
- PSCI 3104 Race and Ethnic Politics
- PSCI 3105 Political Economy of Race, Gender and Immigration
- PSCI 3701 Politics of Mexico
- PSCI 3702 Latin American Politics
- PSCI 3703 Security in Latin America
- PSCI 3704 U.S.-Latin American Relations
- SOCI 4540 Race and Ethnic Minorities
- SOCI 4580 Immigration and Race in Contemporary U.S.
- SPAN 3130 Topics in Latin American Culture
- SPAN 3140 Mexican Civilization
- SPAN 3180 Latin American Culture Through Film
- SPAN 4010 Aspects of Contemporary Mexican Culture
- SPAN 4385 Hispanic Culture in the United States
- THEA 4370 Contemporary Chicana/Chicano Theatre
- and other courses as approved by advisor

For more information, please contact Dr. Valerie Martinez-Ebers, LMAS Director, at Valerie.Martinez-Ebers@unt. edu, or at (940) 565-2276; or the UNT College of Liberal Arts and Social Sciences, Integrative Studies Office, Student Advising at GAB 220 or (940) 565-2051.

#### **Leadership Studies certificate**

Students may receive a certificate in leadership studies by successfully completing the following courses:

#### Certificate requirements, 12 hours

#### Core course, 3 hours

• UCRS 3600 - Leadership for a Global Society

#### Ethics, 3 hours

Selected from:

- MGMT 3880 Business Ethics and Social Responsibility
- PHIL 1400 Ethics and Society
- PHIL 4700 Environmental Ethics
- PSCI 4360 International Ethics
- (other courses as approved by program advisor)

#### Global issues, 3 hours

Selected from:

- EADP 4040 International Disasters
- INST 4851 International Security
- INST 4852 Critical Issues in Global Economics Senior Seminar
- INST 4853 Global Development: Issues and Challenges
- MGMT 4660 International Management Perspectives
- MKTG 4280 Global Marketing Issues and Practice
- PADM 4050 Negotiation and Dispute Resolution
- PSCI 3500 Introduction to Peace Studies
- PSCI 3810 International Relations
- PSCI 4520 International Human Rights

- PSCI 4800 The Politics of International Organization
- PSCI 4820 Contemporary International Problems
- PSCI 4821 International Conflict
- PSCI 4823 International Criminal Tribunals and War Crimes
- PSCI 4850 Critical Issues in World Politics
- PSCI 4860 International Political Economy
- SOCI 4750 World Population Trends and Problems
- UCRS 4500 Global Leadership through Service

#### Leadership in Discipline, 3 hours

3 hours selected in consultation with advisor.

#### **Experiential Component**

In order to complete the leadership certificate, students are required to complete an experiential component that allows them to put their learning and skill development from previous courses into practice. The experience must allow the student to actively engage in organizational/group leadership experiences, civic engagement, or career development and must occur over a period of no less than three consecutive months. Experiences should be approved in advance by the Program Director. Upon completion of the experience, a reflection paper connecting the experiences and course learning must be submitted to the Program Director for review.

#### **UNT Peace Corps Prep Certificate**

UNT's Peace Corps Prep Certificate prepares students for international development fieldwork and potential Peace Corps service in one of the following Peace Corps Work Sectors:

- Education
- Health
- Environment
- Agriculture
- Youth in Development, or
- Community Economic Development.

To accomplish this, students will build four core competencies:

- . Training and experience in a work sector
- 2. Intercultural competence
- 3. Professional and leadership development, and
- 4. Foreign language skills (optional).

Students create an ePortfolio to synthesize and reflect upon their UNT Peace Corps Prep experiences.

#### Requirements, 18 hours

- Nine advanced semester credit hours aligned with Peace Corps Training and Experience work sector in consultation with the advisor.
- Nine hours of Intercultural Competence courses: 3 hours from the list of Core Intercultural Competence courses and 6 additional hours from the list of Elective Intercultural Competence courses. Additional courses may be approved in consultation with the advisor.
- Professional and Leadership Development: Resume, Interview Preparation, and participation in a "significant" leadership experience (coordinated in conjunction with the Career Center & Center for Leadership and Service).
- 4. At least 50 hours of hands-on volunteer/service learning/ internship experience in same work sector (coordinated in conjunction with the Career Center & Center for Leadership and Service). Students are encouraged to participate in a study abroad program or international volunteer work to meet some of these requirements.

#### Intercultural Competence, 9 hours

#### Core Intercultural Competence

3 hours from:

- ANTH 1100 World Cultures
- ANTH 2300 Culture and Society
- COMM 3620 Intercultural Communication
- COUN 2620 Diversity and Cultural Awareness
- PSYC 4030 Multicultural Psychology

### Elective Intercultural Competence courses

6 additional hours from:

- ANTH 1100 World Cultures
- ANTH 1150 World Cultures Through Film
- ANTH 2200 Gender in Cross-Cultural Perspective
- ANTH 2300 Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3120 Indigenous Cultures of the Southwest
- ANTH 3130 African-American Anthropology
- ANTH 3210 Meso America
- ANTH 3300 Peoples and Cultures of the Pacific
- ANTH 3400 Peoples and Cultures of Africa
- ANTH 3500 Cultures and Civilizations of the Middle East
- ANTH 3700 Peoples and Cultures of South Asia
- ANTH 3710 Peoples and Cultures of East Asia
- ANTH 3720 Peoples and Cultures of Southeast Asia
- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- ANTH 4210 Culture and Human Sexuality
- ANTH 4300 Migrants and Refugees
- COMM 3620 Intercultural Communication
- COUN 2620 Diversity and Cultural Awareness
- GEOG 1200 Global Societies
- GEOG 2170 Culture, Environment and Society
- HDFS 3153 The Impact of Culture on Individuals and Families
- INST 2100 Introduction to International Studies
- MUET 3030 Music Cultures of the World
- PHIL 2070 World Religions
- PHIL 3620 Hinduism I: From the Vedas to the Gita
- PHIL 3665 Eastern Religion and the Environment
- PHIL 3680 Buddhism, Daoism, Shintoism
- PHIL 4650 Philosophy of Water
- PSCI 3500 Introduction to Peace Studies
- PSYC 4030 Multicultural Psychology
- PSYC 4300 Psychosocial Issues in HIV/AIDS
- PSYC 4670 Behavioral and Biopsychosocial Challenges within LGBT Communities
- SOCI 4160 Developing Societies
- SOCI 4620 Sociology of Culture
- SOCI 4750 World Population Trends and Problems
- WGST 2100 Introduction to Women's and Gender Studies

#### International Studies

### Bachelor of Arts with a major in International Studies

Main Office, Advising General Academic Building, Room 470

Mailing address:

1155 Union Circle #305457 Denton, TX 76203-5017

940-565-2323 Fax: 940-369-8198

Web site: internationalstudies.unt.edu

#### Emile Sahliyeh, Director

The international studies program is designed to prepare students for jobs in the public and private sectors, where globalization is increasing dramatically, or to enter a graduate degree program. These opportunities are concentrated in, but not limited to, five areas of international studies that draw from a variety of social science disciplines.

The program offers a Bachelor of Arts with a major in international studies and concentrations in international security and diplomacy, international business and economics, international development and humanitarian affairs, regional studies, and peace studies, plus a minor in international studies.

#### **Majors**

# International Studies with a concentration in International Business and Economics, BA

During the last few decades, companies and government agencies have increased their search for employees who understand world issues. A Bachelor of Arts with a major in international studies and a concentration in international business and economics makes you competitive in the job market.

This major is designed to prepare students for jobs in the public and private sectors, where globalization is increasing dramatically, or to enter a graduate degree program.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Majors need 42 hours from the list of approved courses below, including:

- INST 2100 Introduction to International Studies
- INST 4852 Critical Issues in Global Economics Senior Seminar

### International Business and Economics concentration, 36 hours

Twelve of the 36 hours must be advanced-level courses.

#### Economics, 9 hours

- ECON 1110 Principles of Macroeconomics
- ECON 4100 Comparative Economic Systems
- ECON 4420 Open Economy Macroeconomics
- ECON 4510 History of Economic Thought
- ECON 4550 Law and Economics
- ECON 4600 Economic Development
- ECON 4850 International Trade
- FINA 4500 International Finance
- GEOG 3010 Economic Geography
- PSCI 4860 International Political Economy

#### Management, 9 hours

- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- LSCM 3960 Logistics and Supply Chain Management
- LSCM 4360 Global Alliances and International Supply Chain Management
- LSCM 4530 E-Logistics in Supply Chain Management
- MGMT 3720 Organizational Behavior
- MGMT 3880 Business Ethics and Social Responsibility
- MGMT 4210 E-Management: Managing in a Digital Economy
- MGMT 4660 International Management Perspectives
- PADM 4030 Dispute Resolution in a Global Workplace

#### Marketing and business practice, 9 hours

- ACCT 4420 International Accounting
- BCIS 4720 Web-Based Information Technologies
- BLAW 4480 International Business Law
- HMGT 2800 Foundations of International Travel and Tourism
- HMGT 2810 Introduction to International Sustainable Tourism
- MDSE 2750 Consumers in a Global Market
- MDSE 4003 Global Discovery: Hong Kong/China
- MDSE 4010 Global Sourcing
- MKTG 2650 Culture and Consumption
- MKTG 3720 Digital Marketing Fundamentals
- MKTG 4280 Global Marketing Issues and Practice
- MKTG 4620 E-Commerce Marketing Tools and Applications
- MKTG 4630 Retailing II
- MKTG 4810 Special Topics in Marketing or Logistics

#### Regional choice, 9 hours

Students should select one region of the world relevant to their concentration and foreign language and take 9 hours in that region. See "Regional choice" under the concentration in Regional Studies.

#### Note

Some courses (e.g., INST 4850 and INST 4900) may be repeated for credit as topics vary and if the subject is appropriate.

#### Other course requirements

- 6 upper-division hours in a foreign language of the student's choice. International students who attended high school in a non-native English speaking country and have been exempted from the College of Liberal Arts and Social Sciences foreign language requirement can substitute 6 hours of advanced English writing courses with prior approval of the International Studies director or academic advisor.
- Students are strongly encouraged to take advantage of Study Abroad opportunities. Students are also encouraged to do an internship related to their area of concentration; only 3 hours will apply towards the major.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Other requirements

To graduate with a Bachelor of Arts degree with a major in international studies, a student must have achieved a minimum cumulative GPA of 2.0 at the time of graduation.

# International Studies with a concentration in International Development and Humanitarian Affairs, BA

During the last few decades, companies and government agencies have increased their search for employees who understand world issues. A Bachelor of Arts with a major in international studies and a concentration in international development and humanitarian affairs prepares you for working with relief and aid organizations.

This major is designed to prepare students for jobs in the public and private sections, where globalization is increasing dramatically, or to enter a graduate degree program.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Majors need 42 hours from the list of approved courses below, including:

- INST 2100 Introduction to International Studies
- INST 4853 Global Development: Issues and Challenges

# International Development and Humanitarian Affairs concentration, 36 hours

Twelve of the 36 hours must be advanced-level courses.

### Development of professional skills, 6 hours

- EADP 3010 Principles of Emergency Management
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3080 Leadership and Organizational Behavior \*
- JOUR 3410 Public Relations for Non-Profits
- MGMT 4235 Social Entrepreneurship
- PADM 3010 Foundations of Philanthropy and Nonprofits
- PADM 4200 Leadership Theory and Practice for Volunteer Managers
- PADM 4210 Introduction to Philanthropy and Fundraising
- PADM 4220 Proposal Writing and Grants Administration
- PADM 4240 Volunteer Management Concepts and Applications
- PADM 4260 Volunteer Program Planning and Evaluation
- PADM 4300 Nonprofit Leadership Capstone
- UCRS 3600 Leadership for a Global Society

#### Substantive issue areas, 21 hours

Take 9 hours in sustainable development and 12 hours in social development and public health.

#### Sustainable development

- ANTH 4400 Environmental Anthropology
- BIOL 1132 Environmental Science
- BIOL 3160 Conservation Biology \*
- BIOL 3170 Plants and Human Society \*
- BIOL 4053 Introduction to Subantarctic Biocultural Conservation
- BIOL 4100 Introduction to Environmental Impact Assessment \*
- BIOL 4400 Wetland Ecology and Management
- EADP 4015 Flood Plain Management
- ECON 4440 Economics of Natural Resources and Environment \*
- GEOG 2170 Culture, Environment and Society
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa
- GEOG 3770 Latin America: Geography and Globalization
- GEOG 4420 Capitalism, Nature and Climate Change \*
- HMGT 2810 Introduction to International Sustainable Tourism
- INST 4850 International Studies Seminar (when approved)
- MDSE 4560 Sustainable Strategies in Merchandising
- PHIL 2500 Environment and Society
- PHIL 4053 Introduction to Subantarctic Biocultural Conservation
- PHIL 4650 Philosophy of Water
- PHIL 4700 Environmental Ethics
- PHII 4740 Environmental Justice

• SOCI 4260 - Topics in Sociology (when approved)

#### Social development and public health

- AGER 2000 Global Aging and Individual Aging
- AGER 4560 Minority Aging
- AGER 4780 Aging Programs and Services
- ANTH 2200 Gender in Cross-Cultural Perspective
- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- ANTH 4220 Anthropology in Public Health
- ANTH 4300 Migrants and Refugees
- ANTH 4500 Language and Culture
- ANTH 4550 Race, Ethnicity and Identity
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3045 Disaster Response and Recovery
- EADP 4010 Public Health and Disasters \*
- EADP 4015 Flood Plain Management
- EADP 4040 International Disasters
- EADP 4050 Social Vulnerability in Disasters
- EADP 4060 Emerging Technology and Disasters
- ECON 4180 The Economics of Health Care
- GEOG 3120 Medical Geography \*
- GEOG 4580 GIS in Health
- HIST 4245 Gender, Race and Class Issues in Middle Eastern History
- INST 4850 International Studies Seminar (when approved)
- PSCI 3500 Introduction to Peace Studies
- PSCI 3600 Governments and Politics around the World
- PSCI 4520 International Human Rights
- PSCI 4640 Revolution and Political Violence
- PSCI 4660 Democracy and Democratization
- PSCI 4670 Third World Politics \*
- PSCI 4720 Ethnicity in World Politics
- PSYC 4300 Psychosocial Issues in HIV/AIDS
- SOCI 2010 Race, Class, Gender and Ethnicity
- SOCI 2070 Introduction to Race and Ethnic Relations
- SOCI 3120 Sociology of Health and Illness
- SOCI 3330 Social Stratification \*
- SOCI 4160 Developing Societies
- SOCI 4750 World Population Trends and Problems
- WGST 2420 Race, Class, Gender and Ethnicity

#### Regional choice, 9 hours

Students should select one region of the world relevant to their concentration and foreign language and take 9 hours in that region. See "Regional choice" under the concentration in Regional Studies.

#### Note

\* May be repeated for credit as topics vary.

Some courses (e.g., INST 4850 and INST 4900) may be repeated for credit as topics vary and if the subject is appropriate.

#### Other course requirements

 6 upper-division hours in a foreign language of the student's choice. International students who attended high school in a non-native English speaking country and have been exempted from the College of Liberal Arts and Social Sciences foreign language requirement can substitute

- 6 hours of advanced English writing courses with prior approval of the International Studies director or academic advisor.
- Students are strongly encouraged to take advantage of Study Abroad opportunities. Students are also encouraged to do an internship related to their area of concentration; only 3 hours will apply towards the major.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Other requirements

To graduate with a Bachelor of Arts degree with a major in international studies, a student must have achieved a minimum cumulative GPA of 2.0 at the time of graduation.

# International Studies with a concentration in International Security and Diplomacy, BA

During the last few decades, companies and government agencies have increased their search for employees who understand world issues. A Bachelor of Arts with a major in international studies and a concentration in international security and diplomacy makes you an excellent candidate for a variety of positions.

This major is designed to prepare students for jobs in the public and private sectors, where globalization is increasing dramatically, or to enter a graduate degree program.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Majors need 42 hours from the list of approved courses below, including:

- INST 2100 Introduction to International Studies
- INST 4851 International Security

### International Security and Diplomacy concentration, 36 hours

Twelve of the 36 hours must be advanced-level courses.

### International politics and diplomacy, 9 hours

- HIST 4771 U.S. in the World 1898-1945
- HIST 4246 Imperialism in the Modern Middle East
- HIST 4360 Europe since 1945
- HIST 4772 U.S. in the World Since 1945
- INST 4850 International Studies Seminar \*

- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PHIL 3120 Social and Political Philosophy
- PSCI 3500 Introduction to Peace Studies
- PSCI 3600 Governments and Politics around the World
- PSCI 3810 International Relations
- PSCI 4360 International Ethics
- PSCI 4520 International Human Rights
- PSCI 4800 The Politics of International Organization
- PSCI 4810 International Law
- PSCI 4820 Contemporary International Problems
- PSCI 4830 American Foreign Policy
- PSCI 4840 Major Problems of American Foreign Policy
- PSCI 4850 Critical Issues in World Politics

### International conflict and national security, 9 hours

- ANTH 4701 Topics in Sociocultural Anthropology (when approved)
- CJUS 4330 Domestic and International Terrorism
- EADP 3010 Principles of Emergency Management
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3045 Disaster Response and Recovery
- EADP 4040 International Disasters
- EADP 4050 Social Vulnerability in Disasters
- EADP 4090 Terrorism and Emergency Management
- INST 4850 International Studies Seminar \* (when approved)
- PSCI 4821 International Conflict
- PSCI 4823 International Criminal Tribunals and War Crimes

#### Military history, 9 hours

- HIST 4070 World War II: European Theater
- HIST 4090 Britain and Ireland in the Age of Revolution, 1603–1832
- HIST 4104 The British Raj
- HIST 4125 The Military History of England and its Colonies
- HIST 4261 Topics in United States History (when approved)
- HIST 4262 Topics in European History (when approved)
- HIST 4263 Topics in African-, Asian- or Latin American History (when approved)
- HIST 4300 The French Revolution, 1774–1799
- HIST 4301 Napoleonic Europe, 1799–1815
- HIST 4302 Wars of Napoleon, 1792–1815
- HIST 4350 Europe, 1914–1945
- HIST 4630 U.S. Navy, 1775-Present: Sails
- HIST 4640 Early United States Military History to 1815
- HIST 4650 Evolution of Warfare to Napoleon
- HIST 4660 Evolution of Warfare from Napoleon
- INST 4850 International Studies Seminar \* (when approved)
- PSCI 4640 Revolution and Political Violence

#### Regional choice, 9 hours

Students should select one region of the world relevant to their concentration and foreign language requirement and take 9 hours in that region. See "Regional choice" under the concentration in Regional Studies.

#### Note

\* May be repeated for credit as topics vary.

Some courses (e.g., INST 4850 and INST 4900) may be repeated for credit as topics vary and if the subject is appropriate.

#### Other course requirements

- 6 upper-division hours in a foreign language of the student's choice. International students who attended high school in a non-native English speaking country and have been exempted from the College of Liberal Arts and Social Sciences foreign language requirement can substitute 6 hours of advanced English writing courses with prior approval of the International Studies director or academic advisor
- Students are strongly encouraged to take advantage of Study Abroad opportunities. Students are also encouraged to do an internship related to their area of concentration; only 3 hours will apply towards the major.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Other requirements

To graduate with a Bachelor of Arts degree with a major in international studies, a student must have achieved a minimum cumulative GPA of 2.0 at the time of graduation.

### International Studies with a concentration in Peace Studies, BA

During the last few decades, companies and government agencies have increased their search for employees who understand world issues. A Bachelor of Arts with a major in international studies and a concentration in peace studies prepares you to work in conflict resolution.

This major is designed to prepare students for jobs in the public and private sectors, where globalization is increasing dramatically, or to enter a graduate degree program.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Majors need 42 hours from the list of approved courses below, including:

- INST 2100 Introduction to International Studies
- INST 4851 International Security

#### Peace Studies concentration, 36 hours

Twelve of the 36 hours must be advanced-level courses.

• PSCI 3500 - Introduction to Peace Studies (3 hours)

#### Determinants of violence, 6 hours

- ANTH 4701 Topics in Sociocultural Anthropology (when approved)
- CJUS 4330 Domestic and International Terrorism
- CJUS 4350 Seminar on Violence \*
- EADP 4090 Terrorism and Emergency Management
- HIST 4260 Topics in History (when approved)
- HIST 4262 Topics in European History (when approved)
- HIST 4263 Topics in African-, Asian- or Latin American History (when approved)
- HIST 4300 The French Revolution, 1774–1799
- HIST 4302 Wars of Napoleon, 1792–1815
- HIST 4335 Age of Revolutions: Europe, 1700–1918
- PSCI 4640 Revolution and Political Violence
- PSCI 4700 Topics in Comparative Politics (when approved)
- PSCI 4820 Contemporary International Problems (when approved)
- PSCI 4821 International Conflict

#### Conflict management, 6 hours

- COMM 3320 Communication and Conflict Management \*
- HIST 4260 Topics in History (when approved)
- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PSCI 4660 Democracy and Democratization
- PSCI 4700 Topics in Comparative Politics (when approved)
- PSCI 4823 International Criminal Tribunals and War Crimes
- PSCI 4850 Critical Issues in World Politics (when approved)

#### Issues of justice, 6 hours

- ANTH 4300 Migrants and Refugees
- ECON 3150 Economics of Discrimination \*
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4260 Topics in History (when approved)
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4390 The Holocaust, 1933–1945
- HIST 4391 War Crimes, Genocide, and Justice
- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4455 History of Black Women in America
- HIST 4465 Women in the United States to 1900
- HIST 4470 Women in the United States Since 1900
- PSCI 3100 Topics in American Government \*
- PSCI 4210 Constitutional Law: Rights and Liberties

- PSCI 4360 International Ethics
- PSCI 4330 Topics in Political Theory (when approved)
- PSCI 4520 International Human Rights
- PSCI 4660 Democracy and Democratization
- PSCI 4720 Ethnicity in World Politics
- PSCI 4800 The Politics of International Organization
- PSCI 4810 International Law \*
- PSCI 4820 Contemporary International Problems (when approved)
- PSCI 4823 International Criminal Tribunals and War Crimes
- SOCI 3330 Social Stratification \*
- SOCI 4160 Developing Societies
- SOCI 4250 Gender and Society
- SOCI 4540 Race and Ethnic Minorities
- SOWK 4540 Human Diversity for the Helping Professions \*

#### Additional courses, 6 hours

Selected from approved courses below or in the three sub-areas listed above.

- ANTH 3130 African-American Anthropology
- EADP 3010 Principles of Emergency Management
- EADP 3035 Hazard Mitigation and Preparedness
- EADP 3045 Disaster Response and Recovery
- EADP 4040 International Disasters
- ECON 4100 Comparative Economic Systems
- ECON 4440 Economics of Natural Resources and Environment
- HIST 4070 World War II: European Theater
- HIST 4350 Europe, 1914-1945
- HIST 4650 Evolution of Warfare to Napoleon
- HIST 4660 Evolution of Warfare from Napoleon
- JOUR 4240 Comparative International Media Systems
- PADM 4060 Practicum in Mediation and Dispute Resolution
- PHIL 2500 Environment and Society
- PHIL 4700 Environmental Ethics
- PSCI 3810 International Relations
- PSCI 4830 American Foreign Policy
- SOCI 2010 Race, Class, Gender and Ethnicity
- SOCI 3550 Collective Behavior
- SOCI 3560 Sociology of Disasters
- SOCI 4750 World Population Trends and Problems

#### Regional choice, 9 hours

Students should select one region of the world relevant to their concentration and take 9 hours in that region. See "Regional choice" under the concentration in Regional Studies.

#### Note

\* May be repeated for credit as topics vary.

Some courses (e.g., INST 4850 and INST 4900) may be repeated for credit as topics vary and if the subject is appropriate.

#### Other course requirements

 6 upper-division hours in a foreign language of the student's choice. International students who attended high school in a non-native English speaking country and have been exempted from the College of Liberal Arts and Social

- Sciences foreign language requirement can substitute 6 hours of advanced English writing courses with prior approval of the International Studies director or academic advisor.
- Students are strongly encouraged to take advantage of Study Abroad opportunities. Students are also encouraged to do an internship related to their area of concentration; only 3 hours will apply towards the major.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Other requirements

To graduate with a Bachelor of Arts degree with a major in international studies, a student must have achieved a minimum cumulative GPA of 2.0 at the time of graduation.

### International Studies with a concentration in Regional Studies, BA

During the last few decades, companies and government agencies have increased their search for employees who understand world issues. A Bachelor of Arts with a major in international studies and a concentration in regional studies makes you a valuable asset to any organization working in your chosen region.

This major is designed to prepare students for jobs in the public and private sectors, where globalization is increasing dramatically, or to enter a graduate degree program.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Majors need 42 hours from the list of approved courses below, including:

- INST 2100 Introduction to International Studies
- INST 4853 Global Development: Issues and Challenges

### Regional Studies concentration, 36 hours

Twelve of the 36 hours must be advanced-level courses.

#### World survey, 9 hours

- ANTH 1100 World Cultures
- ANTH 1150 World Cultures Through Film
- ANTH 2200 Gender in Cross-Cultural Perspective
- ANTH 2300 Culture and Society
- GEOG 1200 Global Societies

- GEOG 2170 Culture, Environment and Society
- HIST 1060 World History from the Sixteenth Century
- HIST 4070 World War II: European Theater
- JOUR 4240 Comparative International Media Systems
- MUET 3030 Music Cultures of the World
- PHIL 2070 World Religions
- PSCI 3600 Governments and Politics around the World
- PSCI 4640 Revolution and Political Violence
- PSCI 4660 Democracy and Democratization
- PSCI 4670 Third World Politics
- PSCI 4700 Topics in Comparative Politics (when approved)
- PSCI 4720 Ethnicity in World Politics
- SOCI 3700 Sociology of Religion
- SOCI 4750 World Population Trends and Problems

#### Regional choice, 18 hours

Select two regions from the following four regions of the world and take 9 hours in each.

#### Europe

- ANTH 3600 Peoples and Cultures of Europe
- GEOG 4030 British Isles Field School \*
- HIST 4050 Russia from the 9th to the 19th Century
- HIST 4055 The Russian Empire from 1700 to 1917
- HIST 4060 Russia in the 20th and 21st Centuries
- HIST 4061 Russian Cultural History of the 19th and 20th Centuries
- HIST 4070 World War II: European Theater
- HIST 4090 Britain and Ireland in the Age of Revolution, 1603–1832
- HIST 4100 Modern Britain Since 1830
- HIST 4110 British Empire in Asia, Africa, and the Pacific
- HIST 4124 Risings, Revolts, and Rebels of the British Empire, 1900-1930
- HIST 4125 The Military History of England and its Colonies
- HIST 4262 Topics in European History (when approved)
- HIST 4300 The French Revolution, 1774–1799
- HIST 4301 Napoleonic Europe, 1799–1815
- HIST 4302 Wars of Napoleon, 1792–1815
- HIST 4320 Anti-Semitism in Europe, French Revolution to Present
- HIST 4335 Age of Revolutions: Europe, 1700–1918
- HIST 4350 Europe, 1914-1945
- HIST 4360 Europe since 1945
- HIST 4364 Germany from Luther to Napoleon, 1500 to 1815
- HIST 4365 Modern Germany, 1815–Present
- HIST 4370 Intellectual, Cultural and Social History of Modern Europe since 1789
- HIST 4385 Nazi Germany
- HIST 4390 The Holocaust, 1933–1945
- PSCI 3700 Area Politics (when approved)
- WLLC 3310 The Best of French Pop Culture
- WLLC 3400 The Holocaust and Film
- WLLC 3800 Russian Folklore and Magic
- WLLC 3810 Russian Popular Culture

#### Latin America

- ARTH 4818 Topics in Latin American Art (when approved)
- ARTH 4820 Pre-Columbian Art of Mesoamerica \*
- ANTH 3200 Latin America
- ANTH 3210 Meso America
- BIOL 4053 Introduction to Subantarctic Biocultural Conservation
- GEOG 3770 Latin America: Geography and Globalization
- HIST 4171 Latin America: The Colonial Experience, 1492–1821
- HIST 4172 Modern Latin America: 1810-Present
- HIST 4180 Colonial Mexico and the Spanish Southwest
- HIST 4190 Mexico, 1810-Present
- HIST 4263 Topics in African-, Asian- or Latin American History (when approved)
- PHIL 4053 Introduction to Subantarctic Biocultural Conservation
- PHIL 4775 Latin American Philosophy
- PSCI 3700 Area Politics (when approved)
- PSCI 4670 Third World Politics

#### Asia

- ARTH 4823 Asian Art
- ARTH 4824 Topics in Asian Art (when approved)
- ANTH 3300 Peoples and Cultures of the Pacific
- ANTH 3700 Peoples and Cultures of South Asia
- ANTH 3710 Peoples and Cultures of East Asia
- ANTH 3720 Peoples and Cultures of Southeast Asia
- HIST 4104 The British Raj
- HIST 4263 Topics in African-, Asian- or Latin American History (when approved)
- HIST 4283 Decolonization in Asia and Africa
- HIST 4550 Imperial China
- HIST 4560 Modern China
- HIST 4570 Japanese History
- HIST 4605 History of South Asia, 1757–1947
- HIST 4610 Contemporary South Asia
- MUET 3090 Music of India
- PHIL 3620 Hinduism I: From the Vedas to the Gita
- PHIL 3630 Jainism
- PHIL 3665 Eastern Religion and the Environment
- PHIL 3680 Buddhism, Daoism, Shintoism
- PSCI 3700 Area Politics (when approved)
- WLLC 3200 Chinese Culture and Society

#### Africa and the Middle East

- ARTH 4822 African Art
- ARTH 4825 Topics in Islamic and/or Middle Eastern Art (when approved)
- ANTH 3400 Peoples and Cultures of Africa
- ANTH 3500 Cultures and Civilizations of the Middle Fast
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa
- HIST 3450 Islam and its Empires
- HIST 3460 Modern Middle Eastern History
- HIST 4240 Nationalism, Zionism and Islamism in Modern Middle Eastern History

- HIST 4245 Gender, Race and Class Issues in Middle Eastern History
- HIST 4246 Imperialism in the Modern Middle East
- HIST 4263 Topics in African-, Asian- or Latin American History (when approved)
- HIST 4283 Decolonization in Asia and Africa
- HIST 4580 Africa to the Nineteenth Century
- HIST 4590 Modern Africa
- INST 4850 International Studies Seminar
- PSCI 3700 Area Politics (when approved)
- PSCI 4670 Third World Politics
- PSCI 3650 Middle East Politics
- WLLC 3100 Arab Cultures in Film and Music

#### Additional area of concentration, 9 hours

Select 9 hours from a second area of concentration:

- International Security and Diplomacy
- International Business and Economics
- International Development and Humanitarian Affairs
- Peace Studies

### Foreign language for Regional Studies students

In their choice of a foreign language to satisfy degree requirements, students who select Regional Studies as their area of concentration must choose a language that complements their primary area of concentration. For example, students who choose Asian studies as their area of concentration may select either Chinese or Japanese; students who choose Latin America may select Spanish; students who choose European Studies may choose German, French, Italian, Spanish or Russian; students who choose Africa and the Middle East may select Arabic or French.

#### Note

\* May be repeated for credit as topics vary.

Some courses (e.g., INST 4850 and INST 4900) may be repeated for credit as topics vary and if the subject is appropriate.

#### Other course requirements

- 6 upper-division hours in a foreign language of the student's choice. International students who attended high school in a non-native English speaking country and have been exempted from the College of Liberal Arts and Social Sciences foreign language requirement can substitute 6 hours of advanced English writing courses with prior approval of the International Studies director or academic advisor.
- Students are strongly encouraged to take advantage of Study Abroad opportunities. Students are also encouraged to do an internship related to their area of concentration; only 3 hours will apply towards the major.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Other requirements

To graduate with a Bachelor of Arts degree with a major in international studies, a student must have achieved a minimum cumulative GPA of 2.0 at the time of graduation.

#### **Minors**

#### **International Studies minor**

A minor in international studies requires 18 hours. Students choose one of four (4) areas of concentration for the minor:

- International Studies with a concentration in International Business and Economics
- International Studies with a concentration in International Development and Humanitarian Affairs
- International Studies with a concentration in International Security and Diplomacy
- International Studies with a concentration in Regional Studies

#### Required courses:

INST 2100 will be required for all four of the concentrations along with the INST Capstone class that is appropriate for that particular concentration

#### International Business and Economics

- INST 2100 Introduction to International Studies
- INST 4852 Critical Issues in Global Economics Senior Seminar
- Four additional advanced courses from the approved course listing that are appropriate for their chosen concentration.

### International Development and Humanitarian Affairs

- INST 2100 Introduction to International Studies
- INST 4853 Global Development: Issues and Challenges
- Four additional advanced courses from the approved course listing that are appropriate for their chosen concentration.

#### International Security and Diplomacy

- INST 2100 Introduction to International Studies
- INST 4851 International Security
- Four additional advanced courses from the approved course listing that are appropriate for their chosen concentration.

#### Regional Studies

- INST 2100 Introduction to International Studies
- INST 4853 Global Development: Issues and Challenges
- Four additional advanced courses from the approved course listing that are appropriate for their chosen concentration.

### **Undergraduate Academic Certificates Arab and Islamic Studies certificate**

The Arab and Islamic studies certificate is an undergraduate academic certificate designed to enable students to acquire knowledge skills about Arab and Islamic cultures, economies, societies and politics. The required course work in Arab and Islamic studies will help students develop cross-cultural communication skills and enhance their competitiveness to enter a professional program or occupation related to the Arab and Islamic worlds.

The Arab and Islamic studies certificate is open to all majors. It is administered by the International Studies Program in the College of Liberal Arts and Social Sciences in collaboration with

the Contemporary Arab and Muslim Cultural Studies Institute (CAMCSI) in the College of Visual Arts and Design.

Students are strongly encouraged to achieve Arabic language proficiency through the level of LANG 1020 by completing course work or through examination.

#### Course requirements, 12 hours

To earn an Arab and Islamic studies certificate, students must complete 12 hours at UNT in such areas as the following (other courses may be used if approved by the certificate advisor):

#### Culture and Art

- ARTH 4805 Topics in Medieval Art
- ARTH 4824 Topics in Asian Art
- ARTH 4825 Topics in Islamic and/or Middle Eastern Art
- ANTH 3500 Cultures and Civilizations of the Middle Fast
- MRTS 4415 Topics in Film and Television Studies

#### History

- HIST 3450 Islam and its Empires
- HIST 3460 Modern Middle Eastern History
- HIST 4240 Nationalism, Zionism and Islamism in Modern Middle Eastern History
- HIST 4245 Gender, Race and Class Issues in Middle Eastern History
- HIST 4246 Imperialism in the Modern Middle East
- HIST 4283 Decolonization in Asia and Africa

#### **Politics**

- INST 4850 International Studies Seminar (when taught as "Women in the Middle East," "Political Economy and Governments of the Middle East," or "International Relations of the Middle East")
- PSCI 3650 Middle East Politics

#### Other requirements

Students must also:

- Acquire Arab and Islamic worlds experience via one or more of the following:
  - a. Study abroad in an Arab or Islamic country
  - Internship in an area related to the Arab and Islamic worlds
  - c. Volunteer service in projects related to the Arab and Islamic worlds
- Participate in 5 international events or activities on campus or in the DFW community related to Arab and Islamic affairs. Include documentation of participating in these activities along with a summary report.

Students successfully completing the above requirements will file for the Arab and Islamic studies certificate in the International Studies Program and the certificate will be posted to their UNT transcript. The Contemporary Arab and Muslim Cultural Studies Institute (CAMCSI) will also honor students graduating with the Arab and Islamic studies certificate with an annual reception in the spring semester.

#### **Global Perspectives certificate**

The global perspectives certificate is an undergraduate academic certificate designed to enable students to acquire knowledge, skills and attitudes in order to become a globally aware citizen of the world. The required course work and international experiences

help students develop cross-cultural communication skills and will enhance their competitiveness to enter a professional program or the global workforce.

The global perspectives certificate is open to all majors and is administered through each school and college in collaboration with UNT-International. Students successfully completing the requirements below will file for the certificate in global perspectives in their school or college, and the certificate will be posted to their UNT transcript.

To earn a global perspectives certificate, a student must complete the following:

#### Language proficiency

Achieve language proficiency in one foreign language through elementary II level by completing course work or through examination.

#### Course work, 12 hours

• INST 2100 - Introduction to International Studies

#### Plus 9 advanced hours

The remaining 9 advanced hours as approved in advance by the student's academic dean and in such areas as:

- International relations
- Global business, economics or resources
- Country or region studies
- Cultural perspectives

#### International experience

Acquire international experience via one or more of the following:

- Study abroad
- Student exchange
- Internship
- Volunteer service projects abroad
- Student Teaching Abroad

#### Campus or community events

Participate in eight international events or activities on campus or in the community other than those related to the student's own country. Include documentation of these activities, especially leadership contributions, along with the synthesis report.

#### Reflection and synthesis report/project

Prepare and present a reflection and synthesis report/project in the semester the student files for the certificate. Presentations are made in the student's school or college or at an event hosted by UNT-International.

#### **Department of Anthropology**

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Lisa Henry, Chair

Faculty

The Department of Anthropology offers a Bachelor of Arts with a major in anthropology for those who wish to pursue a career in the discipline of anthropology, for those simply interested in the human condition and for those who may wish to combine the study of anthropology with another discipline.

Marketable skills for this degree include interpersonal, cognitive, and applied skill areas, that are valued by employers, and are primary or complementary to the major. The marketable skills goal was designed to help students articulate their skills to employers. UNT's marketable skills were faculty-developed and approved by employers or discipline-specific agencies, e.g., internship providers, chambers of commerce, workforce development boards, and other workforce-related entities. For information on these marketable skills -https://vpaa.unt.edu/thecb/class.

We also offer a number of courses which satisfy breadth requirements for other majors. Anthropology's focus on understanding cultural diversity makes it a useful subject for people planning careers in areas such as education, business, medicine, and law.

Anthropology majors at UNT receive a broad range of training in theory and methodology: ethnography, in-depth interviewing, survey research and quantitative analysis. Courses require intensive writing, and all students are encouraged to become proficient in a second language. UNT places emphasis on training students in the application of anthropological knowledge in the private, public and not-for-profit sectors, in local, regional and international arenas. Students are encouraged to travel abroad and often get hands-on experience while working in UNT's international field schools.

#### **Majors**

#### Anthropology, BA

A Bachelor of Arts with a major in anthropology provides the skills needed to work in a world transformed by global economic forces, shifting political borders, national conflicts, ethnic division, food and environmental crises, natural disasters, genocide, and public health issues.

The following requirements must be satisfied for a Bachelor of Arts with a major in anthropology.

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

#### Major requirements

Major of 39 hours in anthropology, including 18 hours of required anthropology courses:

- ANTH 1010 Introduction to Anthropology
- ANTH 2300 Culture and Society

- ANTH 4021 Development of Anthropological Thought
- Two "Geographic Area Studies" classes (from courses numbered ANTH 3100–3900)
- ANTH 4011 Anthropological Field Methods

### Elective anthropology requirements, 21 hours

A minimum of 6 hours must be taken from 4000-level courses, 6 additional hours must be at the advanced level (either 3000-4000 level), and 9 hours from any level.

Note: ARCH 2800 courses may be substituted for elective anthropology courses with approval of the faculty advisor.

#### Minor

No minor is required.

#### **Electives**

See individual degree plan (12 hours of free electives must be advanced).

#### Other requirements

- Students must pass all courses required for the Anthropology major with a "C" or higher;
- Transfer course work to be substituted for required anthropology courses must be approved by a student's faculty advisor during the degree plan process;
- Credit substitution requests must be pre-approved prior to a student enrolling in the course.

#### **Minors**

#### **Anthropology minor**

A minor requires completion of 18 hours in anthropology.

#### Required courses:

- ANTH 1010 Introduction to Anthropology
- ANTH 2300 Culture and Society
- ANTH 4011 Anthropological Field Methods
- 6 hours of anthropology courses from any level
- 3 hours of 3000- or 4000- level anthropology courses

#### **Medical Anthropology minor**

A minor in medical anthropology requires completion of 18 hours (6 must be advanced).

#### Requirements

#### 3 hours from

- ANTH 1010 Introduction to Anthropology
- ANTH 1100 World Cultures
- ANTH 2300 Culture and Society

#### 3 hours from

- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- ANTH 4220 Anthropology in Public Health

#### Approved electives, 12 hours

- ANTH 4210 Culture and Human Sexuality
- ANTH 4230 Psychological Anthropology

- AGER 3480 Psychology of Adult Development and Aging
- AGER 4750 Sexuality and Aging
- BEHV 3200 Science, Skepticism and Weird Behavior
- BIOL 2301 Human Anatomy and Physiology I and
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 3350 Human Heredity
- EADP 4010 Public Health and Disasters
- EADP 4050 Social Vulnerability in Disasters
- HLTH 1100 School and Community Health Problems and Services
- HLTH 1570 Environmental Health and Safety
- HLTH 2000 Introduction to Public Health
- HLTH 2200 Family Life and Human Sexuality
- HLTH 2400 Introduction to Global Health
- HLTH 4430 Planning, Administration and Evaluation of Health Programs
- PHIL 1400 Ethics and Society
- PSYC 2580 Health Psychology
- PSYC 3490 Psychology of Women
- PSYC 4020 Psychology of Death and Dying
- PSYC 4300 Psychosocial Issues in HIV/AIDS
- PUBH 1010 Introduction to Public Health
- PUBH 3010 Social Justice and Behavioral Foundations in Public Health
- PUBH 3020 Community Health Education
- PUBH 3025 Environmental Health
- PUBH 3030 Global Public Health
- PUBH 4015 Ethics in Public Health
- PUBH 4050 Public Health and Health Policy
- PUBH 4060 Public Health Management and Leadership
- SOCI 3110 Sociology of Mental Health, Mental Illness and Mental Health Care
- SOCI 3120 Sociology of Health and Illness
- SOCI 4250 Gender and Society
- SOCI 4550 Sociology of Aging
- SOCI 4750 World Population Trends and Problems
- Additional advanced elective courses may be counted with the approval of the medical anthropology minor advisor.

#### **Undergraduate Academic Certificates**

#### **Applied Anthropology certificate**

An undergraduate academic certificate in applied anthropology requires 12 hours.

#### Required courses, 6 hours

- ANTH 2300 Culture and Society
- ANTH 4000 Applied Anthropology

#### Plus 6 hours selected from

- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- ANTH 4220 Anthropology in Public Health
- ANTH 4230 Psychological Anthropology
- ANTH 4300 Migrants and Refugees
- ANTH 4400 Environmental Anthropology
- ANTH 4601 Anthropology of Education
- ANTH 4701 Topics in Sociocultural Anthropology (select courses are eligible when pre-approved by the Department of Anthropology)
- ANTH 4760 Inequality, Social Justice and the City

#### Department of Communication Studies

Main Departmental Office General Academic Building, Room 309A

Mailing Address: 1155 Union Circle #305268 Denton, TX 76203-5017 940-565-2588 Fax: 940-565-3630

Web site: www.comm.unt.edu

Suzanne Enck, Chair

Faculty

Communication studies examines communication in human affairs and the symbolic processes through which humans interact by focusing on five basic behaviors associated with communication: analysis of self and others, effectively using and responding to verbal messages, effectively using and responding to non-verbal messages, listening and responding appropriately, and appropriately adapting messages to others. The curriculum is designed to facilitate student mastery of theory and research, to enhance communication skills and to enhance student preparation for a variety of careers or for graduate study. Many communication studies graduates pursue careers in consulting, , marketing, advertising, training and development, education, non-profit leadership and human resources. Others find communication to be a useful major in preparing for law, the ministry, public relations, corporate communication, politics and community relations.

The department offers course work in rhetorical, performance and social science traditions. Students are afforded opportunities to explore communication from applied and theoretical perspectives in organizational settings and through co-curricular activities. Course work features the investigation of communication in organizational, interpersonal, aesthetic, health, small group, political, cultural, intercultural and international contexts. Students encounter topics such as gender and diversity issues, persuasion, technology, social change, conflict, narrative and cultural studies.

#### Debate and performance programs

Students may develop and enhance critical thinking skills by participating in intercollegiate debate and performance activities. The national-caliber debate team competes actively in both on-campus events and tournament competition at the regional and national levels. The performance interest group participates in national festivals, sponsors on-campus performances and hosts the Petit Jean National Performance Festival.

#### Digital media studies certificate

In conjunction with the departments of media arts and technical communication, the Department of Communication Studies offers a Digital Media Studies certificate (COMM).

#### **Scholarships**

#### Debate Alumni/William DeMougeot Scholarship

This scholarship is awarded on a competitive basis to outstanding students who participate in the activities of the North Texas Debate Team

#### Olive M. Johnson Memorial Scholarship

This scholarship is awarded on a competitive basis to outstanding students who participate in the activities of the North Texas Debate Team.

#### Curtis M. Loveless Scholarship

This scholarship is awarded on a competitive basis to outstanding students who major in communication studies and participate in the activities of the North Texas Debate Team.

Information about debate scholarships may be obtained by writing to Dr. Brian Lain, Department of Communication Studies, brian.lain@unt.edu.

#### Lesa Woody Memorial Scholarship in Oral Interpretation and Performance Studies

This scholarship is awarded on a competitive basis to undergraduate students who participate in curricular performance studies classes and extracurricular performance studies, intercollegiate festivals and other activities.

Information about this scholarship may be obtained by writing to Dr. Justin Trudeau, Department of Communication Studies, justin. trudeau@unt.edu.

#### **Majors**

#### **Communication Studies, BA**

A Bachelor of Arts with a major in communication studies equips you with the effective communication, critical thinking and problem-solving skills needed for success in today's marketplace. You will investigate communication in aesthetic, health, international, interpersonal, cultural, legal, organizational and political contexts.

### Communication Studies admission and initial requirements

Entering students are classified as majors but must fulfill initial requirements for the degree prior to enrolling in upper division courses in the department. An advisor is available in the department to help students with questions regarding the degree and transitioning from lower division to upper division courses. To progress from lower division course work to upper division course work, students must complete the following requirements.

#### 30 hours of college credit

Complete at least 30 hours of college credit, including:

#### English composition requirement

Complete the university core English composition and rhetoric requirement with a grade of C or better in each course.

- ENGL 1310 First-Year Writing I
- ENGL 1320 First-Year Writing II
  or
- TECM 2700 Technical Writing

#### Communication studies (COMM) courses

Complete the following COMM courses with a grade of C or better in each course.

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2060 Performance of Literature
- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 2140 Advocating in Public or
- COMM 3840 Argumentation and Debate

### GPA requirement for admission and initial requirements:

Have a UNT grade point average of 2.5 or higher.

#### Degree requirements

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements. Students wishing to major in communication studies should consult an advisor in the Undergraduate Advising Office, General Academic Building, Room 320F.

#### Major requirements

A total of 36 semester credit hours:

#### Initial requirements, 15 core hours

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2060 Performance of Literature or
- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 2140 Advocating in Public or
- COMM 3840 Argumentation and Debate
- COMM 3010 Communication Perspectives

### Initial upper-division course sequence requirements

COMM 3010 may be taken concurrently with **one** other communication course; students may either take COMM 3010 concurrently with their final 2000-level COMM core course or their first enrollment in an upper-division course. If students elect to take COMM 3010 concurrently with their first upper-division course, it must be approved by a Department of Communication Studies advisor.

Students who do not complete COMM 3010 with a grade of C or better are prohibited from enrolling in other upper-division communication courses until they have completed COMM 3010 successfully.

#### 9 hours distributed

One course taken from each of the following groups:

#### Group A

- COMM 3120 Nonverbal Communication
- COMM 3220 Health Communication
- COMM 3320 Communication and Conflict Management
- COMM 3420 Communication and New Technology
- COMM 3520 Advanced Interpersonal Communication
- COMM 3620 Intercultural Communication
- COMM 3720 Small Group Communication
- COMM 3820 Social Media Perspectives
- COMM 3920 Organizational Communication
- COMM 4120 Communication and Sport
- COMM 4220 Theories of Crisis Communication

- COMM 4320 Communications and Virtual Gaming
- COMM 4420 Communication and Relational Development
- COMM 4829 Topics in Interpersonal/Organizational Studies

#### Group B

- COMM 3340 Methods of Rhetorical Criticism
- COMM 3440 Public Address Studies
- COMM 3540 The Zombie as Rhetorical Figure
- COMM 3840 Argumentation and Debate
- COMM 4140 Gender and Communication
- COMM 4240 Rhetoric and Popular Culture
- COMM 4340 Rhetoric and Politics
- COMM 4640 Latin@ Rhetorics
- COMM 4740 Landscapes of Public Memory
- COMM 4849 Topics in Rhetorical Studies

#### Group C

- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 3760 Performance Methods
- COMM 3865 Adaptation and Staging
- COMM 4065 20th Century Performance Styles
- COMM 4160 Intertextuality and Performance
- COMM 4360 Performance Composition
- COMM 4460 Performance Art
- COMM 4869 Topics in Performance Studies

#### 3 hours of Theory from

- COMM 4020 Communication Theory
- COMM 4040 Rhetorical Theory
- COMM 4060 Performance Theory
- COMM 4220 Theories of Crisis Communication
- COMM 4520 Theories of Persuasion
- COMM 4540 Communication Theories of Sexuality

#### 9 additional advanced hours in Communications Studies (COMM) courses

#### Other course requirements

None.

#### Minor requirements

Majors are required to complete a minor of at least 18 hours, including 6 advanced hours, from another department, or an interdisciplinary minor.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A student who has completed 90 hours with at least a 3.5 grade point average is eligible to write a Senior Honors Thesis. Students who elect this option are expected to complete their theses in the course of a single term/semester.

Students majoring in communication studies are required to have a minimum grade of C in all COMM courses that count toward the major to graduate. COMM courses taken beyond requirements for the major cannot be taken pass/no pass.

Students must observe prerequisites for each COMM course. If a student registered for a course has not completed prerequisite(s) for the course with a grade of C or better, the student is subject to being dropped from the course without notice. Prerequisites are listed with individual course descriptions.

All students taking COMM 3010 may only take one additional COMM class concurrently, which must be approved by a Department of Communication Studies advisor.

Because of the high demand for many COMM courses, students who miss the first class day without prior consent of the instructor are subject to being dropped from the course so that other students may be added. It is the student's responsibility to secure prior consent of the instructor.

## **Grad Track Options**

# Communication Studies, BA with grad pathway option leading to Communication Studies, MA

This program will target high-achieving undergraduate students majoring in Communication Studies, offering the opportunity for outstanding students to advance their careers by pursuing the Bachelor's and Master's degrees in a parallel and coordinated program. Students are eligible for acceptance into the program upon completion of 75 undergraduate hours, including COMM 3010 and enrollment in a theory course in Communication Studies.

### **Admissions Criteria**

Students are eligible for acceptance beginning in the spring of their junior year upon completion of 75 undergraduate hours, including COMM 3010 and enrollment in a theory course in Communication Studies. To be considered for admission into the pathway program, students must: have a minimum 3.5 GPA both overall and in the Communication Studies major; completed COMM 3010 with a grade of A or B; and completed the undergraduate theory course in Communication Studies with a grade of A or B.

#### **Application Process**

Students will apply by submitting a letter of application, a resume or vita, 2 letters of recommendation from UNT Communication Studies faculty, and a scholarly writing sample from an upper-division course in Communication Studies.

#### **Enrollment & Benefits**

Students accepted into the Pathway program can enroll in up to 12 hours of graduate-level coursework to count toward their Bachelor's degree in Communication Studies. As a pathway toward the Master's degree, students in this program will first earn their Bachelor's degree and then complete their Master's degree in Communication Studies. Students accepted into the program will be able to fulfill all degree requirements established by the department & university, while augmenting their undergraduate degree with master's level coursework that would count toward the student's upper-level electives and GROUP requirements. This pathway program will enable outstanding students to move more efficiently through their academic career.

## **Undergraduate Course Substitutes**

The maximum number of graduate hours a Pathway student could earn is 12 hours (4 graduate courses). These 12 hours can be comprised of a mixture of course substitutions for a combination of Group A-B-C course requirements and/or upper-division Communication elective courses.

Students accepted into the Grad Pathway program can substitute the following graduate-level COMM courses for each corresponding COMM GROUP requirement:

## GROUP A (Interpersonal/Organizational Studies)

- COMM 5120 (Group Processes)
- COMM 5180 (Qualitative Research Methods)
- COMM 5185 (Quantitative Research Methods)
- COMM 5220 (Organizational Communication)
- COMM 5221 (Crisis and Disaster Communication)
- COMM 5223 (Communication and Aging)
- COMM 5225 (Interpersonal Communication)
- COMM 5226 (Seminar in Health Communication)
- COMM 5227 (Seminar in Intercultural Communication)
- COMM 5325 (Communication Theory)
- COMM 5420 (Seminar in Computer-Mediated Communication)
- COMM 5625 (Communication Consulting)
- COMM 5820 (Seminar in Communication Processes)
- COMM 5880 (Seminar in Communication Studies and Research)

## **GROUP B (Rhetorical Studies)**

- COMM 5240 (Rhetoric and Mediated Culture)
- COMM 5340 (Rhetorical Methods)
- COMM 5345 (Rhetorical Theory)
- COMM 5445 (Feminist Criticism)
- COMM 5485 (Topics in Gender and Communication)
- COMM 5540 (Freedom of Expression)
- COMM 5545 (Race and Public Culture)
- COMM 5640 (Classical Rhetoric)
- COMM 5740 (Visual Rhetoric)
- COMM 5840 (Seminar in Rhetorical Studies)
- COMM 5860 (Seminar in Performance Studies)

## GROUP C (Performance Studies)

- COMM 5160 (Performative Writing)
- COMM 5165 (Performance and Southern Culture)
- COMM 5260 (Adaptation & Staging)
- COMM 5265 (Performance Methods)
- COMM 5365 (Performance Theory)
- COMM 5460 (Narrative Theory)
- COMM 5560 (20th Century Theory and Practice in Performance Studies)
- COMM 5660 (Performance and Ethnography)
- COMM 5760 (Performance, Culture, and Tourism)
- COMM 5860 (Seminar in Performance Studies)

## Additional Information About Advising for Pathway Students

Pathway students will choose classes in consultation with the graduate advisor to ensure that classes meet their level of preparation in the program.

Pathway students cannot enroll in COMM 5085 (Communication & Pedagogy) until they have fulfilled all degree requirements for their Bachelor's degree.

COMM 5080 (Introduction to Graduate Study and Research in Communication Studies) would count as a substitute for a Pathway student's upper-level COMM elective.

Pathway students would be strongly advised not to take more than 12 hours (total) in a semester while still completing their Bachelor's degree (the ideal enrollment would be a split of 6 hours of Undergrad courses and 3-6 hours of graduate courses). No Pathway student would be permitted to take more than 3 graduate courses while still enrolled in their Bachelor's degree program.

Pathway students cannot enroll in more advanced seminars in the Master's program unless they have already taken a more general course in that area of the department (e.g., while still enrolled in the Bachelor's program, a Pathway student would not be permitted to take COMM 5545-Race and Public Culture unless they have already taken one of the rhetoric courses approved as a GROUP B substitute).

Pathway students would be advised to take graduate coursework alongside general degree electives in other departments to help balance out workload.

Courses taken for Pathway credit will have a slightly different numbering system (So, instead of taking COMM 5221.601, the undergrad Pathway student would sign up for COMM 5221.002 to distinguish them from the traditional Master's degree student).

#### **Minors**

#### Communication Studies minor

The minor in communication studies requires a total of 18 semester hours, including at least 6 upper-level hours. Minors must observe the system of prerequisites for upper-level courses.

Departmental advisors are available for consultation on the minor in communication studies.

## **Secondary Teacher Certification**

## Communication Studies (Speech) teacher certification

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in Speech. Upon completion of this program, students will be prepared to sit for the certification examinations in Speech.

## Communication Studies admission and initial requirements

Entering students are classified as majors but must fulfill initial requirements for the degree prior to enrolling in upper division courses in the department. An advisor is available in the department to help students with questions regarding the degree and transitioning from lower division to upper division courses. To progress from lower division course work to upper division course work, students must complete the following requirements.

## 30 hours of college credit

Complete at least 30 hours of college credit, including:

## English composition requirement

Complete the university core English composition and rhetoric requirement with a grade of C or better in each course.

ENGL 1310 - First-Year Writing I

- ENGL 1320 First-Year Writing II or
- TECM 2700 Technical Writing

## Communication studies (COMM) courses

Complete the following COMM courses with a grade of C or better in each course.

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2060 Performance of Literature
   or
- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 2140 Advocating in Public
- COMM 3840 Argumentation and Debate

## GPA requirement for admission and initial requirements:

Have a UNT grade point average of 2.5 or higher.

## Major requirements, 36 hours

## Initial requirements, 18 core hours

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2040 Public Speaking
- COMM 2060 Performance of Literature or
- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 2140 Advocating in Public

  or
- COMM 3840 Argumentation and Debate
- COMM 3010 Communication Perspectives

## Initial upper-division course sequence requirements

COMM 3010 may be taken concurrently with one other communication course; students may either take COMM 3010 concurrently with their final 2000-level COMM core course or their first enrollment in an upper-division course. If students elect to take COMM 3010 concurrently with their first upper-division course, it must be approved by a Department of Communication Studies advisor.

Students who do not complete COMM 3010 with a grade of C or better are prohibited from enrolling in other upper-division communication courses until they have completed COMM 3010 successfully.

#### 9 hours distributed

One course taken from each group:

#### Group A

- COMM 3120 Nonverbal Communication
- COMM 3220 Health Communication

- COMM 3320 Communication and Conflict Management
- COMM 3420 Communication and New Technology
- COMM 3520 Advanced Interpersonal Communication
- COMM 3620 Intercultural Communication
- COMM 3720 Small Group Communication
- COMM 3820 Social Media Perspectives
- COMM 3920 Organizational Communication
- COMM 4120 Communication and Sport
- COMM 4220 Theories of Crisis Communication
- COMM 4320 Communications and Virtual Gaming
- COMM 4420 Communication and Relational Development
- COMM 4829 Topics in Interpersonal/Organizational Studies

#### Group B

- COMM 3440 Public Address Studies
- COMM 3340 Methods of Rhetorical Criticism
- COMM 3540 The Zombie as Rhetorical Figure
- COMM 3840 Argumentation and Debate
- COMM 4140 Gender and Communication
- COMM 4240 Rhetoric and Popular Culture
- COMM 4340 Rhetoric and Politics
- COMM 4640 Latin@ Rhetorics
- COMM 4740 Landscapes of Public Memory
- COMM 4849 Topics in Rhetorical Studies

#### Group C

- COMM 3260 Storytelling, Narrative and Everyday Life
- COMM 3760 Performance Methods
- COMM 3865 Adaptation and Staging
- COMM 4065 20th Century Performance Styles
- COMM 4160 Intertextuality and Performance
- COMM 4360 Performance Composition
- COMM 4460 Performance Art
- COMM 4869 Topics in Performance Studies

## 3 hours of theory, chosen from

- COMM 4020 Communication Theory
- COMM 4040 Rhetorical Theory
- COMM 4060 Performance Theory
- COMM 4220 Theories of Crisis Communication
- COMM 4540 Communication Theories of Sexuality
- COMM 4520 Theories of Persuasion

## 6 additional advanced hours in Communication Studies (COMM) courses

Chosen in consultation with an advisor.

## Additional requirements

 $See \ major \ for \ additional \ course \ work \ and \ GPA \ requirements.$ 

Majors are required to complete COMM core courses before registering in upper-division courses. Students who register for a course for which they have not completed prerequisite(s) with a grade of C or better are subject to being dropped from the course.

Because of the high demand for many COMM courses, students who miss the first class day without prior consent are subject to being dropped from the course so that other students may be added. It is the student's responsibility to secure prior consent of the instructor.

Students must also complete the required 21 hours in upper-level education courses (EDCI 3800, EDCI 3830, EDCI 4060, EDCI 4070, EDCI 4108, EDCI 4118, EDCI 4840) and meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## **Undergraduate Academic Certificates**

## Digital Media Studies certificate (COMM)

## Certificate requirements, 15 hours

Students may receive a certificate in digital media studies by successfully completing the following courses with a grade of B or higher.

## Required courses, 9 hours

- COMM 3420 Communication and New Technology
- TECM 1500 New Media Experience
- MRTS 3620 Digital Media and Society

#### Electives, 6 hours

Selected from the following courses:

- COMM 3820 Social Media Perspectives
- COMM 4320 Communications and Virtual Gaming
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 4270 Strategic Social Media
- MRTS 3360 Social Media Strategies
- MRTS 3525 Content Development for Digital Media
- MRTS 4410 Topics in Digital Media Studies (Gender and Digital Cultures)
- MRTS 4410 Topics in Digital Media Studies (Video Game Perspectives)
- MRTS 4415 Topics in Film and Television Studies (Media Genres/Authors - Video Game Authors)
- MRTS 4450 Topics in Media Industry Studies (Digital Distribution)
- MRTS 4450 Topics in Media Industry Studies (Mobile Media)
- MRTS 4450 Topics in Media Industry Studies (Video Game History)
- Internship option (TECM 4920, MRTS 4480 or COMM 4800) with departmental approval
- Other courses approved by certificate advisor

# Department of Dance and Theatre

Main Departmental Office Radio, TV, Film and Performing Arts Building, Room 242

Mailing address: 1155 Union Circle #310607 Denton, TX 76203-5017 940-565-2211

Fax: 940-565-4453

E-mail: DanceAndTheatre@unt.edu Web site: www.danceandtheatre.unt.edu

Dance Office Dance and The 940-565-3432

Dance and Theatre Building, Room 103

Fax: 940-369-7458

Lorenzo Garcia, Chair

**Faculty** 

The Department of Dance and Theatre is dedicated to the professions of theatre and dance as central concerns of a civilized society and as primary methodologies in the education of its citizenry. Small groups of teachers and students, using as a foundation artists and artworks from both past and present and from all cultures and civilizations, collaborate in rehearsals and public performances derived from the finest possible classroom experiences.

Scholarly and empirical research are combined with a high level of spontaneous creativity to develop the entire spectrum of dance and theatre as art forms. Playwrights, actors, dancers, choreographers, directors, designers, technicians and teachers are encouraged to discover and to enhance their own creativity, to bear witness through their artistry to the richness of human life and to make artistic excellence an essential component of contemporary performance.

The Department of Dance and Theatre operates several facilities designed and equipped to generate, organize and conduct research in dance and dramatic performance, design and technical production.

The University Theatre, with a 475-seat proscenium-stage and a flexible studio theatre, both located in the Radio, TV, Film and Performing Arts Building; the Dance and Theatre Building; four dance studios; acting/directing studios; rehearsal rooms; a scene shop; a state-of-the-art costume design and construction space; the scenery and costume collection; and the department library represent a commitment to providing the finest possible theatre and dance education

Current information regarding application, auditions, portfolio reviews, interviews and requirements is available at the department web site, www.danceandtheatre.unt.edu.

#### **Academic advising**

Students who wish to major in dance should consult an advisor in the DATH building, Room 103C, about selection of courses, a degree audit, application of transfer credit in dance, and general academic requirements, policies and procedures. The approval of the department chair is required for degree audits. Theatre majors and minors will be advised by the academic advisor by contacting the department office, Room 242 of the Radio, TV, Film and Performing Arts Building.

All members of the dance and theatre faculty are available to help students achieve a successful enrollment at the University of North Texas and to provide guidance through their academic and professional careers.

Dance Advisor email: Dance-Advising@unt.edu Theatre Advisor email: Theatre-Advising@unt.edu

#### Dance programs of study

The department offers undergraduate programs in the following area:

- Bachelor of Arts with a major in dance
- Dance minor

### Theatre program of study

The department offers an undergraduate program in the following area:

Bachelor of Arts with a major in theatre

The department offers a minor in theatre and a series of courses designed to prepare students to sit for the certification examinations in theatre.

The Bachelor of Arts (BA) is a flexible liberal arts degree intended to offer a basic comprehensive knowledge of theatre, and the BA program in theatre is dedicated to providing a well-rounded major within a liberal arts context.

Undergraduate majors are required to complete courses in acting, design and technical theatre, and theatre history/dramatic literature, as well as electives at the 3000–4000 level. Theatre elective courses include courses in intermediate and advanced level acting and movement, design and technical theatre, stage management, teaching methods in creative drama, theatre for young audiences, playwriting, and a directing series. The balance of the course work provides opportunities in all elements of production. The faculty considers the optimum preparation for the theatre is to be comprised of a liberal arts undergraduate major in theatre and a graduate conservatory education. The BA program is projected to be a 4-year degree, with the preferred entry point to occur during the fall semester. However, duration in the program can be affected by the timeliness of the major declaration, number and type of transfer credits and semester credit load.

#### **Scholarships**

The Ann Bradshaw Stokes Award is provided by a grant from the Ann Bradshaw Stokes Foundation. The Gaylord-Hughes Scholarship has been made possible through an endowment by noted actress Martha Gaylord and by Tom Hughes, late producer and managing director of the Dallas Summer Musicals and a Distinguished Alumnus; by the work of guest artists; and by contributions. Two recently endowed scholarships honoring former department chairs include the Ed DeLatte Scholarship in musical theatre and the Ralph B. Culp Scholarship in directing. The Lucille Murchison Scholarships in dance, costuming and technical theatre are the result of the department's participation in the UNT Centennial Extravaganza. Dance scholarships are supported by gifts from faculty, students and alumni. The Chun Hui Lee Dance Scholarship is the result of the generosity of Mr. Chun Hui Lee. The Mills Dance Scholarship was established by an alumnus, the late Eugene Mills.

All scholarships are presented to students majoring in the Department of Dance and Theatre during any term/semester or summer session. Each year on announced dates, interested students must audition for the performance awards or submit design portfolios for technical awards available for the summer sessions and the following academic year.

Information is available in the department office in the Radio, TV, Film and Performing Arts Building, Room 242, or from the department web site at www.danceandtheatre.unt.edu.

#### **Organizations**

The serious student of dance or theatre may become a member of Alpha Psi Omega, Chi Tau Epsilon, DANCE UNiT and University Players, undergraduate organizations that serve the dance and theatre department and other university programs.

### **Majors**

#### Dance, BA

A Bachelor of Arts with a major in dance helps you become a dancer who values self-expression, intellectual investigation, creativity and discipline by exposing you to a broad range of dance techniques. With additional course work, the program prepares you to become a certified teacher.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in dance.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

A minimum of 48 hours of DANC courses, including the following:

## Dance technique, 16 hours

## Modern dance technique, 12 hours

 $12\ hours\ required\ from\ the\ following\ menu\ (including\ at\ least\ one\ course\ in\ Level\ VI)$ 

Students will be placed in the Level of Modern Dance Technique Courses through examination.

- DANC 1401 Modern Dance Technique Level I
- DANC 1402 Modern Dance Technique Level II
- DANC 2403 Modern Dance Technique Level III
- DANC 2404 Modern Dance Technique Level IV
- DANC 3405 Modern Dance Technique Level V
- DANC 3406 Modern Dance Technique Level VI
- DANC 4407 Modern Dance Technique Level VII
- DANC 4408 Modern Dance Technique Level VIII

### Ballet technique, 4 hours

4 hours required from the following menu (including at least one course in Level IV)

Students will be placed in the Level of Ballet Technique Courses through examination.

- DANC 1411 Ballet Technique Level I
- DANC 1412 Ballet Technique Level II
- DANC 2413 Ballet Technique Level III
- DANC 2414 Ballet Technique Level IV
- DANC 3415 Ballet Technique Level V
- DANC 3416 Ballet Technique Level VI
- DANC 4417 Ballet Technique Level VII
- DANC 4418 Ballet Technique Level VIII

### Creative studies, 9 hours

(3 hours each)

- DANC 1250 Choreography I
- DANC 2250 Choreography II
- DANC 3250 Choreography III

### Dance theory, 15 hours

(3 hours each)

- DANC 2060 Music for Dancers
- DANC 3050 Dance Kinesiology
- DANC 3630 Laban Studies
- DANC 3800 History of Concert Dance in the U.S.: 1900–Present
- DANC 4070 Dance Pedagogy: The Teacher Prepares

Please note prerequisites for all courses. Students are encouraged to take DANC 2800 Survey of Dance as elective to satisfy CORE requirement.

## Additional Global Dance Forms, 3 hours

3 hours from the following menu:

- DANC 2500 Jazz Dance Technique, Level II
- DANC 2710 Tap Dance Technique, Level II
- DANC 3600 Hip-Hop Dance Technique Level I
- DANC 3700 Social Club Dance
- DANC 4600 Movement Topics in World Dance

### Performance, 2 hours

- DANC 1050 Dance Performance
- DANC 4050 Dance Performance and Production Lab

## Capstone, 3 hours

DANC 4046 - Dance and Technology

#### Note

Each term/semester a student performs in public dance productions sponsored or approved by the department, the student must enroll in one of the following:

- DANC 1050 Dance Performance
- DANC 3080 Principles and Techniques of Dance Performance
- DANC 4050 Dance Performance and Production Lab

#### Minor

Optional. Students have the option to pursue a Minor in related fields. Suggested minors are: Entrepreneurship, Kinesiology, Digital Media, English, or Psychology.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

### Suggested dance electives

The following are suggested Dance Electives (please note prerequisites for these courses):

- DANC 1050 Dance Performance
- DANC 1100 Stress Reduction Through Movement
- DANC 1300 Dance of the Time: Modern Dance for Non-Majors
- DANC 1500 Jazz Dance Technique, Level I
- DANC 1710 Tap Dance Technique, Level I
- DANC 2095 Stage Production I
- DANC 2800 Survey of Dance
- DANC 3080 Principles and Techniques of Dance Performance
- DANC 3250 Choreography III
- DANC 3415 Ballet Technique Level V
- DANC 3416 Ballet Technique Level VI
- DANC 4050 Dance Performance and Production Lab
- DANC 4095 Stage Production II
- DANC 4407 Modern Dance Technique Level VII
- DANC 4417 Ballet Technique Level VII
- DANC 4418 Ballet Technique Level VIII
- DANC 4700 Composer/Choreographer Collaboration
- DANC 4850 Dance and Women's Studies

## Other requirements

- Entrance auditions are required for admission to be a major in the dance program. Further information is available at www.danceandtheatre.unt.edu concerning time, date and place. DANC 1100, DANC 1200 and DANC 2800 are open to all students in the university without restriction and satisfy University Core Curriculum requirements. All other DANC courses are open only to dance majors and minors.
- 2. Technique levels are initially determined by an audition.
- Dance majors are expected to take modern technique each semester and encouraged to take ballet technique each semester with a minimum of one daily technique class.
   Transfer students entering the spring term/semester will be evaluated individually.
- Transfer course work to be substituted for required dance courses must be approved by a student's academic advisor during the degree audit process.
- 5. Students majoring in dance must make a B or better in dance technique in order to move to the next level, and at least a C in all other courses comprising the major. If students do not earn the above grades, they must repeat the course with only one repetition allowed. If students fail to progress, they will be removed from the Dance BA program.
- 6. Students who miss the first day of class without consent of the instructor are subject to be administratively dropped from the course so that other students may be added. Students who miss the first day of class because of illness or some other acceptable excuse must notify the instructor on record the day of the absence.
- Students must observe prerequisites for each dance course.
   If a student has not completed prerequisites for a particular course, the student is subject to administrative drop without notice. Prerequisites are listed with individual course descriptions.

## Requirements for dance teacher certification

## **Dance teacher certification**

The College of Liberal Arts and Social Sciences encourages students to explore teaching as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in dance.

All students seeking secondary teaching certification in dance will major in the Dance, BA and fulfill the following additional requirements.

### **Education courses, 21 hours**

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4840 Instructional Strategies and Classroom Management
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School

## **Additional requirements**

Students must complete the 21 hours of education courses (above) and meet all GPA requirements to apply for state certification.

In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC) at www.tea.state.tx.us.

Upon completion of this program, students will be prepared to sit for the certification examinations in dance.

## Theatre with a concentration in Design/Tech, BA

A Bachelor of Arts with a major in theatre provides you with a comprehensive understanding of theatre and the skills required to make a show work, both on and off the stage.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in theatre and a concentration in design/tech.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements, 45 hours

A minimum of 45 semester hours, including a theatre core of 21 credit hours

## Theatre core, 21 hours

#### Required courses, 12 hours

- THEA 1440 Play Analysis
- THEA 3030 World Theatre to 1700
- THEA 3040 World Theatre After 1700
- THEA 4350 Senior Seminar

#### 3 hours from

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 1280 Stage Management I
- THEA 2380 Theatrical Makeup

#### 3 hours from

- THEA 1050 Acting: Fundamentals
- THEA 2051 Theatre Voice I
- THEA 2351 Theatre Movement I

#### 3 courses from

Select three courses from the following:

- THEA 2095 Stage Production I (one hour)
- THEA 3095 Stage Production II (one hour)
- THEA 4095 Stage Production III (one hour)
- THEA 4600 Rehearsal and Performance for the Stage (one hour)

## Concentration in design/tech, 24 hours

Required courses:

- THEA 1700 Theatrical Design I
- THEA 1701 Theatrical Design II

#### 3 hours from

Select three hours from the following courses, in addition to the course chosen for the theatre core:

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 1280 Stage Management I
- THEA 2380 Theatrical Makeup

## Areas of interest, 15 hours (advanced)

15 advanced hours from the following courses in consultation with the department advisor:

- THEA 3070 History of Theatrical Costume and Décor
- THEA 3130 Lighting II
- THEA 3143 Costume II
- THEA 3146 Stagecraft II
- THEA 3280 Stage Management II
- THEA 4110 Scene Painting for the Theatre
- THEA 4130 Lighting III: Design
- THEA 4143 Costume Design
- THEA 4146 Stagecraft III: Design
- THEA 4190 Sound Production and Design for the Theatre
- THEA 4910 Special Problems
- THEA 4920 Theatre Practicum

## Other course requirements

Students must follow all course prerequisites.

#### Minor

Optional (a related field such as music, psychology or art is recommended).

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information, see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- To remain a theatre major and to graduate, students majoring in theatre must maintain a cumulative grade point average of 2.5 for all theatre courses.
- b. Students majoring in theatre must enroll in a production course (THEA 4500 or equivalent) each term/semester the student performs or designs in public productions sponsored or approved by the department.
- Transfer work to be substituted for required theatre courses must be approved by the departmental advisor.
- d. The department does not allow students to obtain a D or below more than twice in a theatre course comprising the major. Once the student receives the second D or below in the same course, the student will be dismissed from the department.
- e. Students who miss the first day of class without consent
  of the instructor are subject to be administratively dropped
  from the course so that other students may be added.
   Students who miss the first day of class because of illness or
  some other acceptable excuse must notify the instructor on
  record the day of the absence.

f. Students must observe prerequisites for each theatre course. If a student has not completed prerequisites for a particular course, the student is subject to administrative drop without notice. Prerequisites are listed with individual course descriptions.

## Theatre with a concentration in Performance, BA

A Bachelor of Arts with a major in theatre provides you with a comprehensive understanding of theatre and the skills required to make a show work, both on and off the stage.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in theatre and a concentration in performance.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements, 45 hours

A minimum of 45 semester hours, including a theatre core of 24 credit hours.

## Theatre core, 24 hours

- THEA 1050 Acting: Fundamentals
- THEA 1440 Play Analysis
- THEA 2051 Theatre Voice I
- THEA 2351 Theatre Movement I
- THEA 3030 World Theatre to 1700
  THEA 3040 World Theatre After 1700
- THEA 3040 World Triestle Arter 170
   THEA 3050 Acting: Realism
- THEA 4350 Senior Seminar

## Concentration in performance, 21 hours

#### 3 hours from

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 1280 Stage Management I
- THEA 2380 Theatrical Makeup

#### 3 courses from

Select three courses from the following:

- THEA 2095 Stage Production I (one hour), or
- THEA 3095 Stage Production II (one hour), or
- THEA 4095 Stage Production III (one hour), or
- THEA 4600 Rehearsal and Performance for the Stage (one hour)

## Critical perspectives, 3 hours

3 hours chosen from the following

- THEA 4370 Contemporary Chicana/Chicano Theatre
- THEA 4380 Gay/Lesbian Plays and Performance After 1960s
- THEA 4390 Theatre and Social Change

## Areas of interest, 12 hours (advanced)

12 advanced hours chosen from the following courses in consultation with the department advisor:

- THEA 3100 Directing I
- THEA 3140 Acting: Styles and Periods
- THEA 3351 Theatre Movement II
- THEA 3400 Theatre for Young Audiences
- THEA 4000 Musical Theatre Acting
- THEA 4100 Directing II
- THEA 4140 Acting: Shakespeare
- THEA 4240 Theatre in the Classroom
- THEA 4310 Acting for the Camera
- THEA 4351 Physical Theatre
- THEA 4460 Play and Film Scriptwriting
- THEA 4500 Theatre Topics
- THEA 4600 Rehearsal and Performance for the Stage
- THEA 4910 Special Problems
- THEA 4920 Theatre Practicum

## Other course requirements

- a. Students must follow all course prerequisites
- b. Through a juried review process, theatre performance faculty will assess the skill level of all students completing THEA 3050 to determine eligibility for enrollment in the following courses: THEA 3140, THEA 4000, THEA 4140, THEA 4290 and THEA 4310. Individuals may be required to repeat THEA 3050.

### Minor

Optional (a related field such as music, psychology or art is recommended).

### **Electives**

Hours required for electives may vary based on course selection and the University Core curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information, see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- a. To remain a theatre major and to graduate, students majoring in theatre must maintain a cumulative grade point average of 2.5 for all theatre courses.
- b. Students majoring in theatre must enroll in a production course (THEA 4500 or equivalent) each term/semester the student performs or designs in public productions sponsored or approved by the department.
- Transfer work to be substituted for required theatre courses must be approved by the departmental advisor.
- d. The department does not allow students to obtain a D or below more than twice in a theatre course comprising the major. Once the student receives the second D or below in the same course, the student will be dismissed from the department.
- e. Students who miss the first day of class without consent of the instructor are subject to be administratively dropped from the course so that other students may be added. Students who miss the first day of class because of illness or some other acceptable excuse must notify the instructor on record the day of the absence.
- f. Students must observe prerequisites for each theatre course. If a student has not completed prerequisites for a particular course, the student is subject to administrative drop without

notice. Prerequisites are listed with individual course descriptions.

## Theatre, BA

A Bachelor of Arts with a major in theatre provides you with a comprehensive understanding of theatre and the skills required to make a show work, both on and off the stage.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in theatre.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

A minimum of 45 semester hours, including a theatre core of 21 credit hours:

## Theatre core, 21 hours

### Required courses, 12 hours

- THEA 1440 Play Analysis
- THEA 3030 World Theatre to 1700
- THEA 3040 World Theatre After 1700
- THEA 4350 Senior Seminar

#### 3 hours from

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 1280 Stage Management I
- THEA 2380 Theatrical Makeup

#### 3 hours from

- THEA 1050 Acting: Fundamentals
- THEA 2051 Theatre Voice I
- THEA 2351 Theatre Movement I

### 3 courses from

- THEA 2095 Stage Production I (one hour), or
- THEA 3095 Stage Production II (one hour), or
- THEA 4095 Stage Production III (one hour), or
- THEA 4600 Rehearsal and Performance for the Stage (one hour)

## Areas of interest, 24 hours

To complete the BA with a major in theatre, students may choose 24 hours from a range of lower and upper division theatre courses (areas of interest) in consultation with department advisor.

## Other course requirements

- a. Students must follow all course prerequisites
- b. Through a juried review process, theatre performance faculty will assess the skill level of all students completing THEA 3050 to determine eligibility for enrollment in the following courses: THEA 3140, THEA 4000, THEA 4140, THEA 4290 and THEA 4310. Individuals may be required to repeat THEA 3050.

#### Minor

Optional (a related field such as music, psychology or art is recommended).

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- a. To remain a theatre major and to graduate, students majoring in theatre must maintain a cumulative grade point average of 2.5 for all theatre courses.
- b. Students majoring in theatre must enroll in a production course (THEA 4500 or equivalent) each term/semester the student performs or designs in public productions sponsored or approved by the department.
- Transfer work to be substituted for required theatre courses must be approved by the departmental advisor.
- d. The department does not allow students to obtain a D or below more than twice in a theatre course comprising the major. Once the student receives the second D or below in the same course, the student will be dismissed from the department.
- e. Students who miss the first day of class without consent of the instructor are subject to be administratively dropped from the course so that other students may be added. Students who miss the first day of class because of illness or some other acceptable excuse must notify the instructor on record the day of the absence.
- f. Students must observe prerequisites for each theatre course. If a student has not completed prerequisites for a particular course, the student is subject to administrative drop without notice. Prerequisites are listed with individual course descriptions.

#### **Minors**

#### **Dance minor**

A minor dance consists of 18 semester hours, including 6 advanced hours.

The dance minor seeks to provide, within 18 credit hours, an opportunity for students to explore the field of dance via breadth and some depth as tailored to their individual needs. Students will gain and apply artistic and intellectual knowledge in the field of dance that is relevant and applicable to each dance minor's interdisciplinary career goal or personal enrichment aim.

## First 9 hours

### Dance technique studies, 3 hours

Assigned to student via audition.

- DANC 1401 Modern Dance Technique Level I
- DANC 1402 Modern Dance Technique Level II
- DANC 1411 Ballet Technique Level I
- DANC 1412 Ballet Technique Level II
- DANC 2403 Modern Dance Technique Level III
- DANC 2404 Modern Dance Technique Level IV
- DANC 2413 Ballet Technique Level III
- DANC 2414 Ballet Technique Level IV
- DANC 3405 Modern Dance Technique Level V
- DANC 3406 Modern Dance Technique Level VI

- DANC 3415 Ballet Technique Level V
- DANC 3416 Ballet Technique Level VI
- DANC 4407 Modern Dance Technique Level VII
- DANC 4408 Modern Dance Technique Level VIII
- DANC 4417 Ballet Technique Level VII
- DANC 4418 Ballet Technique Level VIII

## Dance historical/theoretical studies, 3 hours

Selected from:

- DANC 1100 Stress Reduction Through Movement
- DANC 1200 Appreciation of Dance as a Contemporary Art Form
- DANC 2800 Survey of Dance

#### Dance creative studies, 3 hours

DANC 1250 - Choreography I

## Remaining course work

Upon completion of the first three courses, the student may then, in consultation with the department advisor, take a horizontal **or** vertical path toward completing the additional 9 credit hours of the dance minor.

This structure gives the dance minor student flexibility and offers the student an opportunity to carve out his or her individual path once each of the three areas of dance studies has been sampled.

## Horizontal path, 9 hours

The student may choose to take a broad-based horizontal path by enrolling in the next level of dance technique, dance historical/theoretical studies and dance creative studies.

## Vertical path, 9 hours

The student may choose to take an intensive vertical path by enrolling in advanced courses or a variety of courses (i.e., more styles and idioms) along just one of the three tracks of study (dance technique studies, dance historical/theoretical studies or dance creative studies). This path allows for immersion in one focused area of study in the field of dance.

## Other requirements

Students must formally apply for the dance minor via an application sheet, audition for initial placement in dance technique courses, and meet with the department advisor prior to enrolling in courses.

#### Theatre minor

A minor in theatre consists of 21 semester hours.

## Requirements

### 9 hours from

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 1050 Acting: Fundamentals
- THEA 1440 Play Analysis
- THEA 1700 Theatrical Design I
- THEA 2051 Theatre Voice I
- THEA 2351 Theatre Movement I
- THEA 2380 Theatrical Makeup

#### Plus 12 advanced hours in theatre

## **Secondary Teacher Certification**

### **Dance teacher certification**

The College of Liberal Arts and Social Sciences encourages students to explore teaching as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in dance.

All students seeking secondary teaching certification in dance will major in the Dance, BA and fulfill the following additional requirements.

## Education courses, 21 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4840 Instructional Strategies and Classroom Management
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School

## Additional requirements

Students must complete the 21 hours of education courses (above) and meet all GPA requirements to apply for state certification.

In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC) at www.tea.state.tx.us.

Upon completion of this program, students will be prepared to sit for the certification examinations in dance.

## **All Level Teacher Certification**

### Theatre teacher certification

The College of Liberal Arts and Social Sciences encourages students to explore teaching as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in Theatre.

Upon completion of this program, students will be prepared to sit for the certification examinations in theatre.

## Requirements for theatre teaching field

- THEA 1050 Acting: Fundamentals
- THEA 1440 Play Analysis
- THEA 2095 Stage Production I
- THEA 3030 World Theatre to 1700
- THEA 3040 World Theatre After 1700
- THEA 3095 Stage Production II
- THEA 3100 Directing I
- THEA 3400 Theatre for Young Audiences
- THEA 4095 Stage Production III
- THEA 4240 Theatre in the Classroom
- THEA 4350 Senior Seminar

#### 6 hours from

- THEA 1700 Theatrical Design I
- THEA 1701 Theatrical Design II
- THEA 2051 Theatre Voice I
- THEA 2351 Theatre Movement I
- THEA 3070 History of Theatrical Costume and Décor

## 6 hours from

- THEA 1030 Lighting and Sound I
- THEA 1043 Costume I
- THEA 1046 Stagecraft I
- THEA 2380 Theatrical Makeup

## Additional requirements

See major for additional course work and GPA requirements.

Students must also complete the required 21 hours in upper-level education courses (EDCI 3800, EDCI 3830, EDCI 4060, EDCI 4070, EDCI 4108, EDCI 4118, EDCI 4840) and meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall. Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## **Undergraduate Academic Certificates**

## **Theatre Technologies certificate**

The certificate program seeks to provide, within 15 credit hours, an opportunity for students to explore the field of theatre technologies in the international industry. Students will gain practical knowledge that is relevant and applicable to each student's career goal.

Interested students must apply and be admitted into the theatre technologies certificate program by the design/tech faculty of the Department of Dance and Theatre. Upon admittance, students must meet with the department advisor before enrolling in courses.

## Required courses, 12 hours

- THEA 1030 Lighting and Sound I
- THEA 1046 Stagecraft I
- THEA 3130 Lighting II
- THEA 4920 Theatre Practicum

### Plus 3 hours selected from

- THEA 3146 Stagecraft II
- THEA 4190 Sound Production and Design for the Theatre
- THEA 4920 Theatre Practicum (in addition to THEA 4920 listed above)

## **Department of Economics**

Main Departmental Office Wooten Hall, Room 325

Mailing address: 1155 Union Circle #311457 Denton, TX 76203-5017 940-565-2573

Web site: economics.unt.edu

Advising Offices Undergraduate, Wooten Hall, Rooms 335, 336, and 338 Graduate, Wooten Hall, Rooms 343 and 348

#### David J. Molina, Chair

#### **Faculty**

The Department of Economics prepares students for career opportunities in the increasingly competitive domestic and global marketplace. The department is committed to a balance of high-quality teaching and research. Students benefit from the personal attention of faculty and develop a clear understanding of applications of economic theory to real-world policy issues.

There are more than 59,000 economists in the United States working in three main areas: 42 percent work in business; 37 percent in teaching, research and consulting; and 21 percent in government. Economists work in many fields, including international trade, forecasting, environmental analysis, monetary theory, economic development, insurance, banking, finance, consulting, health care, communications, marketing, law and labor relations. There is an expected increase in the number of jobs for economists of 14% between 2019-2029, which is larger than the 4% increase in the number of jobs for all occupations.

An undergraduate major in economics is excellent preparation for graduate work in economics, business, law and other fields. An applied approach helps students develop the technical and quantitative skills necessary for graduate study in many of today's expanding career fields in business and research.

#### **Programs of study**

Programs in the Department of Economics offer students a diversity of options ranging from a liberal arts perspective to a more quantitative technical background.

A Bachelor of Business Administration with a professional field in economics is available through the Department of Finance, Insurance, Real Estate and Law in the College of Business, and is served by advisors in the Department of Economics.

#### **Bachelor of Business Administration**

BBA candidates must complete a minimum of 120 semester hours, 42 of which must be advanced, and meet "University Core Curriculum" and "University Core Curriculum Requirements" as stated in the Academics section of this catalog, and general course and curriculum requirements of the College of Business. The professional field in economics is planned with the economics undergraduate advisor and includes ECON 3550, ECON 3560 and ECON 4140; 9 additional advanced economics hours; and 12 hours of approved supporting courses, including FINA 4500.

#### **Scholarships**

Scholarship applications are available online and in Wooten Hall, Room 325. The deadline for applying is early March. Scholarship winners are announced in late March.

#### The Melton-Cochran Scholarship

The Melton-Cochran Scholarship is in memory of Rosser B. "Abe" Melton (a faculty member from 1946-1975) and Kendall P. Cochran (on the faculty from 1957-1989, and department chair from 1969-1977). Melton and Cochran were both strong mentors and an inspiration to students. This scholarship is awarded annually to an outstanding undergraduate economics major of junior standing who has completed at least 60 hours of coursework and maintains a minimum 3.5 overall grade point average.

#### Department of Economics Scholarships for Academic Excellence

Scholarships are awarded to outstanding undergraduate and graduate economics majors.

Students who have declared economics as their major are eligible, including entering freshmen and entering graduate students.

To be eligible, an undergraduate student must have a minimum GPA of 3.0. A graduate student must have a 3.0 GPA on all college work and must meet current admissions standards for the GRE or GMAT.

The amount and number of awards depend on the availability of funding.

#### Rising Eagle Scholarship

This scholarship is for current economics majors who are graduating with a BA/BS/BBA in Economics and are applying to the master's-level program in economics. Students must have a minimum 3.0 average and have made application to the graduate school. The number and amount of awards depend on the availability of funding.

#### Lewis M. Abernathy Scholarship

This scholarship is named in honor of Professor Lewis M. Abernathy, retired UNT economics faculty member and distinguished department chairman.

To be eligible, an undergraduate student must have a minimum GPA of 3.0.

The amount and number of awards depend on the availability of funding.

#### **Center for Economic Education**

#### Steven L. Cobb, Director

The Center for Economic Education is committed to making formal instruction in economics more accessible to educators.

The center maintains an in-service teacher training program of course offerings regularly scheduled during evening hours and in the summer. This program provides a mechanism for the in-service training of economics teachers in community colleges and secondary and elementary schools.

In addition to these regional instructional programs, the center develops instructional material, conducts research in economics education, maintains an instructional resource center and provides technical assistance in matters pertaining to instruction in economics.

#### **Economics Research Group**

#### Michael C. Carroll, Director

The Department of Economics at the University of North Texas houses the Economics Research Group (ERG), one of the country's leading economics research groups. By providing support to communities and industry, the ERG is leading the study of the *innovation economy*, defining the dynamics of this economy and analyzing it to provide understanding and actionable data. ERG conducts in-depth research, solving tough economic issues leading to new ideas and solutions facing society. Examples include water costs and impacts, efficiencies associated with the movement of goods, infrastructure development and integration assessment, and bio-based industry growth.

Committed to the creation and application of world-class economic strategies, ERG is working with global partners to assess the economy and transform data and trends into innovative, actionable solutions. Areas of expertise include: innovation economy, social network theory, embedded economy, creative economy, economic impact studies, and economic development strategies.

### **Majors**

## **Economics, BA**

The Department of Economics helps students develop a clear understanding of how to apply economic theory to real-world policy issues. We administer a rigorous curriculum leading to a Bachelor of Arts with a major in economics.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in economics.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements.

## Major requirements

Majors must complete at least 33 hours in economics, including:

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- ECON 3550 Intermediate Micro-Theory
- ECON 3560 Intermediate Macro-Theory
- ECON 4510 History of Economic Thought

## Plus 18 additional upper-division hours

Plus 18 additional upper-division hours above the 3000 level, including at least 9 hours from the following:

- ECON 4030 Economic Cycles and Forecasting
- ECON 4100 Comparative Economic Systems
- ECON 4140 Managerial Economics
- ECON 4150 Public Economics
- ECON 4180 The Economics of Health Care
- ECON 4290 Labor Economics
- ECON 4420 Open Economy Macroeconomics
- ECON 4450 Strategic Behavior Across Market Structures
- ECON 4460 Industrial Organization and Public Policy
- ECON 4550 Law and Economics
- ECON 4650 Urban Economics
- ECON 4870 Introduction to Econometrics
- ECON 4875 Empirical Linear Modeling

#### Additional requirements

To graduate with a BA with a major in economics, a student must have a GPA of 2.5 in all economics courses (including transfer work). Students may retake UNT economics courses to improve the overall economics GPA. In computing the economics GPA, only the grade in the last repetition of a course will be included.

A student must earn at least a B in ECON 1100 and ECON 1110 and at least a C in all economics courses above the 3000 level. A student must earn at least a B in ECON 1100 before taking ECON 3550 and at least a B in ECON 1110 before taking ECON 3560. In all other cases, a student must earn a grade of C or higher in any prerequisite course before taking the next course in a sequence.

## Other course requirements

## Math requirement

- MATH 1190 Business Calculus
- MATH 1710 Calculus I

## Statistics requirement

- ECON 4630 Research Methods for Economists or
- MATH 3680 Applied Statistics

(either with a grade of C or better)

## Minor

Optional.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences

## **Economics, BSECO**

A Bachelor of Science in Economics teaches you a marketable, transferable skill set that makes you a valuable asset to any company. Our curriculum provides a unique perspective on economics because of the shared resources between the Department of Finance, Insurance, Real Estate and Law and the Department of Economics.

## **Degree requirements**

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

Majors must complete at least 33 hours in economics, including:

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- ECON 3550 Intermediate Micro-Theory
- ECON 3560 Intermediate Macro-Theory
- ECON 4870 Introduction to Econometrics

## Plus 18 additional upper-division hours

18 additional upper-division hours above the 3000 level, including at least 9 hours from the following:

- ECON 4030 Economic Cycles and Forecasting
- ECON 4100 Comparative Economic Systems
- ECON 4140 Managerial Economics
- ECON 4150 Public Economics
- ECON 4180 The Economics of Health Care
- ECON 4290 Labor Economics
- ECON 4420 Open Economy Macroeconomics
- ECON 4450 Strategic Behavior Across Market Structures
- ECON 4460 Industrial Organization and Public Policy
- ECON 4510 History of Economic Thought
- ECON 4550 Law and Economics
- ECON 4650 Urban Economics
- ECON 4875 Empirical Linear Modeling

## Additional requirements

To graduate with a BS in Economics, a student must have a GPA of 2.5 in all economics courses (including transfer work). Students may retake UNT economics courses to improve the overall economics GPA. In computing the economics GPA, only the grade in the last repetition of a course will be included.

A student must receive at least a B in ECON 1100 and ECON 1110 and at least a C in all economics courses above the 3000 level. In addition, a student must receive a B in ECON 1100 before taking ECON 3550 and at least a B in ECON 1110 before taking ECON 3560. In all other cases, a student must earn at least a C in any prerequisite course before taking the next course in a sequence.

## Other course requirements

## Math requirement

- MATH 1710 Calculus I
- MATH 1720 Calculus II

both with a grade of C or better

## Statistics requirement

- ECON 4630 Research Methods for Economists or
- MATH 3680 Applied Statistics

(either with a grade of C or better)

## Foreign language requirement options

Students may complete either of two options to satisfy the College of Liberal Arts and Social Sciences foreign language requirement:

## Option 1

Must attain intermediate II level (2050) in a foreign language.

#### Option 2

6 hours of mathematics in addition to MATH 1710 and MATH 1720, chosen from:

- MATH 2000 Discrete Mathematics
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I
- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3610 Real Analysis II
- MATH 3740 Vector Calculus
- MATH 4060 Foundations of Geometry
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4500 Introduction to Topology
- MATH 4520 Introduction to Functions of a Complex Variable
- MATH 4610 Probability
- MATH 4650 Statistics

#### Note

MATH 3680 may be taken to fulfill the statistics requirement and will also count toward the additional 6 hours of mathematics. Students who take MATH 3680 cannot receive credit for both MATH 3680 and ECON 4630.

### Minor

Optional.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### **Minors**

#### **Economics minor**

## Required courses

- ECON 1100 Principles of Microeconomics (with a grade of C or better)
- ECON 1110 Principles of Macroeconomics (with a grade of C or better)

## Plus 12 hours

12 additional hours of upper-division courses (3000- or 4000-level) with a grade of C or better.

# Undergraduate Academic Certificates Economic Geography certificate

The economics and geography departments offer an interdisciplinary certificate in analysis of geographic data. Eighteen (18) hours of course work are required, including four core courses, one approved geography course, and two electives from approved list. All courses must be completed with a grade of C or better.

## Required Courses

- ECON 3550 Intermediate Micro-Theory
- ECON 4870 Introduction to Econometrics
- GEOG 4230 Location Intelligence: Business GIS Concepts and Applications

## Additional Required Course

Choose one of the following:

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4560 Introduction to Python Programming

### **Elective Courses**

Choose two of the following:

- ECON 4650 Urban Economics
- GEOG 3010 Economic Geography
- GEOG 4210 Urban Geography
- GEOG 4220 Applied Retail Geography
- GEOG 4550 Advanced Geographic Information Systems
- GEOG 4590 Advanced GIS Programming

**NOTE:** GEOG 2110 (Foundations of Geographic Research) is required for GEOG 3010 and GEOG 4210 for Geography majors only and will be waived for Economics majors

## **Department of English**

Main Departmental Office Auditorium Building, Room 112

Mailing address: 1155 Union Circle #311307 Denton, TX 76203-5017 940-565-2050

Fax: 940-565-4355

Web site: www.english.unt.edu

Undergraduate Advising Office Auditorium Building, Room 114

### Jacqueline Vanhoutte, Chair

#### **Faculty**

The study of English language and literature provides students with an intellectual foundation that will permanently enrich their lives and prepare them for a wide variety of professional paths. Our department features courses in British, American, and anglophone literature; in the art of poetry, fiction, and creative non-fiction; and in rhetoric and composition. All of these classes foster intellectual independence and help students to develop the skills of thinking critically, reading deeply, and writing clearly.

The English major is widely recognized as a core liberal arts degree, preparing students not only for graduate study in literature or creative writing, but for a range of careers – including teaching, the law, publishing, and business – in which the skills of analytical thinking and effective communication are at a premium. Whatever path they choose, English majors (and minors) will also have gained something invaluable: a fuller sense of the possibilities of life, expanded intellectual and imaginative horizons, and greater insight into the workings of human nature.

At all levels, our class sizes are restricted in order to provide opportunities for collaboration with other students and close interaction with professors. Our faculty specialize in a variety of literary traditions, critical methodologies, and genres of creative writing, and are devoted to training students in the most effective strategies for reading and writing.

#### **Programs of study**

Programs offered by the department, including concentrations under the English major, are listed below.

## **Endorsement in English as a Second Language**

See the certification advisor in the College of Education for details.

### **Majors**

## English with a concentration in Creative Writing, BA

The English department plays a pivotal role in developing a student's writing and critical analysis skills. While pursuing the Bachelor of Arts with a major in English, you can choose from concentrations in literature, writing and rhetoric, creative writing, and language arts with secondary teacher certification.

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

#### Required courses, 18 hours

- ENGL 1310 First-Year Writing I
- ENGL 1320 First-Year Writing II
- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills

**Note:** ENGL 3000 should be taken in the first 18 hours of English course work.

#### 6 additional hours

Students choose two of the following courses:

- ENGL 2321 British Literature
- ENGL 2326 American Literature
- ENGL 2331 World Literature
- ENGL 2341 Forms of Literature
- ENGL 2351 Mexican American Literature

## Diversity requirement

Students choose one course from the following.

- ENGL 3920 Ethnic American Literatures
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4245 Postcolonial Literature and Theory
- ENGL 4250 Latinx Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 4260 African American Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4670 Gender and Sexuality in Literature

## Creative Writing concentration, 24 hours

No fewer than three 4000-level courses must be included in the 24 hours

## One course chosen from

- ENGL 3430 British Literature to 1780
- ENGL 3830 American Literature to 1870

#### One course chosen from

- ENGL 3440 British Anglophone Literature 1780 to the Present
- ENGL 3840 American Literature 1870 to the Present

#### Two 4000-level courses in literature

## Four courses chosen from

(either three intermediate and one advanced or two intermediate and two advanced)

- ENGL 3140 Beginning Fiction Writing
- ENGL 3150 Beginning Poetry Writing
- ENGL 3160 Beginning Creative Nonfiction Writing
- ENGL 4100 Advanced Fiction Writing
- ENGL 4110 Advanced Poetry Writing
- ENGL 4120 Advanced Creative Nonfiction Writing

## Other course requirements

None.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C in each is required for all English courses counting toward the Bachelor of Arts degree in English.

A minimum cumulative GPA of 2.5 for all English courses is required for graduation.

## English with a concentration in Language Arts, BA

The English department plays a pivotal role in developing a student's writing and critical analysis skills. While pursuing the Bachelor of Arts with a major in English, you can choose from concentrations in literature, writing and rhetoric, creative writing, and language arts with secondary teacher certification.

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

### Required courses, 18 hours

- ENGL 1310 First-Year Writing I
- ENGL 1320 First-Year Writing II
- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills

Note: ENGL 3000 should be taken in the first 18 hours of English course work.

### 6 additional hours

Students choose two of the following courses:

- ENGL 2321 British Literature
- ENGL 2326 American Literature
- ENGL 2331 World Literature
- ENGL 2341 Forms of Literature
- ENGL 2351 Mexican American Literature

## Diversity requirement

Students choose one course from the following.

- ENGL 3920 Ethnic American Literatures
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4245 Postcolonial Literature and Theory
- ENGL 4250 Latinx Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 4260 African American Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4670 Gender and Sexuality in Literature

## Language Arts concentration, 24 hours

#### Also satisfies teacher certification.

No fewer than three 4000-level courses must be included in the 24 hours.

- ENGL 3110 Academic Writing in the Humanities
- ENGL 4195 Advanced Grammar and Usage
- ENGL 4430 Shakespeare
- ENGL 4700 Instruction and Assessment in English Language Arts
- One additional 4000-level ENGL course.

#### One course chosen from

- ENGL 3450 Short Story
- ENGL 3920 Ethnic American Literatures

#### One course chosen from

- ENGL 3430 British Literature to 1780
- ENGL 3830 American Literature to 1870

#### One course chosen from

- ENGL 3440 British Anglophone Literature 1780 to the Present
- ENGL 3840 American Literature 1870 to the Present

## Additional courses required for teacher certification

- COMM 1010 Introduction to Communication
- EDRE 4840 Linguistically Diverse Learners
- EDRE 4870 Cross-Curricular (Content Area) Literacy Materials and Resources
- JOUR 1210 Mass Communication and Society
- JOUR 2000 Principles of Advertising and Public Relations
- LING 3060 Principles of Language Study

## Other course requirements

None.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C in each is required for all English/linguistics courses counting toward the Bachelor of Arts degree with a major in English and a concentration in language arts.

A minimum cumulative GPA of 2.5 for all English/linguistics courses is required for graduation.

Students must also complete teacher certification requirements.

## English with a concentration in Literature, BA

The English department plays a pivotal role in developing a student's writing and critical analysis skills. While pursuing the Bachelor of Arts with a major in English, you can choose from concentrations in literature, writing and rhetoric, creative writing, and language arts with secondary teacher certification.

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

#### Required courses, 18 hours

- ENGL 1310 First-Year Writing I
- ENGL 1320 First-Year Writing II
- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills

Note: ENGL 3000 should be taken in the first 18 hours of English course work.

#### 6 additional hours

Students choose two of the following courses:

- ENGL 2321 British Literature
- ENGL 2326 American Literature
- ENGL 2331 World Literature
- ENGL 2341 Forms of Literature
- ENGL 2351 Mexican American Literature

### Diversity requirement

Students choose one course from the following.

- ENGL 3920 Ethnic American Literatures
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4245 Postcolonial Literature and Theory
- ENGL 4250 Latinx Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 4260 African American Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4670 Gender and Sexuality in Literature

## Literature concentration, 24 hours

No fewer than three 4000-level courses must be included in the 24 hours.

#### One course chosen from

- ENGL 3430 British Literature to 1780
- ENGL 3830 American Literature to 1870

#### One course chosen from

- ENGL 3440 British Anglophone Literature 1780 to the Present
- ENGL 3840 American Literature 1870 to the Present

#### One course chosen from

- ENGL 4410 Chaucer
- ENGL 4430 Shakespeare
- ENGL 4440 Milton
- ENGL 4450 Special Studies in a Single or Dual Author(s)

Note: ENGL 4410, ENGL 4430, ENGL 4440, and ENGL 4450 will also count toward the historical period courses requirement.

### One course chosen from

- ENGL 3200 Rhetorical History and Historiography
- ENGL 3210 Studies in Writing
- ENGL 4150 Literary Criticism
- ENGL 4200 Studies in Modern Rhetoric
- ENGL 4210 Advanced Studies in Writing

## One course each in four of the five historical periods

Medieval, Renaissance, 18th Century, 19th Century and 20th/21st Century (four total). See lists below.

#### Historical period courses

#### Medieval literature

- ENGL 3431 Introduction to Early Medieval Literature
- ENGL 3432 Introduction to Late Medieval Literature
- ENGL 3433 Medieval Women Writers
- ENGL 4410 Chaucer
- ENGL 4431 Studies in Medieval Literature

#### Designated sections of

- ENGL 3910 Special Studies in Literature
- ENGL 3911 Topics in British Literature
- ENGL 3913 Topics in World Literature
- ENGL 3924 Women's Literature
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4470 British Drama
- ENGL 4800 Special Seminar in Literature or Language
- ENGL 4850 Literature in Context

#### Renaissance literature

- ENGL 3434 British Renaissance Drama
- ENGL 3435 British Renaissance Poetry
- ENGL 4430 Shakespeare
- ENGL 4432 Studies in Renaissance Literature
- ENGL 4440 Milton

#### Designated sections of

- ENGL 3910 Special Studies in Literature
- ENGL 3911 Topics in British Literature
- ENGL 3913 Topics in World Literature
- ENGL 3924 Women's Literature
- ENGL 4290 World Drama
- ENGL 4420 Poetry
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4470 British Drama

- ENGL 4800 Special Seminar in Literature or Language
- ENGL 4850 Literature in Context

#### 18th century literature

- ENGL 3436 Introduction to Eighteenth-Century British Literature
- ENGL 3831 Introduction to the Literature of the Colonial Americas
- ENGL 4433 Studies in Restoration and 18th Century British Literature
- ENGL 4831 Studies in the Literature of the Eighteenth-Century Americas

#### Designated sections of

- ENGL 3910 Special Studies in Literature
- ENGL 3911 Topics in British Literature
- ENGL 3912 Topics in American Literature
- ENGL 3913 Topics in World Literature
- ENGL 4260 African American Literature
- ENGL 4250 Latinx Literature
- ENGL 3924 Women's Literature
- ENGL 4290 World Drama
- ENGL 4400 American Fiction
- ENGL 4420 Poetry
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4470 British Drama
- ENGL 4500 British Fiction
- ENGL 4800 Special Seminar in Literature or Language
- ENGL 4850 Literature in Context

### 19th century literature

- ENGL 3441 Introduction to Romantic Literature
- ENGL 3442 Introduction to Victorian Literature
- ENGL 3832 Nineteenth-Century American Poetry
- ENGL 3833 The American Renaissance
- ENGL 3847 American Realism
- ENGL 4260 African American Literature
- ENGL 4250 Latinx Literature
- ENGL 4434 Studies in Romantic Literature
- ENGL 4435 Studies in Victorian Literature
- ENGL 4832 Studies in 19th-Century American Literature

#### Designated sections of

- ENGL 3850 The Literature of Texas and the Southwest
- ENGL 3910 Special Studies in Literature
- ENGL 3911 Topics in British Literature
- ENGL 3912 Topics in American Literature
- ENGL 3913 Topics in World Literature
- ENGL 3924 Women's Literature
- ENGL 4290 World Drama
- ENGL 4400 American Fiction
- ENGL 4420 Poetry
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4470 British Drama
- ENGL 4500 British Fiction

- ENGL 4800 Special Seminar in Literature or Language
- ENGL 4850 Literature in Context

#### 20th and 21st century literature

- ENGL 3450 Short Story
- ENGL 3843 Twentieth- and Twenty-first-Century American Poetry
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 3920 Ethnic American Literatures
- ENGL 4260 African American Literature
- ENGL 4250 Latinx Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4300 Modern Drama
- ENGL 4480 American Drama
- ENGL 4841 Studies in Modern Irish Literature
- ENGL 4842 Studies in British Modernism
- ENGL 4844 Studies in American Modernism
- ENGL 4845 Studies in Contemporary American Literature

#### Designated sections of

- ENGL 3850 The Literature of Texas and the Southwest
- ENGL 3910 Special Studies in Literature
- ENGL 3911 Topics in British Literature
- ENGL 3912 Topics in American Literature
- ENGL 3913 Topics in World Literature
- ENGL 3920 Ethnic American Literatures
- ENGL 3924 Women's Literature
- ENGL 4290 World Drama
- ENGL 4400 American Fiction
- ENGL 4420 Poetry
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4470 British Drama
- ENGL 4500 British Fiction
- ENGL 4800 Special Seminar in Literature or Language
- ENGL 4850 Literature in Context

## Other course requirements

None.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C is required in all English courses counting toward the Bachelor of Arts degree with a major in English and a concentration in literature.

A minimum cumulative GPA of 2.5 for all English courses is required for graduation.

## English with a concentration in Writing and Rhetoric, BA

The English department plays a pivotal role in developing a student's writing and critical analysis skills. While pursuing the Bachelor of Arts with a major in English, you can choose from concentrations in literature, writing and rhetoric, creative writing, and language arts with secondary teacher certification.

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

Required courses, 18 hours

- ENGL 1310 First-Year Writing I
- ENGL 1320 First-Year Writing II
- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills

**Note:** ENGL 3000 should be taken in the first 18 hours of English course work.

#### 6 additional hours

Students choose two of the following courses:

- ENGL 2321 British Literature
- ENGL 2326 American Literature
- ENGL 2331 World Literature
- ENGL 2341 Forms of Literature
- ENGL 2351 Mexican American Literature

## Diversity requirement

Students choose one course from the following.

- ENGL 3920 Ethnic American Literatures
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4245 Postcolonial Literature and Theory
- ENGL 4250 Latinx Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 4260 African American Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4670 Gender and Sexuality in Literature

## Writing and Rhetoric concentration, 24 hours

No fewer than three 4000-level courses must be included in the 24 hours.

- ENGL 3110 Academic Writing in the Humanities or
- One 3000-level course in literature or creative writing
- ENGL 3200 Rhetorical History and Historiography
- ENGL 3210 Studies in Writing

- ENGL 4150 Literary Criticism

  or.
- One 4000-level course in literature or creative writing
- ENGL 4200 Studies in Modern Rhetoric
- ENGL 4210 Advanced Studies in Writing
- ENGL 4230 Special Topics in Rhetoric and Writing Studies
- One 4000-level course in literature or creative writing

## Other course requirements

None.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C in each is required for all English courses counting toward the Bachelor of Arts degree with a major in English and a concentration in writing and rhetoric.

A minimum cumulative GPA of 2.5 for all English courses is required for graduation.

## **Grad Track Options**

# English, B.A. with a concentration in Literature with grad track option leading to a M.A. in English

The Department of English offers a grad-track pathway in which students complete a Bachelor's Degree with a concentration in literature in four years, and then go on to earn a master's degree in literature in the fifth year. This accelerated program, which is cost-effective and time-saving, is designed for exceptional, highly motivated majors who have maintained at least a 3.5 GPA. Students must apply to this program in their junior year. Admitted students will take twelve graduate hours during their senior year, which can count both toward their bachelor's and master's degrees, as permitted by university rules.

## Admission Requirements

To be eligible for acceptance, students must have completed 75 undergraduate hours, including the following courses:

- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills
- ENGL 3430 British Literature to 1780 OR ENGL 3830 American Literature to 1870
- ENGL 3440 British Anglophone Literature 1780 to the Present OR ENGL 3840 American Literature 1870 to the Present.

In addition to completing the required courses, students will need to submit:

- One or more writing samples
- A statement of purpose
- A curriculum vitae or resume
- Two letters of recommendation testifying to student's ability to do graduate-level work
- An application to the Toulouse Graduate School

GRE scores are not required. Students in the UNT Honors Program and students who satisfy the requirements are guaranteed admission to the program and need not provide letters of recommendation.

## **Program Policies**

Undergraduate students who have been accepted to a grad track pathway option must complete their bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they were admitted to the accelerated program in order to continue into the graduate program.

Admitted students will take twelve graduate hours during their senior year, which will also count toward their B.A. as permitted by university rules.

## Requirements

In lieu of 4 advanced undergraduate electives in the fourth year, students for the MA in literature will take 3 5000-level graduate literature classes and ENGL 5760 in their senior year. The literature classes should be chosen from the following list with an eye to fulfilling period distribution requirements for the BA and the MA. See the distribution requirements for the BA with a major in English and the MA in English.

- ENGL 5000 Old English
- ENGL 5010 Beowulf
- ENGL 5020 Chaucer: Major Works
- ENGL 5030 Studies in Medieval Literature and Culture
- ENGL 5100 Studies in British Literature and Culture of the Romantic Period
- ENGL 5200 Studies in British Literature and Culture of the Victorian Period
- ENGL 5250 Studies in British Literature and Culture of the Eighteenth Century
- ENGL 5260 Studies in Nineteenth-Century British Literature and Culture
- ENGL 5310 Studies in Rhetorical Theory
- ENGL 5320 Studies in Composition Theory
- ENGL 5400 Studies in Shakespeare
- ENGL 5410 Studies in the British Renaissance
- ENGL 5490 Studies in the Twentieth-Century British Novel
- ENGL 5500 Studies in American Literature and Culture from the Beginning to 1800
- ENGL 5510 Studies in American Literature and Culture, 1800 to 1865
- ENGL 5515 Studies in the American Renaissance
- ENGL 5520 Studies in American Literature and Culture, 1865 to 1914
- ENGL 5525 Studies in American Realism
- ENGL 5530 Studies in American Literature and Culture, 1914 to the Present
- ENGL 5540 Studies in Twentieth-Century British or Irish Literature and Culture
- ENGL 5550 Studies in the Teaching of Composition
- ENGL 5560 Studies in the Teaching of Literature
- ENGL 5600 Studies in European Literature and Culture
- ENGL 5605 Studies in the Literature and Culture of the Colonial Americas
- ENGL 5610 Studies in Early African-American Literature and Culture
- ENGL 5620 Studies in Contemporary African-American Literature and Culture
- ENGL 5635 Mexican-American Literature and Theory Before 1954
- ENGL 5640 Mexican-American Literature and Theory After 1954
- ENGL 5650 United States Ethnic Literature and Culture
- ENGL 5680 Studies in Global Literature and Culture

- ENGL 5720 Literature and Science
- ENGL 5730 Literature and the Environment
- ENGL 5750 Methods of Historical Research
- ENGL 5760 Scholarly and Critical Writing
- ENGL 5800 Studies in Literary Genres
- ENGL 5810 Survey of Critical Theory
- ENGL 5890 Studies in the American Novel, 1914 to the Present
- ENGL 5900 Special Problems
- ENGL 5910 Special Problems
- ENGL 5920 Research Problems in Lieu of Thesis
- ENGL 5930 Research Problems in Lieu of Thesis
- ENGL 5950 Master's Thesis

#### **Minors**

### American Studies minor

## Requirements

The minor in American Studies requires a total of 18 hours, including either ENGL 3830 - American Literature to 1870 or ENGL 3840 - American Literature 1870 to the Present; at least one upper-division course in American History (the Core Curriculum classes in American History do not count); and at least one other upper-division course in English. No more than 2 courses in a single department may be applied toward the minor.

The following courses may be applied toward the American Studies minor. Designated sections of other courses may also count, subject to approval by the minor advisor.

## Anthropology

- ANTH 3101 American Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3120 Indigenous Cultures of the Southwest
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.

## Art Education and Art History

- ARTH 4816 American Art
- ARTH 4817 Topics in American Art

#### Criminal Justice

• CJUS 2100 - Crime and Justice in the United States

## Dance and Theatre

- DANC 3800 History of Concert Dance in the U.S.: 1900–Present
- THEA 4370 Contemporary Chicana/Chicano Theatre

#### **English**

- ENGL 3830 American Literature to 1870
- ENGL 3831 Introduction to the Literature of the Colonial Americas
- ENGL 3832 Nineteenth-Century American Poetry
- ENGL 3833 The American Renaissance
- ENGL 3840 American Literature 1870 to the Present
- ENGL 3843 Twentieth- and Twenty-first–Century American Poetry
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism

- ENGL 3847 American Realism
- ENGL 3850 The Literature of Texas and the Southwest
- ENGL 3912 Topics in American Literature
- ENGL 3920 Ethnic American Literatures
- ENGL 4260 African American Literature
- ENGL 4250 Latinx Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4400 American Fiction
- ENGL 4480 American Drama
- ENGL 4831 Studies in the Literature of the Eighteenth-Century Americas
- ENGL 4832 Studies in 19th-Century American Literature
- ENGL 4844 Studies in American Modernism
- ENGL 4845 Studies in Contemporary American Literature

#### Designated Sections of:

- ENGL 4200 Studies in Modern Rhetoric
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4650 Literature and the Environment
- ENGL 4850 Literature in Context

## American History

- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4155 Mexican American Autobiography
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4200 The Spanish Frontier in North America
- HIST 4210 Southern Plains Indian History
- HIST 4261 Topics in United States History
- HIST 4435 American Jewish Experience
- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4451 African American History During Segregation Era
- HIST 4455 History of Black Women in America
- HIST 4465 Women in the United States to 1900
- HIST 4470 Women in the United States Since 1900
- HIST 4475 Jewish Women in Modern America
- HIST 4480 Colonial America
- HIST 4490 The American Revolution Causes and Consequences
- HIST 4495 United States Food History
- HIST 4830 Rise and Fall of the Slave South
- HIST 4840 Making of the Modern South
- HIST 4850 The Early National Period of the United States, 1789–1848
- HIST 4860 The Civil War and Reconstruction
- HIST 4870 Making of the Modern United States, 1877–1929
- HIST 4890 Civil Rights and Black Power Movements in the U.S.

## Geography

 GEOG 3100 - United States and Canada: Economies, Cities and Sustainability

#### Journalism

• JOUR 4820 - History of American Media

## Media Arts

- MRTS 3465 American Film History
- MRTS 4110 U.S. Radio History
- MRTS 4120 U.S. Television History
- MRTS 4520 African-American Film

## Music History, Theory, and Ethnomusicology

- MUET 3020 Popular Music in American Culture
- MUET 3060 African-American Music
- MUMH 4780 American Music

#### Jazz Studies

MUJS 4470 - History of Jazz

## Philosophy and Religion

- PHIL 2400 Religion and American Society
- PHIL 3360 American Philosophy

#### Political Science

- PSCI 3010 American State and Local Government
- PSCI 3100 Topics in American Government
- PSCI 3160 Mass Media in American Politics
- PSCI 3200 The American Legal System
- PSCI 3210 The U.S. Supreme Court
- PSCI 4140 The Presidency
- PSCI 4150 Religion and Politics in the United States
- PSCI 4320 American Political Theory
- PSCI 4830 American Foreign Policy
- PSCI 4840 Major Problems of American Foreign Policy

### Women's and Gender Studies

WGST 4460 - History of Black Women in America

#### **English minor**

The minor requires a total of 21 hours, including 9 advanced.

## Special Problems courses

These courses may count toward the minor only with the written consent of the department chair.

- ENGL 4900 Special Problems
- ENGL 4910 Special Problems

## **Secondary Teacher Certification**

## **English Language Arts and Reading teacher certification**

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in English Language

Arts and Reading. Upon completion of this program, students will be prepared to sit for the certification examinations in English Language Arts and Reading.

## Requirements

Completion of the requirements for the Language Arts concentration under the major in English.

#### **Education courses**

Students must complete the required 21 hours in upper-level education courses

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

## Additional requirements

Students must meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## **Undergraduate Academic Certificates**

### **American Studies certificate**

To earn a certificate in American studies, students must complete 12 credit hours of applicable courses at UNT (Denton campus) with a grade of C or above. There is great flexibility in how students may choose to configure their particular concentration within American studies. Of the 12 hours, at least 9 hours must be at the 3000 and 4000 levels, at least two courses must be outside the student's major discipline, at least one course must be in English, and at least one course must be in history (though the Core Curriculum classes in American history do not count).

The following courses may be applied toward the American studies certificate. Designated sections of other courses may also count, subject to approval by the certificate advisor.

## Anthropology

- ANTH 3101 American Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3120 Indigenous Cultures of the Southwest
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.

## Art education and art history

- ARTH 4816 American Art
- ARTH 4817 Topics in American Art

## Criminal justice

CJUS 2100 - Crime and Justice in the United States

### Dance and theatre

- DANC 3800 History of Concert Dance in the U.S.: 1900–Present
- THEA 4370 Contemporary Chicana/Chicano Theatre

## English

- ENGL 2600 Introduction to American Studies
- ENGL 3830 American Literature to 1870
- ENGL 3831 Introduction to the Literature of the Colonial Americas
- ENGL 3832 Nineteenth-Century American Poetry
- ENGL 3833 The American Renaissance
- ENGL 3840 American Literature 1870 to the Present
- ENGL 3843 Twentieth- and Twenty-first-Century American Poetry
- ENGL 4220 Contemporary North American Indigenous Literature
- ENGL 4255 Mexican American Non-Fiction and Criticism
- ENGL 3847 American Realism
- ENGL 3850 The Literature of Texas and the Southwest
- ENGL 3912 Topics in American Literature
- ENGL 3920 Ethnic American Literatures
- ENGL 4260 African American Literature
- ENGL 4250 Latinx Literature
- ENGL 4270 Modern Jewish Literature
- ENGL 4400 American Fiction
- ENGL 4480 American Drama
- ENGL 4831 Studies in the Literature of the Eighteenth-Century Americas
- ENGL 4832 Studies in 19th-Century American Literature
- ENGL 4844 Studies in American Modernism
- ENGL 4845 Studies in Contemporary American Literature

#### Designated sections of

- ENGL 4200 Studies in Modern Rhetoric
- ENGL 4450 Special Studies in a Single or Dual Author(s)
- ENGL 4650 Literature and the Environment
- ENGL 4850 Literature in Context

## History

- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4155 Mexican American Autobiography
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4200 The Spanish Frontier in North America
- HIST 4210 Southern Plains Indian History
- HIST 4261 Topics in United States History
- HIST 4435 American Jewish Experience
- HIST 4440 African American History and Culture to
- HIST 4450 African American History and Culture Since 1865

- HIST 4451 African American History During Segregation Era
- HIST 4465 Women in the United States to 1900
- HIST 4470 Women in the United States Since 1900
- HIST 4475 Jewish Women in Modern America
- HIST 4480 Colonial America
- HIST 4490 The American Revolution Causes and Consequences
- HIST 4495 United States Food History
- HIST 4830 Rise and Fall of the Slave South
- HIST 4840 Making of the Modern South
- HIST 4850 The Early National Period of the United States, 1789–1848
- HIST 4860 The Civil War and Reconstruction
- HIST 4870 Making of the Modern United States, 1877–1929
- HIST 4890 Civil Rights and Black Power Movements in the U.S.

## Geography

 GEOG 3100 - United States and Canada: Economies, Cities and Sustainability

#### Journalism

• JOUR 4820 - History of American Media

### Media arts

- MRTS 3465 American Film History
- MRTS 4110 U.S. Radio History
- MRTS 4120 U.S. Television History
- MRTS 4520 African-American Film

## Music history, theory and ethnomusicology

- MUET 3020 Popular Music in American Culture
- MUET 3060 African-American Music
- MUMH 4780 American Music

### Jazz studies

MUJS 4470 - History of Jazz

## Philosophy

- PHIL 2400 Religion and American Society
- PHIL 3360 American Philosophy
- PSCI 3010 American State and Local Government
- PSCI 3100 Topics in American Government
- PSCI 3160 Mass Media in American Politics
- PSCI 3200 The American Legal System
- PSCI 3210 The U.S. Supreme Court
- PSCI 4140 The Presidency
- PSCI 4150 Religion and Politics in the United States
- PSCI 4320 American Political Theory
- PSCI 4830 American Foreign Policy
- PSCI 4840 Major Problems of American Foreign Policy

## Women's and gender studies

WGST 4460 - History of Black Women in America

## Medieval and Renaissance Studies certificate

The medieval and Renaissance studies certificate is an undergraduate academic certificate that enables students to acquire proficiency in European medieval and Renaissance cultures and societies, as well as comparable cultural developments in non-western countries. The required course work in medieval and Renaissance studies promotes both inter- and trans-disciplinary work, which in turn provides the tools necessary for nuanced examination of not only a distant society but also, in its reflection, of our own.

The medieval and Renaissance studies certificate is open to all majors. It is administered by the English department in the College of Liberal Arts and Social Sciences. Students are strongly encouraged to achieve proficiency in a foreign language important to medieval and/ or Renaissance Europe through course work or examination.

## Requirements

To earn a certificate in medieval and Renaissance studies, students must complete 12 hours of courses at UNT with a grade of C or above. Of the 12 hours, 9 hours must be at 3000 and 4000 levels, two courses must be outside the student's major discipline, one course must be in medieval studies and one course must be in Renaissance studies.

Courses should be chosen from the areas listed below. Other courses may apply, subject to approval by the certificate advisor.

#### Art and music

- ARTH 4804 Medieval Art
- ARTH 4805 Topics in Medieval Art
- ARTH 4806 Topics in Renaissance Art
- MUMH 3500 Music History and Literature to 1750

## **English**

- ENGL 3430 British Literature to 1780
- ENGL 3431 Introduction to Early Medieval Literature
- ENGL 3432 Introduction to Late Medieval Literature
- ENGL 3433 Medieval Women Writers
- ENGL 3434 British Renaissance Drama
- ENGL 3435 British Renaissance Poetry
- ENGL 4410 Chaucer
- ENGL 4430 Shakespeare
- ENGL 4431 Studies in Medieval Literature
- ENGL 4432 Studies in Renaissance Literature
- ENGL 4440 Milton

#### History

- HIST 3450 Islam and its Empires
- HIST 3762 Rome: The Biography of a City
- HIST 3770 Ancient and Medieval Women, Gender and Sexuality
- HIST 4080 History of Early England from the Anglo-Saxons Through the Tudors
- HIST 4218 Early Medieval Europe, ca. 312–1095
- HIST 4219 Late Medieval Europe, 1095 to 1400
- HIST 4220 The Renaissance
- HIST 4290 Intellectual, Cultural and Social History of Medieval and Early Modern Europe
- HIST 4310 Gender and Sexuality in Early Modern Europe
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4380 The European Witch Hunts

## Philosophy and religion studies

- PHIL 2070 World Religions
- PHIL 2100 Introduction to Judaism
- PHIL 3120 Social and Political Philosophy
- PHIL 3310 Ancient Philosophy
- PHIL 3320 Medieval Philosophy
- PHIL 3525 Rabbinic Judaism
- PHIL 3540 Judaism and Philosophy

## World languages

WLLC 3700 - Classical Mythology

## Additional information

Students successfully completing the above requirements will file for the medieval and Renaissance certificate in the English department, and the certificate will be posted to their UNT transcript. The Medieval and Renaissance Colloquium will also honor students graduating with the medieval and Renaissance certificate with an annual reception in the spring semester.

# Department of Geography and the Environment

Main Departmental Office

Environmental Education, Science and Technology Building, Room 210

Mailing address:

1155 Union Circle #305279 Denton, TX 76203-5017 940-565-2091

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#### Steve Wolverton, Chair

Faculty

Geography is both an academic and an applied field, and our graduates enjoy highly successful careers in diverse parts of the job market. Majors are prepared for a broad range of employment, including geographic information systems, regional and urban planning, retail and industrial site location planning, transportation planning, parks and recreation planning, housing and community development, land and water resources management, environmental consulting and regulatory work, land surveying and cartography, archaeology and meteorology. Completion of the department's programs also prepares students for graduate course work in geography, archaeology and environmental science.

The Department of Geography offers courses for students majoring in geography or other fields. Students in the colleges of liberal arts and social sciences, business, education, engineering, information, journalism, public affairs and community service, and merchandising, hospitality and tourism will find that geography provides excellent support for their majors. Students majoring in any field may minor in geography, geology or archaeology (all offered through this department); complete courses to fill core requirements; obtain the department's certificate in geographic information systems or public health and GIS; or take courses for general interest.

Geography courses are divided into two subfields: human geography and earth science. Human geography involves the study of the organization of human activity (particularly, the economic, sociopolitical and cultural dimensions) across space as they affect and in turn respond to the world about us. Earth science courses explore physical processes that operate inside the earth, at its surface and in the atmosphere, and interactions between humans and the physical environment. The earth science courses are under both physical geography and geology headings.

Students planning to transfer to another institution to pursue a geology major should consult with the undergraduate advisor.

#### **Programs of study**

Programs offered by the department are listed below. Through course selection, students may elect to emphasize earth science, human geography or techniques.

## **Majors**

## **Geographic Information Systems and Computer Science, BS**

A Bachelor of Science degree in Geographic Information Systems + Computer Science (GIS+CS) enables understanding of geospatial processes as well as process-based/algorithmic approaches to problem solving. The changing nature of geospatial data (e.g. location-based data) and associated analytical methods (e.g. machine learning) requires professionals who can blend these two approaches – i.e. develop processes and algorithms while understanding the larger context within which they occur. The GIS+CS degree provides this blend but also offers two tracks – Computer Science (CS) or Information Technology (IT). The CS Track focuses on

machine learning and artificial intelligence. The IT Track focuses on construction, maintenance, and management of computational infrastructure and IT project management.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the University Core Curriculum in the Academics section section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements, 46 hours

## Computer Science, 13 hours

- CSCE 1030 Computer Science I or
- CSCE 1035 Computer Programming I
- CSCE 1040 Computer Science II or
- CSCE 1045 Computer Programming II
- CSCE 2100 Foundations of Computing
- CSCE 2110 Foundations of Data Structures

## Geographic Information Systems, 18 hours

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4550 Advanced Geographic Information Systems
- GEOG 4560 Introduction to Python Programming
- GEOG 4570 Special Topics in GIS
- GEOG 4590 Advanced GIS Programming

### Plus 3 hours selected from:

- GEOG 4195 Geospatial Data Analytics and Visualization
- GEOG 4230 Location Intelligence: Business GIS Concepts and Applications
- GEOG 4580 GIS in Health

### Other program requirements

An additional 15 hours are required in one of the tracks listed below. Blending courses from tracks requires advisor approval.

#### Computer science, 15 hours

CSCE 3110 - Data Structures and Algorithms

#### Plus 12 hours selected from:

- CSCE 3850 Introduction to Computational Life Science
- CSCE 4110 Algorithms
- CSCE 4201 Introduction to Artificial Intelligence
- CSCE 4205 Introduction to Machine Learning
- CSCE 4230 Introduction to Computer Graphics
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4380 Data Mining
- CSCE 4810 Biocomputing
- CSCE 4820 Computational Epidemiology

## Information technology, 15 hours

- CSCE 3055 IT Project Management
- CSCE 3615 Enterprise Systems Architecture and Design

#### Plus 9 hours selected from:

- CSCE 3220 Human Computer Interfaces
- CSCE 3420 Internet Programming
- CSCE 3530 Introduction to Computer Networks
- CSCE 3550 Foundations of Cybersecurity
- CSCE 3600 Principles of Systems Programming
- CSCE 3850 Introduction to Computational Life Science
- CSCE 4350 Fundamentals of Database Systems
- CSCE 4810 Biocomputing
- CSCE 4820 Computational Epidemiology

### **Electives**

Students should consult with their academic advisor on courses for electives or undergraduate certificates that enhance their career options.

## Geography with a concentration in Earth Systems, BS

A Bachelor of Science with a major in Geography and a concentration in Earth Systems focuses on the Earth's natural systems and how they affect people and society. With this concentration, students will develop skills to study earth processes.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements requirements (excluding foreign language).

## Major requirements, 36 hours

A minimum grade of C is required in all major courses to graduate with a major in this department.

#### Required courses, 12 hours

- GEOG 2110 Foundations of Geographic Research
- GEOG 2170 Culture, Environment and Society
- GEOG 2180 Geosystems, Environment and Society
- GEOG 4800 Geography Capstone

## Earth systems concentration, 24 hours

### Earth science

Choose five courses, at least one in each area.

#### Geomorphology

- GEOG 4350 Geomorphology
- GEOL 3010 Environmental Geology
- GEOL 3020 Historical Geology
- GEOL 3030 Earthquakes and Volcanoes

#### Climatology

GEOG 3800 - Weather and Climate

#### Hydrology

- GEOG 4750 Surface Water Hydrology
- GEOL 4850 Introduction to Groundwater Hydrology

#### Biogeography

- GEOG 3420 Applied Biogeography
- GEOG 4710 Ecosystems: Structure, Function and Services

### **Techniques**

Choose two courses.

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4170 Field Methods and Mapping
- GEOG 4185 Statistical Research Methods in Geography
- GEOG 4525 Using LiDAR Data in GIS
- GEOG 4530 Digital Image Analysis
- GEOG 4550 Advanced Geographic Information Systems

## Human geography

Choose one course.

- GEOG 3100 United States and Canada: Economies, Cities and Sustainability
- GEOG 3200 Sustainability
- GEOG 3770 Latin America: Geography and Globalization
- GEOG 4115 Our Energy Futures
- GEOG 4420 Capitalism, Nature and Climate Change

## Other course requirements

#### **Mathematics**

MATH 1680 - Elementary Probability and Statistics (or equivalent)

### Science

GEOG 1710 - Earth Science

## One additional science course

- BIOL 1132 Environmental Science
- BIOL 2140 Principles of Ecology
- BIOL 2241 Biology of Higher Plants
- BIOL 2251 Biodiversity and Conservation of Animals
- CHEM 1360 Context of Chemistry
- CHEM 1410 General Chemistry for Science Majors (or equivalent)
- PHYS 1315 Introduction to the World of Physics
- PHYS 1410 General Physics I (or equivalent)

#### Minor

Optional.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Geography with a concentration in Environmental Studies, BS

A Bachelor of Science with a major in Geography and a concentration in Environmental Studies focuses on the complex interactions between the environment and society. With this concentration, students will develop skills to address both the natural and social aspects of environmental issues.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements requirements (excluding foreign language).

## Major requirements, 36 hours

A minimum grade of C is required in all major courses to graduate with a major in this department.

## Required courses, 12 hours

- GEOG 2110 Foundations of Geographic Research
- GEOG 2170 Culture, Environment and Society
- GEOG 2180 Geosystems, Environment and Society
- GEOG 4800 Geography Capstone

## Environmental studies concentration, 24 hours

#### Earth science

Choose three courses, one course in three of the four areas.

#### Geomorphology

- GEOG 4350 Geomorphology
- GEOL 3010 Environmental Geology
- GEOL 3020 Historical Geology
- GEOL 3030 Earthquakes and Volcanoes

### Climatology

GEOG 3800 - Weather and Climate

#### Hydrology

- GEOG 4750 Surface Water Hydrology
- GEOL 4850 Introduction to Groundwater Hydrology

#### Biogeography

- GEOG 3420 Applied Biogeography
- GEOG 4710 Ecosystems: Structure, Function and Services

#### Human geography

Choose three courses: one course from the Subfields group, two courses from any of the three groups.

### Subfields

- GEOG 3010 Economic Geography
- GEOG 3600 Political Geography
- GEOG 3120 Medical Geography
- GEOG 4210 Urban Geography

### Regional

- GEOG 3100 United States and Canada: Economies, Cities and Sustainability
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa
- GEOG 3770 Latin America: Geography and Globalization

#### Global issues

- GEOG 3200 Sustainability
- GEOG 4115 Our Energy Futures
- GEOG 4245 Geography of International Development
- GEOG 4420 Capitalism, Nature and Climate Change

#### Techniques

Choose two courses.

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4170 Field Methods and Mapping
- GEOG 4185 Statistical Research Methods in Geography
- GEOG 4525 Using LiDAR Data in GIS
- GEOG 4530 Digital Image Analysis
- GEOG 4550 Advanced Geographic Information Systems
- GEOG 4570 Special Topics in GIS

## Other course requirements

#### **Mathematics**

MATH 1680 - Elementary Probability and Statistics (or equivalent)

#### Science

• GEOG 1710 - Earth Science

#### One additional science course

- BIOL 1132 Environmental Science
- BIOL 2140 Principles of Ecology
- BIOL 2241 Biology of Higher Plants
- BIOL 2251 Biodiversity and Conservation of Animals
- CHEM 1360 Context of Chemistry
- CHEM 1410 General Chemistry for Science Majors (or equivalent)
- PHYS 1315 Introduction to the World of Physics
- PHYS 1410 General Physics I (or equivalent)

#### Environmental electives

Choose one course.

- ANTH 4400 Environmental Anthropology
- BIOL 3160 Conservation Biology
- BIOL 4100 Introduction to Environmental Impact Assessment
- BIOL 4440 Stream Ecology
- ECON 4440 Economics of Natural Resources and Environment
- ENGL 4650 Literature and the Environment
- HIST 4275 American Environmental History
- PHIL 2500 Environment and Society

PHIL 4740 - Environmental Justice

PHIL 4700 - Environmental Ethics

#### Minor

Optional.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Geography, BA

A Bachelor of Arts with a major in geography gives you the knowledge and skills to study and address environmental problems associated with population growth, urban sprawl, climate change, natural disasters and public health. This degree is highly marketable and offers an advantage in an increasingly competitive job market.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in geography.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements, 36 hours

A minimum grade of C is required in all courses counting toward the major.

Required Courses, 12 hours

- GEOG 1710 Earth Science
- GEOG 2110 Foundations of Geographic Research
- GEOG 2170 Culture, Environment and Society
- GEOG 4800 Geography Capstone

## Other courses in the major

Three courses from Human Geography; one course from Earth Science; one course from Techniques; and three electives from any group.

GEOG 4900 and GEOG 4920 can be applied to any group.

#### **Techniques**

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4060 Applied GIS: MapInfo Professional®
- GEOG 4170 Field Methods and Mapping
- GEOG 4185 Statistical Research Methods in Geography
- GEOG 4195 Geospatial Data Analytics and Visualization
- GEOG 4400 Introduction to Remote Sensing
- GEOG 4525 Using LiDAR Data in GIS
- GEOG 4530 Digital Image Analysis
- GEOG 4540 Introduction to Enterprise GIS Applications
- GEOG 4550 Advanced Geographic Information Systems

- GEOG 4560 Introduction to Python Programming
- GEOG 4570 Special Topics in GIS
- GEOG 4580 GIS in Health
- GEOG 4590 Advanced GIS Programming
- GEOG 4680 GIS Applications for Spatial Epidemiology and Disease Ecology
- ARCH 4810 Archaeological Field School (6 hours, counts as two courses in Techniques)

#### Earth science

- GEOG 3010 Economic Geography
- GEOG 3420 Applied Biogeography
- GEOG 3800 Weather and Climate
- GEOG 4030 British Isles Field School (6 hours; counts as one course in Earth Science and one course in Human Geography)
- GEOG 4240 Meteorology
- GEOG 4250 Climatology
- GEOG 4350 Geomorphology
- GEOG 4710 Ecosystems: Structure, Function and Services
- GEOG 4750 Surface Water Hydrology
- GEOG 4875 Earth Science Topics
- GEOL 3000 Geology of Texas
- GEOL 3020 Historical Geology
- GEOL 3030 Earthquakes and Volcanoes
- GEOL 4630 Soils Geomorphology
- GEOL 4850 Introduction to Groundwater Hydrology
- ARCH 4620 Topics in Archaeology (can count as either Earth Science or Human Geography; maybe repeated as topics vary)

## Human geography

- GEOG 3010 Economic Geography
- GEOG 3100 United States and Canada: Economies, Cities and Sustainability
- GEOG 3120 Medical Geography
- GEOG 3200 Sustainability
- GEOG 3600 Political Geography
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa
- GEOG 3760 Geography of China: Environment and Society
- GEOG 3770 Latin America: Geography and Globalization
- GEOG 4030 British Isles Field School (6 hours; counts as one course in Earth Science and one course in Human Geography)
- GEOG 4115 Our Energy Futures
- GEOG 4210 Urban Geography
- GEOG 4220 Applied Retail Geography
- GEOG 4230 Location Intelligence: Business GIS Concepts and Applications
- GEOG 4245 Geography of International Development
- GEOG 4410 Location-Allocation Modeling
- GEOG 4420 Capitalism, Nature and Climate Change
- GEOG 4885 Human Geography Topics
- ARCH 3650 Origins of Civilization
- ARCH 4620 Topics in Archaeology

(can count for Earth Science or Human Geography; may be repeated as topics vary)

## Other course requirements

 MATH 1680 - Elementary Probability and Statistics or equivalent.

## Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C in all major courses is required for graduation.

## Geography, BS

A Bachelor of Science with a major in geography gives you the knowledge and skills to study and address environmental problems associated with population growth, urban sprawl, climate change, natural disasters and public health. This degree is highly marketable and offers an advantage in an increasingly competitive job market.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in geography.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements (excluding foreign language).

## Major requirements, 36 hours

A minimum grade of C is required in all courses counting toward the major.

Required courses:

- GEOG 2110 Foundations of Geographic Research
- GEOG 2170 Culture, Environment and Society
- GEOG 2180 Geosystems, Environment and Society
- GEOG 4800 Geography Capstone

## Other courses in the major

Three courses from Earth Science; one course from Human Geography; two courses from Techniques; and two electives from any group.

GEOG 4900 and GEOG 4920 can be applied to any group.

#### Techniques

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4060 Applied GIS: MapInfo Professional®
- GEOG 4680 GIS Applications for Spatial Epidemiology and Disease Ecology
- GEOG 4170 Field Methods and Mapping
- GEOG 4185 Statistical Research Methods in Geography

- GEOG 4195 Geospatial Data Analytics and Visualization
- GEOG 4400 Introduction to Remote Sensing
- GEOG 4525 Using LiDAR Data in GIS
- GEOG 4530 Digital Image Analysis
- GEOG 4540 Introduction to Enterprise GIS Applications
- GEOG 4550 Advanced Geographic Information Systems
- GEOG 4560 Introduction to Python Programming
- GEOG 4570 Special Topics in GIS
- GEOG 4580 GIS in Health
- GEOG 4590 Advanced GIS Programming
- ARCH 4810 Archaeological Field School (6 hours; counts as two courses in Techniques.)

#### Earth science

- GEOG 3420 Applied Biogeography
- GEOG 3800 Weather and Climate
- GEOG 4030 British Isles Field School (6 hours; counts as one course in Earth Science and one course in Human Geography)
- GEOG 4240 Meteorology
- GEOG 4250 Climatology
- GEOG 4350 Geomorphology
- GEOG 4710 Ecosystems: Structure, Function and Services
- GEOG 4875 Earth Science Topics
- GEOL 3000 Geology of Texas
- GEOL 3010 Environmental Geology
- GEOL 3020 Historical Geology
- GEOL 3030 Earthquakes and Volcanoes
- GEOL 4630 Soils Geomorphology
- GEOL 4850 Introduction to Groundwater Hydrology
- ARCH 4620 Topics in Archaeology (can count as either Earth Science or Human Geography; may be repeated as topics vary)

### Human geography

- GEOG 3010 Economic Geography
- GEOG 3100 United States and Canada: Economies, Cities and Sustainability
- GEOG 3200 Sustainability
- GEOG 3600 Political Geography
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa
- GEOG 3760 Geography of China: Environment and Society
- GEOG 3770 Latin America: Geography and Globalization
- GEOG 4030 British Isles Field School (6 hours; counts as one course in Earth Science and one course in Human Geography)
- GEOG 4115 Our Energy Futures
- GEOG 3120 Medical Geography
- GEOG 4220 Applied Retail Geography
- GEOG 4230 Location Intelligence: Business GIS Concepts and Applications
- GEOG 4245 Geography of International Development
- GEOG 4410 Location-Allocation Modeling
- GEOG 4420 Capitalism, Nature and Climate Change

- GEOG 4885 Human Geography Topics
- ARCH 3650 Origins of Civilization
- ARCH 4620 Topics in Archaeology (can count as either Earth Science or Human Geography; may be repeated as topics vary)
- GEOG 4210 Urban Geography

## Other course requirements

#### **Mathematics**

MATH 1680 - Elementary Probability and Statistics (or equivalent)

#### Sciences

GEOG 1710 - Earth Science

#### And one additional science course:

- BIOL 1132 Environmental Science
- BIOL 1710 Biology for Science Majors I (or equivalent)
- BIOL 2140 Principles of Ecology
- BIOL 2241 Biology of Higher Plants
- BIOL 2251 Biodiversity and Conservation of Animals
- CHEM 1360 Context of Chemistry
- CHEM 1410 General Chemistry for Science Majors (or equivalent)
- PHYS 1315 Introduction to the World of Physics
- PHYS 1410 General Physics I (or equivalent)

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### **Minors**

## **Geography minor**

Students planning to minor in geography should consult the geography undergraduate advisor.

## Requirements

The minor requires 18 hours, usually including the following:

- GEOG 2170 Culture, Environment and Society or
- GEOG 1200 Global Societies
- GEOG 1710 Earth Science
- 12 advanced hours

## **Geology minor**

Geography majors may minor in geology, but none of the courses taken to satisfy the minor can also be applied to the major.

## Requirements

A minor in geology requires 18–19 hours in geology and earth science, including:

- GEOL 1610 Introduction to Geology
- GEOL 3020 Historical Geology

#### Four additional courses from

- GEOG 4350 Geomorphology
- GEOG 4750 Surface Water Hydrology
- GEOL 3000 Geology of Texas
- GEOL 3010 Environmental Geology
- GEOL 3030 Earthquakes and Volcanoes
- GEOL 4630 Soils Geomorphology
- GEOL 4850 Introduction to Groundwater Hydrology
- GEOG 4710 Ecosystems: Structure, Function and Services

## **Undergraduate Academic Certificates**

## **Geographic Information Systems** certificate

This certificate may be acquired within the geography major but is also open to students in other programs, non-degree seeking students, or outside professionals who wish to add GIS capabilities to their present careers.

A grade of at least B is required in every course counted toward the certificate.

## Course sequence, 15 hours

The certificate requires five courses as follows:

## Required Courses

- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4560 Introduction to Python Programming

## Group A

One course from Group A:

- GEOG 4550 Advanced Geographic Information Systems
- GEOG 4590 Advanced GIS Programming

#### Group B

Two courses from Group B:

- GEOG 4525 Using LiDAR Data in GIS
- GEOG 4530 Digital Image Analysis
- GEOG 4540 Introduction to Enterprise GIS Applications
- GEOG 4550 Advanced Geographic Information Systems (if not taken as Group A)
- GEOG 4570 Special Topics in GIS (when topic is approved by advisor)
- GEOG 4590 Advanced GIS Programming (if not taken as Group A)

## GeoPhoto: Imaging Technology and Visualization certificate

The GeoPhoto Certificate program requires five courses (15 hours) and provides students with a comprehensive mix of conceptual and technical instruction in imaging technology and visualization. Students will learn methods for collecting, exploring, interpreting, and analyzing visual data and diverse forms of data synthesis and presentation.

## Requirements, 15 hours

Required courses:

- ASTU 2501 Beginning Photography: Photo I
- ASTU 3507 Intermediate Photography: Field Photography
- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4195 Geospatial Data Analytics and Visualization
- GEOG 4530 Digital Image Analysis

## Additional information

For additional information, please contact the GeoPhoto certificate advisor, Alexandra Ponette, at 940-565-4012 or alexandra@unt.edu.

## Health and Medical Geography certificate

## Required courses, 12 hours

A grade of B or better is required in all courses applied to the certificate.

- GEOG 3120 Medical Geography
- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 4185 Statistical Research Methods in Geography
- GEOG 4580 GIS in Health

## Sustainability certificate

Sustainability is about preserving planet Earth for future generations when referring to natural resource extraction, production, and consumption. Sustainability literally means capable of being maintained without exhausting or depleting natural resources. The three components to sustainability are 1) stewardship of natural resources, 2) economic responsibility, and 3) social and community well-being. The certificate prepares students in each of these areas through two required courses that cover global cultures and environments as well as electives from three major course groups (15 credit hours of course work, including 9 advanced).

## Required courses

6 hours from:

- GEOG 1710 Earth Science
- GEOG 3200 Sustainability

## Group 1 - Natural resources conservation

Choose one course (3 hours) from:

- BIOL 3160 Conservation Biology
- GEOG 2180 Geosystems, Environment and Society
- GEOG 3420 Applied Biogeography
- GEOG 4710 Ecosystems: Structure, Function and Services

## Group 2 - Economic responsibility

Choose one course (3 hours) from:

- ECON 3000 Current Economic Issues
   OR
- ECON 4440 Economics of Natural Resources and Environment
- GEOG 3010 Economic Geography
- GEOG 4115 Our Energy Futures
- GEOG 4245 Geography of International Development

## Group 3 - Social and community wellbeing

Choose one course (3 hours) from:

- ANTH 4400 Environmental Anthropology
- GEOG 2170 Culture, Environment and Society
- GEOG 4420 Capitalism, Nature and Climate Change
- PHIL 4700 Environmental Ethics

#### Water Resources certificate

The Water Resources Certificate focuses on the study of water above, upon, and beneath the earth's surface. The certificate provides a foundation in the study of water resources, including the basics of hydrology and area courses from which students may select options in biology, emergency management, geography and/or philosophy (15 hours).

## Requirements

Required courses:

- GEOG 3800 Weather and Climate
- GEOG 4750 Surface Water Hydrology
- GEOL 4850 Introduction to Groundwater Hydrology

### Additional courses

Choose two courses from the following:

- BIOL 4085 Fish Diversity and Ecology
- BIOL 4380 Fundamentals of Aquatic Toxicology
- EADP 4015 Flood Plain Management
- GEOL 3010 Environmental Geology
- PHIL 4650 Philosophy of Water

## **Department of History**

Main Departmental Office Wooten Hall, Room 225

Mailing address:

1155 Union Circle #310650 Denton, TX 76203-5017 940-565-2288

Fax: 940-369-8838

Email: history@unt.edu

Website: http://history.unt.edu/

## Jennifer Jensen Wallach, Chair

Faculty

History encompasses all aspects of past human endeavor; it encourages students to think broadly and to integrate all of their knowledge into a meaningful whole. From history a person develops a better understanding of current events and a better appreciation of art, architecture, ideas, politics, and fellow human beings and their activities. It also provides a guide for the future. The study of history is important for journalists, teachers, business people, theologians, politicians, scientists, lawyers, librarians, archivists, museologists and those in many other professions. Students planning any career could benefit from majoring or minoring in history or from choosing history as the lead subject in a social science major or for elective credits. History is an interest that students may retain for life.

#### **U.S.** history requirement

Texas state law requires that the university may not award a baccalaureate degree or a lesser degree or academic certificate unless the student has credit for 6 semester hours in American history. A student is entitled to submit as much as 3 hours of credit, or its equivalent, in Texas history in partial satisfaction of this requirement. The university may determine that a student has met the requirement by work transferred from another accredited college or upon successful completion of an advanced standing examination. The student may satisfy the entire 6-hour United States/Texas history requirement by advanced standing examination. This requirement may be satisfied by credit in HIST 2610 (HIST 1301) and HIST 2620 (HIST 1302) (United States history) or HIST 2675 and HIST 2685 (Honors United States history).

#### **Scholarships**

The Department of History offers the following undergraduate scholarships:

- Hagler-Marquis History Scholarship
- History Excellence Scholarship
- Howard H. Schultz Scholarship and Watt Family Scholarship in Jewish Studies
- Harry and Ruth Kamman Scholarship
- Gus Seligmann History Scholarship
- Ledbetter Family Scholarship
- CBS Mechanical Inc. History Scholarship
- Nation's Heritage Scholarship
- Benjamin Lyon Chapter DAR Scholarship
- Kingsbury-Thomason Scholarship (for students who intend to major in history and to teach history in Texas public schools).

History majors who are entering freshmen, transfer students or continuing students may apply. The application deadline is February 20. For information and application forms, contact Jami McQueen Thomas, Administrative Coordinator, at 940-565-2814 or jami. mcqueen@unt.edu

#### **Majors**

## History, BA

Students pursuing a Bachelor of Arts with a major in history are supported by the History Help Center, which can assist you with preparing for exams and writing papers. There are also opportunities for hands-on research with professors specializing in a wide range of topics.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in history.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

### Required courses

- HIST 1050 World History to the Sixteenth Century
- HIST 1060 World History from the Sixteenth Century
- HIST 2610 United States History to 1865
- HIST 2620 United States History Since 1865

## Upper-level history courses, 18 hours

18 semester hours of advanced work (3000-4000 level), with at least one class in each Group (A, B and C):

Each student will choose a focus for his or her advanced course work by taking at least four courses in one of the three groups: Group A (U.S. history), Group B (European/Western history), or Group C (African, Asian, Middle Eastern and Latin American History). Students must take at least one course from each of the other two groups outside of their focus. Students must finish a history course with a grade of C or better for it to count toward the history major.

#### Group A: Advanced United States history

- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4072 World War II in Asia and the Pacific
- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4155 Mexican American Autobiography
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4170 History of Tejanos/as
- HIST 4200 The Spanish Frontier in North America
- HIST 4210 Southern Plains Indian History
- HIST 4261 Topics in United States History
- HIST 4270 The American West
- HIST 4271 Hollywood and the Wild West
- HIST 4272 Explorers of North America
- HIST 4275 American Environmental History
- HIST 4276 Animal Histories
- HIST 4280 French Frontier in North America
- HIST 4282 Settler Colonialism and Empire
- HIST 4303 Age of Empire 1848-1914
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present

- HIST 4391 War Crimes, Genocide, and Justice
- HIST 4405 History of the Body
- HIST 4406 Sickness and Health in U.S. History
- HIST 4407 Fitness Culture in U.S. History
- HIST 4411 Pirates, Smugglers, and States in the Atlantic World, 1600-1856
- HIST 4420 United States Constitutional Development, 1783–Present
- HIST 4430 United States Political Parties, 1783– Present
- HIST 4435 American Jewish Experience
- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4451 African American History During Segregation Era
- HIST 4455 History of Black Women in America
- HIST 4460 History of Sexualities in U.S.
- HIST 4461 Gender, Race, Class and Policy since World War II
- HIST 4465 Women in the United States to 1900
- HIST 4470 Women in the United States Since 1900
- HIST 4475 Jewish Women in Modern America
- HIST 4480 Colonial America
- HIST 4490 The American Revolution Causes and Consequences
- HIST 4495 United States Food History
- HIST 4630 U.S. Navy, 1775–Present: Sails
- HIST 4631 North Atlantic Maritime History: 1427-1838
- HIST 4640 Early United States Military History to 1815
- HIST 4641 History of U.S. Military in 20th Century
- HIST 4642 War and American Society, 1608-2001
- HIST 4700 Texas
- HIST 4771 U.S. in the World 1898-1945
- HIST 4772 U.S. in the World Since 1945
- HIST 4830 Rise and Fall of the Slave South
- HIST 4840 Making of the Modern South
- HIST 4850 The Early National Period of the United States, 1789–1848
- HIST 4860 The Civil War and Reconstruction
- HIST 4870 Making of the Modern United States, 1877–1929
- HIST 4871 America in the Gilded Age
- HIST 4875 Prosperity, Depression and a New Deal, 1918-1941
- HIST 4890 Civil Rights and Black Power Movements in the U.S.

### When applicable

- HIST 4260 Topics in History
- HIST 4900 Special Problems
- HIST 4910 Special Problems
- HIST 4951 Honors College Capstone Thesis

#### Group B: Advanced European history

- HIST 3762 Rome: The Biography of a City
- HIST 3770 Ancient and Medieval Women, Gender and Sexuality
- HIST 4002 Ancient Greece

- HIST 4003 The Roman Republic and Augustus
- HIST 4004 The Roman Empire
- HIST 4005 The Byzantine Empire
- HIST 4006 Roman Law and Order
- HIST 4007 Roman Warfare
- HIST 4008 Ancient Religion and Magic
- HIST 4050 Russia from the 9th to the 19th Century
- HIST 4055 The Russian Empire from 1700 to 1917
- HIST 4060 Russia in the 20th and 21st Centuries
- HIST 4061 Russian Cultural History of the 19th and 20th Centuries
- HIST 4065 Warfare and Society in Europe from the French Revolution to World War II
- HIST 4066 World War I
- HIST 4070 World War II: European Theater
- HIST 4073 World War II: The Soviet-German War
- HIST 4080 History of Early England from the Anglo-Saxons Through the Tudors
- HIST 4081 The Rise of English Sea Power: 1399-1714
- HIST 4090 Britain and Ireland in the Age of Revolution, 1603–1832
- HIST 4100 Modern Britain Since 1830
- HIST 4104 The British Raj
- HIST 4110 British Empire in Asia, Africa, and the Pacific
- HIST 4114 Race and Gender in British Imperial Wars 1830-present
- HIST 4124 Risings, Revolts, and Rebels of the British Empire, 1900-1930
- HIST 4125 The Military History of England and its Colonies
- HIST 4214 Ancient Israel
- HIST 4215 Jews Under Greek and Roman Rule
- HIST 4216 Rome's Jewish Wars and the Roman Near East
- HIST 4217 Jew, Greek and Roman: Backgrounds of Early Christianity
- HIST 4218 Early Medieval Europe, ca. 312–1095
- HIST 4219 Late Medieval Europe, 1095 to 1400
- HIST 4220 The Renaissance
- HIST 4221 Early Modern Europe and the World
- HIST 4222 Medieval Travelers
- HIST 4230 The Age of the Reformation
- HIST 4262 Topics in European History
- HIST 4282 Settler Colonialism and Empire
- HIST 4290 Intellectual, Cultural and Social History of Medieval and Early Modern Europe
- HIST 4300 The French Revolution, 1774–1799
- HIST 4301 Napoleonic Europe, 1799–1815
- HIST 4302 Wars of Napoleon, 1792–1815
- HIST 4303 Age of Empire 1848-1914
- HIST 4310 Gender and Sexuality in Early Modern Europe
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4320 Anti-Semitism in Europe, French Revolution to Present
- HIST 4330 Absolutism and Enlightenment in Europe, 1648–1789

- HIST 4335 Age of Revolutions: Europe, 1700–1918
- HIST 4350 Europe, 1914–1945
- HIST 4360 Europe since 1945
- HIST 4364 Germany from Luther to Napoleon, 1500 to 1815
- HIST 4365 Modern Germany, 1815–Present
- HIST 4370 Intellectual, Cultural and Social History of Modern Europe since 1789
- HIST 4380 The European Witch Hunts
- HIST 4385 Nazi Germany
- HIST 4390 The Holocaust, 1933–1945
- HIST 4391 War Crimes, Genocide, and Justice
- HIST 4411 Pirates, Smugglers, and States in the Atlantic World, 1600-1856
- HIST 4631 North Atlantic Maritime History: 1427-1838
- HIST 4650 Evolution of Warfare to Napoleon
- HIST 4660 Evolution of Warfare from Napoleon

## When applicable

- HIST 4260 Topics in History
- HIST 4900 Special Problems
- HIST 4910 Special Problems
- HIST 4951 Honors College Capstone Thesis

## Group C: Advanced African, Asian, Middle Eastern and Latin American history

- HIST 3450 Islam and its Empires
- HIST 3460 Modern Middle Eastern History
- HIST 4000 Ancient Near East
- HIST 4001 Ancient Egypt
- HIST 4005 The Byzantine Empire
- HIST 4008 Ancient Religion and Magic
- HIST 4072 World War II in Asia and the Pacific
- HIST 4075 The Korean and Vietnam Wars
- HIST 4104 The British Raj
- HIST 4110 British Empire in Asia, Africa, and the Pacific
- HIST 4114 Race and Gender in British Imperial Wars 1830-present
- HIST 4124 Risings, Revolts, and Rebels of the British Empire, 1900-1930
- HIST 4171 Latin America: The Colonial Experience, 1492–1821
- HIST 4172 Modern Latin America: 1810-Present
- HIST 4174 Revolutions in Twentieth-Century Latin America
- HIST 4180 Colonial Mexico and the Spanish Southwest
- HIST 4190 Mexico, 1810–Present
- HIST 4200 The Spanish Frontier in North America
- HIST 4214 Ancient Israel
- HIST 4215 Jews Under Greek and Roman Rule
- HIST 4216 Rome's Jewish Wars and the Roman Near East
- HIST 4217 Jew, Greek and Roman: Backgrounds of Early Christianity
- HIST 4221 Early Modern Europe and the World
- HIST 4222 Medieval Travelers
- HIST 4240 Nationalism, Zionism and Islamism in Modern Middle Eastern History

- HIST 4245 Gender, Race and Class Issues in Middle Eastern History
- HIST 4246 Imperialism in the Modern Middle East
- HIST 4247 A History of Jews in the Middle East
- HIST 4248 Palestinian History
- HIST 4249 Food, Sex, and Drugs in Middle Eastern History
- HIST 4250 Modern Middle Eastern Diasporas
- HIST 4263 Topics in African-, Asian- or Latin American History
- HIST 4282 Settler Colonialism and Empire
- HIST 4283 Decolonization in Asia and Africa
- HIST 4303 Age of Empire 1848-1914
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4391 War Crimes, Genocide, and Justice
- HIST 4395 The State of Israel
- HIST 4550 Imperial China
- HIST 4560 Modern China
- HIST 4565 Chinese Military History, 1750-Present
- HIST 4570 Japanese History
- HIST 4580 Africa to the Nineteenth Century
- HIST 4590 Modern Africa
- HIST 4605 History of South Asia, 1757–1947
- HIST 4610 Contemporary South Asia

#### When applicable

- HIST 4260 Topics in History
- HIST 4900 Special Problems
- HIST 4910 Special Problems
- HIST 4951 Honors College Capstone Thesis

## Other course requirements

None.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

#### Minors

### **Africana Studies minor**

Students with questions about this certificate may contact Dr. Christopher Todd, Department of History (christopher.todd@unt.edu).

## Requirements

A minor in African American studies requires 18 hours, including:

- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4580 Africa to the Nineteenth Century
- ENGL 4260 African American Literature

#### Plus 6 hours

Select from the following:

- ANTH 3130 African-American Anthropology
- LING 3010 African American English
- MUET 3060 African-American Music
- MUJS 4470 History of Jazz
- PSCI 3106 African-American Politics
- SOCI 4540 Race and Ethnic Minorities

Students with questions about this minor may contact Dr. J. Anthony Guillory, Department of History (Anthony. Guillory@unt.edu).

#### **Classical Studies minor**

A minor in classical studies requires 18 hours.

## Latin or ancient Greek, 6 hours

Six hours (but no more) of Latin (LATI) or ancient Greek language classes at any level.

### 6 advanced hours

Selected from the following courses:

- ARTH 4802 Art of Ancient Greece
- ARTH 4803 Art of Ancient Rome
- ENGL 3360 Classical Literature and Mythology
- HIST 4002 Ancient Greece
- HIST 4003 The Roman Republic and Augustus
- HIST 3762 Rome: The Biography of a City
- HIST 4215 Jews Under Greek and Roman Rule
- HIST 4216 Rome's Jewish Wars and the Roman Near East
- HIST 4217 Jew, Greek and Roman: Backgrounds of Early Christianity
- PHIL 3310 Ancient Philosophy

### Plus 6 hours

The remaining 6 hours to fulfill the 18-hour requirement may be selected from the above list of core courses or other courses listed below:

- ARCH 3650 Origins of Civilization
- ART 2350 Art History Survey I
- ENGL 3200 Rhetorical History and Historiography
- ENGL 3431 Introduction to Early Medieval Literature
- HIST 3770 Ancient and Medieval Women, Gender and Sexuality
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4650 Evolution of Warfare to Napoleon
- PHIL 2310 Introduction to Ancient Philosophy
- PHIL 3500 Christianity and Philosophy
- PHIL 3510 Hebrew Bible
- PHIL 3520 Early Christian Thought
- PSCI 3310 Political Theory: Quest for Justice

### or, when focus is ancient,

- ARTH 4801 Topics in Art History
- HIST 4260 Topics in History
- HIST 4262 Topics in European History
- HIST 4263 Topics in African-, Asian- or Latin American History

- HIST 4900 Special Problems
- PSCI 4330 Topics in Political Theory

### Additional Information:

Other courses may also qualify, if approved by the classical studies advisor. Interested students should contact Dr. Christopher Fuhrmann, Department of History (cfuhrmann@unt.edu).

## **History minor**

Students may minor in history by completing 18 semester hours.

## Required courses

- HIST 2610 United States History to 1865
- HIST 2620 United States History Since 1865
- 12 hours of additional history courses, 6 of which must be at the 3000 or 4000 level.

#### **Jewish and Israel Studies minor**

A minor in Jewish and Israel studies requires 18 hours, including:

## Philosophy and Religion course

One of the following philosophy and religion courses:

- PHIL 2100 Introduction to Judaism
- PHIL 3510 Hebrew Bible
- PHIL 3540 Judaism and Philosophy

## History course

One of the following history courses:

- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4390 The Holocaust, 1933–1945
- HIST 4395 The State of Israel

## Four additional courses

In addition, four courses chosen in consultation with the Director of the Jewish and Israel Studies Program and representing at least two different departments are required. These courses include, but are not limited to, the following:

- ARTH 4801 Topics in Art History (when taught as "Jewish Art")
- ENGL 3913 Topics in World Literature (when taught as "Yiddish Literature" or "The Jewish Graphic Novel" or "Arab-Israeli Conflict and the Graphic Novel" or "Modern Jewish Literature" or "Representations of Jews in European Literature")
- ENGL 4270 Modern Jewish Literature
- ENGL 4450 Special Studies in a Single or Dual Author(s) ("when taught as "Borders, Race, Religion in Shakespeare & Cervantes")
- ENGL 4660 Literature and the Holocaust
- ENGL 4800 Special Seminar in Literature or Language (when taught as "Hebrew Bible as Literature" or "Film and the Holocaust" or "Representations of Jews in European Literature" or "Jews in Western Literature from Chaucer to Dickens")
- HIST 4215 Jews Under Greek and Roman Rule
- HIST 4216 Rome's Jewish Wars and the Roman Near East
- HIST 4217 Jew, Greek and Roman: Backgrounds of Early Christianity
- HIST 4260 Topics in History (when taught as "Jewish Women: A World Perspective" or as "Ancient Religion and

- Magic: Hebrew Bible to the Fall of Rome" or "War Crimes, Genocide, and Justice")
- HIST 4262 Topics in European History (when taught as "Nazi Racial Policy" or may apply when appropriate and if approved by the JISP director, Dr. Richard Golden)
- HIST 4263 Topics in African-, Asian- or Latin American History (when taught as "Arab-Israeli Wars" or "Ancient Israel" or "The Messiah: From David to Jesus to the Present")
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4385 Nazi Germany
- HIST 4390 The Holocaust, 1933–1945
- HIST 4395 The State of Israel
- HIST 4435 American Jewish Experience
- HIST 4475 Jewish Women in Modern America
- JOUR 4210 Topics in Journalism and Mass Media (when taught as "Public Opinion and Propaganda: Israel and the Middle East")
- JOUR 4240 Comparative International Media Systems (when taught as "Comparative International Media Systems: Israel and the Middle East")
- MUMH 4800 Nazism, Judaism and the Politics of Classical Music in Germany
- MUMH 4810 Jews, Judaism, Anti-Semitism and Opera
- PHIL 2070 World Religions
- PHIL 2100 Introduction to Judaism
- PHIL 3120 Social and Political Philosophy
- PHIL 3320 Medieval Philosophy
- PHIL 3510 Hebrew Bible
- PHIL 3515 David, Saul and Solomon: The Early Israelite Monarchy
- PHIL 3525 Rabbinic Judaism
- PHIL 3530 Kabbalah: Jewish Mysticism, Myth and Magic
- PHIL 3535 Classical Jewish Thought: The 13 Principles of Faith
- PHIL 3540 Judaism and Philosophy
- PHIL 3550 Jewish Business Ethics
- PHIL 4960 Topics in Philosophy (when taught as "Jews and Judaism in Modern Israel" or "The Ten Commandments" or "Sexual Ethics in Judaism" or "Sex and the Bible" or "The Historical Jesus" or "The Dead Sea Scrolls to the Talmud: Jewish Literature in Late Antiquity")
- PSCI 3100 Topics in American Government (when taught as "U.S./Israeli Relations: Conflict, Cooperation and Advocacy")
- PSCI 3700 Area Politics (when taught as "Government and Politics of Israel" or "Israeli Politics")
- PSCI 4330 Topics in Political Theory (when taught "Jewish Political Thought" or "Zionism and Liberalism" or "Medieval Political Thought")
- PSCI 4700 Topics in Comparative Politics (when taught as "Contemporary Conflicts in the Middle East")
- PSCI 4850 Critical Issues in World Politics (when taught as "The Political Weaponization of Antisemitism")
- MRTS 4415 Topics in Film and Television Studies (when taught as "Israeli Cinema" or "Film and the Holocaust")
- SOCI 4260 Topics in Sociology (when taught as "The Family and Sex in Modern Israel" or "Contemporary Israel and Turkey" or "The Peoples of Israel: Identity and Diversity")
- THEA 4395 Theatre and the Holocaust

- THEA 4500 Theatre Topics (when taught as "Staging Atrocity: Theatre of the Holocaust" or "The Broadway Musical")
- Other topics courses as approved when topic is appropriate.

## Additional information

Other courses may also qualify if approved by the Jewish and Israel Studies advisor. For more information or to sign up for a minor in Jewish and Israel Studies, contact the main office at 940-369-8926 or jewish-studies@unt.edu.

## **Mexican-American Studies minor**

A minor in Mexican-American studies requires 18 hours.

## Requirements

- ANTH 3210 Meso America
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4150 Mexican Immigration and the Chicano Community

## Plus three of the following courses

Plus three of the following courses chosen in consultation with the Mexican-American studies minor advisor and representing at least two different departments:

- ANTH 3140 Latinos in the U.S.
- ENGL 4250 Latinx Literature
- HIST 4155 Mexican American Autobiography
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4180 Colonial Mexico and the Spanish Southwest
- HIST 4190 Mexico, 1810-Present
- SOCI 2010 Race, Class, Gender and Ethnicity
- SPAN 3140 Mexican Civilization

### Additional information

Periodic special topics courses offered by departments in the fine arts, humanities, and social sciences (when topics relate directly to Mexican-American studies, and with permission of the Mexican-American studies minor advisor) may also qualify and be included as part of the Mexican-American studies minor on a course-by-course basis.

Students interested in this minor should contact Dr. Roberto Calderon, Department of History (beto@unt.edu).

# Secondary Teacher Certification History teacher certification

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in History. Upon completion of this program, students will be prepared to sit for the certification examinations in History.

All state certification requirements and information on required examinations are available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## Required courses

- HIST 1050 World History to the Sixteenth Century
- HIST 1060 World History from the Sixteenth Century
- HIST 2610 United States History to 1865

- HIST 2620 United States History Since 1865
- HIST 4700 Texas
- HIST 4750 Social Studies Teaching Methods

## Upper-level history courses, 21 hours

Distributed throughout the three history groups (Group A, US History; Group B, European History; Group C, African, Asian, Middle Eastern and Latin American History) in the following way: 9 hours from one group of the student's choice, plus 6 hours from the remaining groups.

## Education courses, 21 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

## Additional requirements

Students meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

# Undergraduate Academic Certificates Africana Studies certificate

The Africana Studies certificate offers undergraduate students an interdisciplinary curriculum that introduces and expands knowledge related to cultures and histories of African people throughout the Diaspora. Utilizing scholarly research, theoretical inquiry and policy analysis, UNT graduates will be prepared to impact their communities in ways that will promote social justice, anti-racism, inclusion, equity and mutual respect.

Students with questions about this certificate may contact Dr. Christopher Todd, Department of History (christopher.todd@unt.edu).

## Requirements, 15 hours

Students complete 15 hours of course, including 9 advanced.

#### One course selected from:

- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4580 Africa to the Nineteenth Century

#### Four courses selected from:

- ANTH 3130 African-American Anthropology
- ANTH 3400 Peoples and Cultures of Africa
- ANTH 4550 Race, Ethnicity and Identity
- CJUS 3500 Diversity Issues in Criminal Justice
- ECON 3150 Economics of Discrimination
- EDCI 4070 Teaching Diverse Populations
- ENGL 4260 African American Literature
- GEOG 3750 Geography of Contemporary Sub-Saharan Africa

- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4451 African American History During Segregation Era
- HIST 4455 History of Black Women in America
- HIST 4580 Africa to the Nineteenth Century
- HIST 4830 Rise and Fall of the Slave South
- HIST 4840 Making of the Modern South
- HIST 4890 Civil Rights and Black Power Movements in the U.S.
- LING 3010 African American English
- MRTS 4520 African-American Film
- MUET 3050 Music of Africa
- MUJS 4470 History of Jazz
- PSCI 3105 Political Economy of Race, Gender and Immigration
- PSCI 3106 African-American Politics
- PSYC 4040 Psychology of Race in the U.S.
- Other courses as approved by the Africana Studies certificate advisors.

## **Food Studies certificate**

The Food Studies certificate is an undergraduate academic program designed to help students acquire both broad and specific skills and training in the interdisciplinary field of Food Studies. Students can customize their certificate to best suit their individual career and intellectual goals. This certificate benefits students interested in pursuing careers in fields such as education, food science, food writing, hospitality and tourism, health services, conservation and environmental stewardship, museum studies, agriculture, and many other areas.

Students interested in the Food Studies Certificate should contact Dr. Michael D. Wise, Department of History (michael.wise@unt.edu).

## Requirements:

To earn a Food Studies certificate students must complete 12 hours at UNT, including 9 advanced credits, of coursework relevant to food studies.

## Required course:

3 hours from:

- HIST 4495 United States Food History
- PHIL 4300 Philosophy of Food

## Plus three courses (9 hours):

Including, but not limited to, the following:

- BIOL 1142 Microbes and Society
- HIST 4275 American Environmental History
- HIST 4276 Animal Histories
- HIST 4405 History of the Body
- HIST 4406 Sickness and Health in U.S. History
- HIST 4495 United States Food History
- HMGT 1450 Principles of Nutrition
- HMGT 3470 Global Kitchen: A Culinary Journey
- JOUR 4230 Arts and Culture Journalism
- KINE 3030 Fundamentals of Sport Nutrition
- KINE 4300 Exercise Leadership
- PHIL 4300 Philosophy of Food
- WLLC 3310 The Best of French Pop Culture

For approval of other courses, contact the Food Certificate advisor in the Department of History.

## **Department of Media Arts**

Main Departmental Office

Radio, TV, Film and Performing Arts Building, Room 262

Mailing address:

1155 Union Circle #310589 Denton, TX 76203-5017 940-565-2537

Fax: 940-369-7838

E-mail: MediaArts@unt.edu Web site: www.mediaarts.unt.edu

#### Tania Khalaf, Associate Chair

#### Faculty

Radio, television, film and digital media platforms play a significant role in society by providing both entertainment and information in a constantly changing world. The Department of Media Arts prepares students with a wide range of knowledge and skills for careers in traditional media (broadcasting, film production, editing, on-air talent, audience research, media management) and emerging media (writing and producing for social media and digital media platforms).

Media Arts students engage in a curriculum that combines a liberal arts education with hands-on experience utilizing similar tools used by industry professionals. The Media Arts department equips students with the foundational principals, critical thinking, skills and opportunities they need to succeed in today's ever-changing media world. Courses afford students unique opportunities to learn from expert faculty members who are committed to readying students for future careers in the media industry or academia.

Located within the thriving Dallas–Fort Worth market (currently ranked 5th in the U.S.) the department frequently hosts professionals who serve as guest speakers and adjunct professors. The location within the DFW market offers numerous internship and part-time employment opportunities while students are pursuing their degrees.

The department offers two degrees:

- a Bachelor of Arts with a major in Media Arts (MRTS)
- a Bachelor of Arts with a major in Converged Broadcast Media (CBCM)

The MRTS undergraduate major provides comprehensive handson experiences in media production along with courses devoted to writing, industry practices, broadcast and film history, digital media, film styles, genres and critical/cultural studies. The CBCM undergraduate major provides extensive background in media convergence, web-based production of news and information, as well as courses devoted to covering sports, entertainment and politics, and interviewing and on-air performance.

With more than 1300 undergraduate students, Media Arts is one of the largest and most active programs in the College of Liberal Arts and Social Sciences. Students have the opportunity to work for the local television news station, ntTV, or the radio station, KNTU. Students can also join a variety of film clubs, a student-run organization focused on peer mentorship and production opportunities.

The Department of Media Arts also offers opportunities to join a Living-Learning Community, a residency program designed to enhance students' education by creating learning opportunities outside of the classroom.

The department's diverse faculty include top research scholars and media practitioners with many years of experience. Faculty frequently publish monographs, anthologies, textbooks, and articles in top-tier journals and present research at top-ranked national and international conferences. Our creative faculty have produced multiple award-winning narrative films and documentaries that are screened in local, national, and international festivals. Students also gain expert knowledge from faculty who have years of professional experience working in the media industry.

The department also benefits from the cutting-edge insight of an executive board comprised of successful media professionals and alumni who provide guidance on curricular development and the most recent industry trends.

#### Admission to the major

Only MRTS and CBCM majors can take MRTS courses. Entering students interested in majoring in MRTS or CBCM must fulfill initial requirements and be advised by the advising office. Admission to the university does not guarantee admission to either major. Admission to both majors is highly competitive and limited by the number of applicants and available resources. This means that if space or technical resources availability is declining, applications for MRTS or CBCM major status may be submitted to a departmental admissions committee for review. For further information on Admissions and requirements see Media Arts, BA and Converged Broadcast Media, BA.

## Suggested minors for BA with a major in Media Arts

Students majoring in Media Arts may choose a minor field of study. Suggested minors coordinated with student career goals are art/photography (for careers in film), business (marketing and management), theatre (production/performance), foreign language, and social sciences (general).

#### KNTU-FM

KNTU-FM 88.1/kntu.com, UNT's own 100,000 watt FM radio station, serves the McKinney–Denton–Dallas–Fort Worth area 24 hours a day with educational, news, sports and entertainment content. All students at UNT are eligible to work at KNTU/kntu.com, where they can participate in creating content for KNTU's broadcast and Internet platforms. More information is available at www.kntu.com.

#### **North Texas Television**

ntTV (North Texas Television) is a nationally recognized, award winning student-run television operation. ntTV offers all UNT students the dynamic opportunity to produce, write, direct and broadcast their work across the DFW area. Content areas include news, sports, entertainment and marketing, as well as long-form live productions.

#### **Organizations**

The department participates actively as an institutional member of the Broadcast Education Association; the University Film and Video Association; the Texas Association of Broadcast Educators; Society for Cinema and Media Studies; and the Radio, Television Digital News Association (RTDNA) student chapter.

#### **Scholarships**

The Department of Media Arts scholarships are awarded each year in the spring semester. Information for applications is posted in January. Scholarship money is applied toward tuition in the following fall term/semester.

**Alan and Beverly Albarran Scholarship** is a fund to provide scholarships for undergraduate or graduate students in the Department of Media Arts who are pursuing an industry studies emphasis in their degree.

**Bud Buschardt Endowed Scholarship** is for an entering or current junior in the Department of Media Arts whose major is converged Broadcast Media. The memorial scholarship honors adjunct professor Bud Buschardt who taught in the department for 46 years.

Cindy Coyle Memorial Scholarship is an academic scholarship for a student in the Department of Media Arts who has expressed a career interest specifically in radio.

**Country Radio Broadcasters Scholarship** is a fund to provide scholarships for undergraduate students interested in a career in radio.

**Edwin L. Glick Scholarship** is an academic scholarship award to recognize demonstrated excellence and promise in the study of broadcasting and cable at the University of North Texas.

**First Broadcasting Scholarship** is an academic scholarship for a student in the Department of Media Arts who has demonstrated an interest in radio broadcasting as a career through participation with either KNTU or off-campus internships.

**Kathleen Woodby Scholarship** is a scholarship for undergraduate students in the Department of Media Arts.

Mark Rybczyk Scholarship is a fund to support undergraduate students in the Department of Media Arts who have demonstrated merit, motivation and talent with the means to complete their education at the University of North Texas.

Media Arts Executive Board Scholarship is a fund for undergraduate students demonstrating academic excellence in the department of Media Arts.

Paramount Pictures Undergraduate Scholarship is an academic scholarship award to recognize demonstrated excellence and promise in the study and production of electronic media and film at the University of North Texas.

**Staples Graduate Scholarship** is an academic scholarship awarded to a graduate student in the Department of Media Arts.

Westcott Foundation Scholarship is a fund to support undergraduate students in the Department of Media Arts who have demonstrated merit, motivation and talent with the means to complete their education at the University of North Texas.

Walter P. Deed Scholarship is an academic scholarship awarded to a student in the Department of Media Arts who has expressed a career interest in television engineering.

#### Requirements

- Meet minimum entrance and academic performance standards of the College of Liberal Arts and Social Sciences and the Department of Media Arts.
- Students must be enrolled for at least 12 hours of study in both the spring and fall terms/semesters.
- Enroll as full-time undergraduate major in the Department of Media Arts.
- Minimum of 60 hours of course work toward a degree completed at the time of application.
- 5. Minimum GPA of 3.0 for courses taken at UNT.

#### **Application**

Applications are accepted in the spring term/semester after the call for applications is posted. An application must include the student's name, ID number, hours completed through fall of the previous year, UNT GPA, overall GPA and name of a media arts faculty familiar with your work. The following questions need to be addressed in a typed letter of application:

- What are your professional goals upon graduation from UNT?
- 2. How have you prepared to accomplish these goals through your education and extracurricular activities?
- 3. How will this award help you accomplish your goals?

### **Majors**

## Converged Broadcast Media, BA

In the Converged Broadcast Media program, you will receive a comprehensive education in media convergence, broadcast television, and their social media and Internet components. In addition, you will learn about live TV news broadcasting, live on-location production, sports, entertainment and political events coverage.

The Bachelor of Arts with a major in Converged Broadcast Media integrates a broad and thorough overview of the ever-changing electronic news media, with intermediate and advanced courses in writing and reporting for radio, television and the Internet; interviewing and performance; shooting and editing for television; television and radio news producing; news media analysis; electronic news management; plus classes in legal and ethical issues and covering cross-cultural communities. Students further develop their skills through NTTV, KNTU-FM and their web sites. An optional certificate in television news producing is also available within the major.

To qualify, students must successfully complete at least 42 hours of college courses before applying for major status (see "Admission to the Major"). Initial requirements must be completed with a minimum 2.75 GPA before applying for major status. Students must have and maintain a minimum 2.75 GPA in all university courses to complete this major.

# CBCM admission and initial requirements

Only CBCM and MRTS majors may take MRTS courses. Entering students interested in majoring in CBCM must fulfill initial requirements and be advised by the advising office. Admission to the university does not guarantee admission to the CBCM major. The media arts department's initial requirements must be fulfilled before a student may apply for CBCM major status. Entering students who elect to pursue the major in converged broadcast media will not be classified as CBCM majors until they fulfill the initial requirements. To do this, a student must successfully complete 42 hours of college courses including the CBCM/MRTS requirements listed below with a UNT grade point average of 2.75 or better and a C or better in each MRTS course. Students may apply for CBCM major status when all of the required classes have been completed.

## Admission to the major

Before applying for CBCM major status, a student must first complete:

## 42 hours of college courses, including

- COMM 1010 Introduction to Communication or equivalent (contact Media Arts department for list).
- The Communication (English Composition and Rhetoric) requirement of the University Core Curriculum with a grade of C or better.
- The Mathematics requirement of the University Core Curriculum.
- The foreign language requirement at least through the 1020 level (or the placement equivalent).

## Requirements to enroll in MRTS 1310, MRTS 2210 or MRTS 2400

Students who wish to enroll in MRTS 1310, MRTS 2210 or MRTS 2400 must fulfill the following requirements:

- Entering freshmen with no college credit must successfully complete at least 12 hours of UNT course work with a UNT GPA of 2.75 or better.
- Transfer students with college credit must transfer a
  minimum of 12 hours of course work accepted by UNT
  with a GPA of 2.75 or better. Students who do not meet this
  requirement must successfully complete at least 12 hours of
  UNT course work with a GPA of 2.75 or better.

Note: Students may not register for any upper-level MRTS courses until full-major status is attained.

## Continued enrollment in MRTS courses

Students must meet the following minimum standards for continued enrollment in MRTS courses:

- Complete MRTS 1310, MRTS 2210 and MRTS 2400 with a grade of C or better. Students earning less than a C in any one of these three courses will be allowed to repeat that course only once. Students failing to earn a C or better on the second attempt will not be allowed to repeat these courses and will not be awarded major status in the department.
- Have at least a 2.75 UNT GPA. CBCM majors must maintain a UNT GPA of 2.75. CBCM students whose GPAs fall below this standard will be informed of their status by the media arts department and may not take any classes in

the media arts department until they return their UNT GPA to 2.75 or better.

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

## 42 hours in the major

Students must complete 42 hours in the major (at least 33 advanced), including:

- MRTS 1310 Introduction to Broadcast, Cable and Internet Technology
- MRTS 2210 Introduction to Media Arts Production
- MRTS 2400 Digital Media Writing

### 18 hours from

- MRTS 3500 Video Photography, Editing and Reporting for Digital Media
- MRTS 3525 Content Development for Digital Media
- MRTS 3560 Interviewing and Performance for Electronic News
- MRTS 4320 Media Law and Regulations
- MRTS 4455 Media Ethics
- MRTS 4480 Internship in Media Arts

#### Plus 6 hours from the following

- MRTS 3615 Understanding Media Industries
- MRTS 4420 Media Programming
- MRTS 4425 Audience Research
- MRTS 4428 Mobile Media
- MRTS 4430 Media Management
- MRTS 4435 Media Marketing and Branding
- MRTS 4440 Media Sales
- MRTS 4670 Media Economics
- MRTS 4850 Television News Producing

#### MRTS electives, 9 additional hours

9 additional hours of electives selected from the following:

- MRTS 3300 Radio and Television Announcing
- MRTS 3330 Sports Broadcasting I
- MRTS 3340 Sports Broadcasting II
- MRTS 3410 Intermediate Topics in Media Studies
- MRTS 3482 Radio Practicum
- MRTS 3501 Television Practicum
- MRTS 3502 Advanced Television Practicum
- MRTS 3630 Perspectives on Video Games
- MRTS 4105 History of Broadcasting in Britain
- MRTS 4106 Contemporary Broadcasting in Britain
- MRTS 4165 Podcasting
- MRTS 4360 Global Media
- MRTS 4410 Topics in Digital Media Studies
- MRTS 4411 Video Production Topics

- MRTS 4430 Media Management
- MRTS 4445 Media in the 21st Century
- MRTS 4450 Topics in Media Industry Studies
- MRTS 4465 Writing for Television
- MRTS 4480 Internship in Media Arts
- MRTS 4515 Teen Media
- MRTS 4850 Television News Producing
- MRTS 4900 Special Problems

## Other course requirements

None.

#### Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

COMM 1010 or equivalent. A minimum 2.0 cumulative UNT GPA is required to graduate. Only 12 hours of MRTS courses taken at other institutions may be applied toward the major.

Students must observe prerequisites for each MRTS course. If a student has not completed prerequisites for a course with a grade of C or better, the student is subject to administrative drop from the course without notice. Prerequisites are listed with individual course descriptions.

Because of the high demand for many MRTS courses, students who miss the first class without consent of the instructor are subject to be dropped from the course so that other students may be added. Students who miss the first day of class because of illness or some other acceptable excuse should notify the department office the day of the absence.

Students may register for only one section of a course at a time. Students registered for more than one section of a course will be dropped from all sections of that course without notice. The policy does not apply to courses such as special topics, which may bear the same course number but different topics and are therefore different courses.

Specific competency and departmental approval for internship, seminar and special problems courses are required.

#### Media Arts, BA

A Bachelor of Arts with a major in Media Arts provides a strong, theoretical education combined with hands-on experience utilizing the same tools used by industry professionals.

# Admission to the major and initial requirements

Note: Only Media Arts (MRTS) and Converged Broadcast Media (CBCM) majors can take MRTS courses.

Entering students interested in majoring in MRTS must fulfill initial requirements and will be advised by the media arts department. Admission to the university does not guarantee admission to the MRTS major. Admission to the major is highly competitive and is limited by the number of applicants and available resources.

The Media Arts department's initial requirements must be fulfilled before a student can apply for MRTS major status.

Entering students who elect to pursue the MRTS-BA major will

not be classified as MRTS majors until they fulfill the initial requirements. To do this, a student must successfully complete 42 hours of college courses including the MRTS requirements listed below with a UNT grade point average of 2.75 or better and a C or better in the MRTS courses. A student may apply for major status when all of the required classes have been completed.

Before applying for MRTS major status, a student must first:

- Complete at least 42 hours of college courses including:
  - a. COMM 1010 or equivalent (contact department);
  - b. The Communication (English Composition and Rhetoric) requirement of the University Core Curriculum with a grade of C or better;
  - c. The Mathematics requirement of the University Core Curriculum;
  - d. The foreign language requirement through at least the 1020 level (or the placement equivalent); and
  - e. The following courses, all with a grade of C or better
    - MRTS 1310 Introduction to Broadcast, Cable and Internet Technology
    - O MRTS 1320 Introduction to Film Studies
    - MRTS 2010 Introduction to Media Arts Writing

Note: Students earning less than a C in any one of these three courses will be allowed to repeat that course only once. Students failing to earn a C or better on the second attempt will not be allowed to repeat MRTS 1310, MRTS 1320 or MRTS 2010 for a third time and will not be awarded MRTS major status in the department.

## Requirements to enroll in MRTS 1310, MRTS 1320 or MRTS 2010

Students who wish to enroll in MRTS 1310, MRTS 1320 or MRTS 2010 must fulfill the following requirements:

- Entering freshmen with no college credit must successfully complete at least 12 hours UNT course work with a UNT GPA of 2.75 or better.
- Transfer students with college credit must transfer a
  minimum of 12 hours of course work accepted by UNT
  with a GPA of 2.75 or better. Students who do not meet this
  requirement must successfully complete at least 12 hours of
  UNT course work with a GPA of 2.75 or better.

Note: Students may not register for any upper-level MRTS courses until full-major status is attained.

## Minimum standards for continued enrollment in MRTS courses

Have at least a 2.75 UNT GPA.

MRTS majors must maintain a UNT GPA of 2.75. MRTS major students whose GPAs fall below this standard will be informed of their status by the Media Arts department and will not be able to take any classes in the Media Arts department until they return their UNT GPA to 2.75 or better.

## Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

Students interested in a BA with a major in Media Arts must apply to the department after successfully completing the initial requirements specified under "Admission to the MRTS Major," above.

## Major requirements

Students must complete 42 hours (at least 30 advanced) in the major, including:

## Required courses

- MRTS 1310 Introduction to Broadcast, Cable and Internet Technology
- MRTS 1320 Introduction to Film Studies
- MRTS 2010 Introduction to Media Arts Writing
- MRTS 2210 Introduction to Media Arts Production

## Production and performance, 6 hours

6 hours of advanced credit in production and performance courses selected from:

- MRTS 3210 Audio Production
- MRTS 3220 Multi Camera Studio Production
- MRTS 3230 Film Style Production
- MRTS 3300 Radio and Television Announcing
- MRTS 3330 Sports Broadcasting I
- MRTS 3340 Sports Broadcasting II
- MRTS 3482 Radio Practicum
- MRTS 3501 Television Practicum
- MRTS 3502 Advanced Television Practicum
- MRTS 3560 Interviewing and Performance for Electronic News
- MRTS 3650 Advanced Audio Production
- MRTS 4140 Intermediate Film Production
- MRTS 4150 Cinematography
- MRTS 4165 Podcasting
- MRTS 4400 Advanced Film Production
- MRTS 4405 Documentary Production
- MRTS 4411 Video Production Topics
- MRTS 4412 Film Production Topics
- MRTS 4413 Audio Production Topics
- MRTS 4650 Location Recording and Post Sound Production
- MRTS 4740 Theories and Techniques of Visual Editing
- MRTS 4750 Advanced Video Production
- MRTS 4760 Documentary Preproduction
- MRTS 4810 Directing Narrative Media
- MRTS 4820 Producing and Managing Narrative Media

### Industry studies, 6 hours

6 hours of advanced credit in industry studies courses selected from:

- MRTS 3410 Intermediate Topics in Media Studies
- MRTS 3360 Social Media Strategies
- MRTS 3615 Understanding Media Industries
- MRTS 3620 Digital Media and Society
- MRTS 3630 Perspectives on Video Games
- MRTS 4105 History of Broadcasting in Britain
- MRTS 4106 Contemporary Broadcasting in Britain
- MRTS 4320 Media Law and Regulations
- MRTS 4360 Global Media
- MRTS 4420 Media Programming
- MRTS 4425 Audience Research
- MRTS 4428 Mobile Media
- MRTS 4430 Media Management

- MRTS 4435 Media Marketing and Branding
- MRTS 4440 Media Sales
- MRTS 4445 Media in the 21st Century
- MRTS 4450 Topics in Media Industry Studies
- MRTS 4455 Media Ethics
- MRTS 4465 Writing for Television
- MRTS 4470 Topics in Media Writing
- MRTS 4670 Media Economics
- MRTS 4850 Television News Producing

## History or criticism, 6 hours

6 hours of advanced credit in history or criticism courses selected from:

- MRTS 3410 Intermediate Topics in Media Studies
- MRTS 3445 Video Game Histories
- MRTS 3465 American Film History
- MRTS 3470 International Film History to 1945
- MRTS 3475 International Film History from 1945
- MRTS 3610 Film and Television Analysis
- MRTS 3630 Perspectives on Video Games
- MRTS 3640 Scene Analysis
- MRTS 4105 History of Broadcasting in Britain
- MRTS 4110 U.S. Radio History
- MRTS 4120 U.S. Television History
- MRTS 4125 History and Theory of Film Remakes
- MRTS 4200 Media Aesthetics and Design Thinking
- MRTS 4215 British Cinema and Television
- MRTS 4220 Post-War European Film
- MRTS 4225 Women in Film
- MRTS 4240 Hitchcock Films
- MRTS 4245 Documentary, Visual Anthropology and Immersive Storytelling
- MRTS 4250 Cinema Beyond the West
- MRTS 4340 History of the Documentary
- MRTS 4350 Media Authors
- MRTS 4410 Topics in Digital Media Studies
- MRTS 4415 Topics in Film and Television Studies
- MRTS 4515 Teen Media
- MRTS 4520 African-American Film
- MRTS 4530 Gender and Sexuality in the Horror Film
- MRTS 4540 Lesbian, Gay and Queer Film and Video
- MRTS 4550 Cinema Verite

## Additional requirements

- 12 hours of advanced MRTS electives.
- No more than 6 hours of MRTS practicum, internship or special problem courses may be applied to the 42 hours of MRTS courses required for the degree.

## Other course requirements

COMM 1010 - Introduction to Communication or equivalent.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum 2.0 cumulative UNT GPA is required to graduate. Only 12 hours of MRTS courses taken at other institutions may be applied toward the 42-hour requirement.

Students majoring in Media Arts are required to have a minimum grade of C in all MRTS courses to receive MRTS credit. Students may have only two attempts for a grade of C or better for each required MRTS course.

Students must observe prerequisites for each MRTS course. If a student has not completed prerequisites for a course with a grade of C or better, the student is subject to administrative drop from the course without notice. Prerequisites are listed with individual course descriptions.

Because of the high demand for many MRTS courses, students who miss the first class without consent of the instructor are subject to be dropped from the course so that other students may be added. Students who miss the first day of class because of illness or some other acceptable excuse should notify the department office the day of the absence.

Students may register for only one section of a course at a time. Students registered for more than one section of a course will be dropped from all sections of that course without notice. The policy does not apply to courses such as special topics, which may bear the same course number but are different courses.

Aural competency in distinguishing discrete sounds, and visual competency in distinguishing shapes, forms, colors and movements are required to complete MRTS critical studies courses. Additional visual competency to utilize studio and location equipment and manual dexterity to operate equipment are required to complete MRTS production courses. Articulation competency to achieve broadcast industry standards may be required. Specific competency and departmental approval for internship, seminar and special problems courses are required.

#### **Undergraduate Academic Certificates**

## Digital Media Studies certificate (MRTS)

In this certificate program, students learn to utilize and analyze a variety of digital media tools for the purposes of communication, collaboration and research, and to develop social, political, academic and professional networks. The certificate is interdisciplinary; students must take the three core courses from MRTS, COMM and TECM. Applicable electives may be taken from any department with permission.

## Certificate requirements, 15 hours

Students may receive a certificate in digital media studies by successfully completing the following courses with a grade of B or higher.

## Required courses, 9 hours

- COMM 3420 Communication and New Technology
- TECM 1500 New Media Experience
- MRTS 3620 Digital Media and Society

#### Electives, 6 hours

Selected from the following courses:

- COMM 3820 Social Media Perspectives
- COMM 4320 Communications and Virtual Gaming
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 4270 Strategic Social Media

- MRTS 3360 Social Media Strategies
- MRTS 3525 Content Development for Digital Media
- MRTS 4410 Topics in Digital Media Studies (Gender and Digital Cultures)
- MRTS 4410 Topics in Digital Media Studies (Video Game Perspectives)
- MRTS 4415 Topics in Film and Television Studies (Media Genres/Authors - Video Game Authors)
- MRTS 4450 Topics in Media Industry Studies (Digital Distribution)
- MRTS 4450 Topics in Media Industry Studies (Mobile Media)
- MRTS 4450 Topics in Media Industry Studies (Video Game History)
- Internship option (TECM 4920, MRTS 4480 or COMM 4800) with departmental approval
- Other courses approved by certificate advisor

## Media Management certificate

This certificate is designed to provide students interested in nonproduction careers a credential that will be useful in seeking entrylevel employment in the electronic media industry.

## Required courses, 12 hours

- MRTS 4430 Media Management
- MRTS 4670 Media Economics

#### Plus two courses selected from

- MRTS 4320 Media Law and Regulations
- MRTS 4360 Global Media
- MRTS 4420 Media Programming
- MRTS 4450 Topics in Media Industry Studies
- Or other course approved by program advisor

## **Spanish Language Media certificate**

This certificate program provides students with a basic understanding of Spanish history, culture, politics, language and media. The certificate requires 15 hours (an optional internship is recommended). Eligible students for this certificate are those majoring in MRTS or CBCM and are taking Spanish to fulfill their language requirement.

## Certificate requirements, 15 hours

## Required courses

- MRTS 4450 Topics in Media Industry Studies (when taught as "Seminar in Spanish Language Media")
- SPAN 4040 Spanish Writing for the Mass Media Professions

### Plus 3 hours from

- SPAN 3140 Mexican Civilization
- SPAN 3150 Spanish Culture and Civilization
- SPAN 3160 Latin American Culture and Civilization

#### Electives, 6 hours

Two electives from the following:

- ANTH 3200 Latin America
- ANTH 3210 Meso America
- ANTH 4300 Migrants and Refugees
- ENGL 4250 Latinx Literature
- HIST 3150 Historical and Cultural Development of the Mexican-American Community

- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4160 Chicano Political History: 19th and 20th Century
- HIST 4172 Modern Latin America: 1810-Present
- HIST 4190 Mexico, 1810–Present
- PSCI 3700 Area Politics (when taught as "Latin America")
- PSCI 3810 International Relations

## **Television News Producing certificate**

This certificate program is open to students majoring in MRTS or CBCM. Interested students must apply and be admitted into the restricted television news producing certificate program. Students must complete 18 hours in MRTS courses as described below. An internship in a professional news operation (radio, television, web, etc.) is recommended to supplement the program, but is not required for completion of the certificate.

## MRTS courses, 15 hours

- MRTS 1310 Introduction to Broadcast, Cable and Internet Technology
- MRTS 2210 Introduction to Media Arts Production
- MRTS 2400 Digital Media Writing
- MRTS 3500 Video Photography, Editing and Reporting for Digital Media
- MRTS 4850 Television News Producing

## Elective, 3 hours

Plus one 3-hour elective course selected from:

- MRTS 3525 Content Development for Digital Media
- MRTS 4320 Media Law and Regulations
- MRTS 4430 Media Management
- MRTS 4450 Topics in Media Industry Studies

# Department of Philosophy and Religion

Main Departmental Office

Environmental Education, Science and Technology Building, Room 225

Mailing address:

1155 Union Circle #310920 Denton, TX 76203-5017 940-565-2266

Fax: 940-565-4448

E-mail: philosophy@unt.edu Web site: www.phil.unt.edu

David M. Kaplan, Director of Undergraduate Studies and

Undergraduate Advisor E-mail: david.kaplan@unt.edu

Environmental Education, Science and Technology Building, Room

David M. Kaplan, Chair

Faculty

The great virtue of philosophy is that it teaches not what to think, but how to think. It is the study of meaning, of the principles underlying conduct, thought and knowledge. The skills it hones are the ability to analyze, to question orthodoxies and to express things clearly. However arcane some philosophical texts may be ... the ability to formulate questions and follow arguments is the essence of education... Philosophy is, in commercial jargon, the ultimate "transferable work skill."

— The Times, London, August 15, 1998

Philosophy, from the Greek words "philein" and "sophia" translated as "love of wisdom", has always been an important part of higher education. In the early Greek proto-universities, the Academy of Plato and the Lyceum of Aristotle, philosophy was the very foundation of all study. It has been studied as an end in itself and in its relation to other areas. Most specialized sciences find their origins in philosophical questions. It is also an excellent preparation for studies in graduate and professional schools.

Studying philosophy develops analytic skills and problem-solving abilities that are extremely useful in almost any academic or scientific field and in a variety of professional careers, such as journalism, business, law, medicine and government. It provides insight into our cultural heritage through courses in the history of ideas and critical insight into many other fields in the humanities and the sciences through such courses as ethical theories, social-political philosophy, philosophy of technology, and philosophy of ecology. Philosophy seeks to teach students methods of thinking about perennial questions—such as 'what is truth' and 'what is beauty'— and about the timeless themes of goodness and wisdom.

The study of religions is also an important part of higher education. Religions are an integral part of our history, social life, politics, economy, foreign policy and domestic interactions. The study of religions exposes students to the beliefs, practices and histories of various religious traditions and analyzes their significance to societies. It also provides the opportunity for inter-religious comparison and evaluation. It's an interdisciplinary major, with courses from many departments, such as philosophy, history, anthropology, sociology, political science, art history, English and music.

The study of religions helps students think and write critically, engage in big questions about worldviews, and apply disciplinary knowledge to local and global issues. It equips students for employment in the public, private and nonprofit sectors including medicine, law, business, publishing, social service and teaching. This major is also excellent preparation for graduate and professional schools

### Pre-theology and pre-seminary

Students intending to pursue post-baccalaureate work in seminaries

or divinity schools should consult with the undergraduate advisor of the Department of Philosophy and Religion.

#### Scholarships and financial aid

A \$500 award is given to the John Kimmey Memorial Scholar in the spring semester. The scholar is selected by the department and is the honoree at the Honors Day convocation.

The Samuel and Mabel Danford Scholarship in Religion awards \$1,000 to one student every fall term. A student must be a religion major to apply. Inquiries concerning the scholarship should be directed to philosophy@unt.edu.

A scholarship in honor of Richard Owsley provides an annual award of \$500 to a recipient who submits and wins an essay competition held each spring. The topic of the essay should fall within the scope of continental philosophy.

## **Majors**

## Philosophy, BA

A Bachelor of Arts with a major in philosophy involves the study of the history of Western and non-Western philosophy and religion. Our course work will provide you not only insight into the world's cultural heritage, but also into every other field of study in the sciences and humanities.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in philosophy.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

The major requires completion of 30 hours in philosophy including:

- PHIL 2050 Logic and Critical Thinking
   or
- PHIL 3300 Symbolic Logic
- PHIL 3310 Ancient Philosophy
- PHIL 3330 Modern Philosophy
- PHIL 4400 Metaphysics or
- PHIL 4100 Epistemology
- PHIL 3600 Philosophy of Religion
- PHIL 3400 Ethical Theory or
- PHIL 4150 Feminism
- PHIL 3120 Social and Political Philosophy
- PHIL 3250 Philosophy of Science or
- or PHIL 3450 Philosophy of Technology or

- PHIL 4200 Science, Technology and Society
- PHIL 4450 Philosophy of Ecology or
- PHIL 4700 Environmental Ethics
- PHIL 4740 Environmental Justice
- PHIL 4970 Philosophy Capstone
- 6 additional hours of philosophy advanced courses

## Other course requirements

None.

### Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Religion, BA

With a Bachelor of Arts with a major in religion, you gain a thorough understanding of the beliefs, practices and histories of multiple religious traditions and hone your oral and written communication skills.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in religion.

# Hours required/general college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the General university requirements in the "Academics" section of the UNT Undergraduate Catalog.

## Major requirements

Majors must complete 33 hours of credit.

## Introduction to Religious Studies, 3 hours

- PHIL 2070 World Religions
- PHIL 2100 Introduction to Judaism
- PHIL 2400 Religion and American Society

## Theoretical Approaches, 3 hours

- ANTH 4751 Anthropology of Religion
- PHIL 3600 Philosophy of Religion
- SOCI 3700 Sociology of Religion

## Christianity, 3 hours

- PHIL 3320 Medieval Philosophy
- PHIL 3500 Christianity and Philosophy
- PHIL 3520 Early Christian Thought

## Judaism, 3 hours

- PHIL 3510 Hebrew Bible
- PHIL 3525 Rabbinic Judaism
- PHIL 3530 Kabbalah: Jewish Mysticism, Myth and Magic
- PHIL 3535 Classical Jewish Thought: The 13 Principles of Faith
- PHIL 3540 Judaism and Philosophy

### Islam, 3 hours

- HIST 3450 Islam and its Empires
- HIST 3460 Modern Middle Eastern History
- HIST 4240 Nationalism, Zionism and Islamism in Modern Middle Eastern History
- PHIL 3570 Islam and Philosophy

## South Asian Religions, 3 hours

- PHIL 3620 Hinduism I: From the Vedas to the Gita
- PHIL 3630 Jainism

## Religion, Science and the Environment, 3 hours

- PHIL 3650 Religion and Science
- PHIL 3660 Western Religion and the Environment
- PHIL 3665 Eastern Religion and the Environment

## Religion and History, 3 hours

- HIST 4215 Jews Under Greek and Roman Rule
- HIST 4217 Jew, Greek and Roman: Backgrounds of Early Christianity
- HIST 4218 Early Medieval Europe, ca. 312–1095
- HIST 4219 Late Medieval Europe, 1095 to 1400
- HIST 4230 The Age of the Reformation
- HIST 4290 Intellectual, Cultural and Social History of Medieval and Early Modern Europe
- HIST 4550 Imperial China

## Capstone seminar, 3 hours

• PHIL 4975 - Theories of Religion

## Advanced electives, 6 hours

Students must take two advanced electives, either from the above groups of courses or any of the following approved electives:

- PHIL 3515 David, Saul and Solomon: The Early Israelite Monarchy
- PHIL 3550 Jewish Business Ethics
- PHIL 3635 Bollywood
- PHIL 3680 Buddhism, Daoism, Shintoism
- ANTH 3700 Peoples and Cultures of South Asia
- HIST 3762 Rome: The Biography of a City
- HIST 3770 Ancient and Medieval Women, Gender and Sexuality
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4380 The European Witch Hunts
- HIST 4390 The Holocaust, 1933-1945
- HIST 4435 American Jewish Experience
- HIST 4475 Jewish Women in Modern America
- ENGL 4270 Modern Jewish Literature
- ENGL 4440 Milton
- PSCI 4150 Religion and Politics in the United States

- ARTH 4804 Medieval Art
- ARTH 4805 Topics in Medieval Art
- ARTH 4825 Topics in Islamic and/or Middle Eastern Art
- MUMH 4800 Nazism, Judaism and the Politics of Classical Music in Germany
- MUMH 4810 Jews, Judaism, Anti-Semitism and Opera

## Other course requirements

None.

#### Minor

Optional.

## Other requirements

A minimum grade of C is required for all courses counting toward the Bachelor of Arts with a major in religious studies. Students majoring in religious studies must contact the Department of Philosophy and Religion Director of Undergraduate Studies, ENV 320C, to prepare their degree audits.

## **Grad Track Options**

## Philosophy, BA with grad track option leading to Philosophy, MA

## Admission requirements

- Applicants for the Grad Track option must be students in the UNT College of Liberal Arts and Social Sciences pursuing the Bachelor of Arts in Philosophy degree.
- Students may apply for the grad track option during their junior year and must have completed at least 75 credit hours at the time of application to grad track.
- 3. Minimum of 3.5 cumulative GPA required at the time of application submission.
- The student will provide two recommendation forms from Philosophy and Religion faculty members who can evaluate the student's ability to complete graduate level work.
- The application will be reviewed by the Philosophy and Religion curriculum committee and the undergraduate and graduate advisors.

## Requirements

Students in the Grad Track program may select up to 6 hours of 5000-level PHIL courses to fulfil the 6 hours of advanced philosophy courses required for the B. A. degree in Philosophy. Students may select the remaining courses (up to 12 hours total) from 5000-level PHIL courses chosen to align with the required courses for the major in Philosophy. These courses can be comprised from the following Groups.

#### Group A - Environmental Philosophy

- PHIL 5000 Environmental Ethics (for PHIL 4700) or
- PHIL 5010 Seminar in the Philosophy of Ecology (for PHIL 4450) or
- PHIL 5700 Seminar in Environmental Ethics (for PHIL 4740)

#### Group B - History of Philosophy

- PHIL 5100 Ancient Philosophy (for PHIL 3310) or
- PHIL 5200 Modern Philosophy (for PHIL 3330) or
- PHIL 5250 Topics in the History of Philosophy

#### Group C - Normativity and Values

- PHIL 5300 Social and Political Philosophy (for PHIL 3120) or
- PHIL 5400 Seminar in Ethical Theory (for PHIL 3400)

#### Group D - Philosophy of Religion

- PHIL 5600 Philosophy of Religion (for PHIL 3600) or
- PHIL 5650 Asian Philosophies and Religions in Practice (for PHIL 3620/PHIL 3625)

#### Note

Student progress will be monitored on a semester-by-semester basis by the directors of graduate and undergraduate studies. Students must meet with each of the directors and must maintain a 3.0 GPA in the graduate coursework. Students must complete the bachelor's degree prior to being fully admitted to the MA in Philosophy. A student can take a maximum of 12 hours of graduate courses through the Grad Track Pathway.

#### **Minors**

## Philosophy minor

A minor in philosophy consists of 18 semester hours, including 6 advanced hours

## **Religion minor**

A minor in religion consists of 18 semester hours from the departments of philosophy and religion, anthropology, history and English. Courses must be selected from an approved list. Courses not on the approved list are to be approved by the Department of Philosophy and Religion advisor.

# Undergraduate Academic Certificates Jain and India Studies certificate

A certificate in Jainism and India Studies will provide specialized knowledge of the Jain religious tradition in the context of the history and culture in which it developed.

## Requirements:

The certificate in Jain and India Studies requires 15 semester hours selected from a list of existing courses in the area of India and Jain Studies, including 9 advanced hours.

### Required courses:

- PHIL 3620 Hinduism I: From the Vedas to the Gita
- PHIL 3630 Jainism

## 9 hours from the following:

- ARTH 4824 Topics in Asian Art (May be repeated for credit as topics vary.)
- ANTH 3700 Peoples and Cultures of South Asia
- HIST 4104 The British Raj
- HIST 4114 Race and Gender in British Imperial Wars 1830-present
- HIST 4124 Risings, Revolts, and Rebels of the British Empire, 1900-1930
- HIST 4605 History of South Asia, 1757–1947
- HIST 4610 Contemporary South Asia
- MUET 3090 Music of India
- PHED 1260 Yoga (1 hour)
- PHIL 3635 Bollywood
- PHIL 3665 Eastern Religion and the Environment
- Other courses as approved by the Jain and India Studies Advisors.

#### Additional information

For additional information, contact the Jain and India Studies Advisors Pankaj Jain and George James or visit the Jain and India Studies website, jainstudies.unt.edu.

# Department of Political Science

Main Departmental Office Wooten Hall, Room 125

Mailing address: 1155 Union Circle, #305340 Denton, TX 76203-5017 940-565-2276

Web site: www.politicalscience.unt.edu

Political Science Advising Office Wooten Hall, Room 141 940-565-2310

Kim King, Chair

Faculty

Department courses meet the needs of both undergraduate and graduate students preparing to enter national, state and local government employment; public and private foreign service; law; politics; public and private research; writing and reporting of public affairs and political science; and government and social science teaching.

#### **Pre-law information**

UNT annually prepares many students to enter law school. To be competitive with nationally recognized law schools, a grade point average of 3.5 or higher is recommended, and a GPA of 3.0 or higher is recommended for application to any law school. While many students undertake a liberal arts degree, law schools place important emphasis on the diversity of their student body and seek persons from different backgrounds, including the natural sciences. Consequently, there is no required pre-law program of courses, and students from any major are encouraged to consider law school; however, UNT offers an array of courses that will help prepare students for law school.

Future law school students should take courses that emphasize writing and oral skills; analytical reasoning; reading comprehension and integration of multiple texts; and logical reasoning. Pre-law students may wish to consider a certificate of legal studies (contact the department for more information). Pre-law students should take the Law School Admission Test (LSAT) during the summer before or fall term/semester of their senior year. Students should plan to attend a pre-law orientation session early in their career (freshman or sophomore year) at UNT. For more information, check www.cas.unt. edu/advising/prelaw/ or send inquiries to prelaw@unt.edu.

#### Political science requirement

The university may not award a baccalaureate degree or a lesser degree or academic certificate unless the student has completed 6 hours of credit in American government that include consideration of the Constitutions of the United States and Texas. The university may determine that a student has met the requirement in whole or in part on the basis of credit transferred from another accredited college or upon successful completion of an advanced standing examination. Completion of 12 semester hours of upper division ROTC courses may be substituted for PSCI 2305. The student may satisfy part (3 hours) or all of the 6-hour political science requirement by credit through examination.

#### Global learning programs

The Department of Political Science is home to several global learning programs. Students may participate in the global learning program in London, where courses on British politics, British legal systems, European politics and terrorism have been taught. Students also meet with members of the British Parliament, key leaders of British political parties, cabinet ministers, and judges and practitioners in the British legal system. The summer program in The Hague, Netherlands, brings students to the International Criminal

Tribunal for the former Yugoslavia where they study international law and attend sessions of the court. Students also meet with judges, members of the prosecutor's office and other top officials.

#### **Degree audits**

During the sophomore year of enrollment, the student should make a degree audit. The student must meet with the departmental advisor, with whom an advisory sheet is made. Advisory sheets are then sent to General Academic Building, Room 220, for the completion of the degree audit. The process should be completed in time for the next registration period.

#### **Pender Scholars**

The department annually awards two \$1,000 scholarships based on merit to incoming students (fall term) who declare their intention to major in political science. The awardees are known as Pender Scholars in honor of the first chair of the political science department, J.W. "Dad" Pender.

High school seniors must rank in the top quarter of their class and have a score of at least 1100 on the SAT (or its equivalent). Transfer students must have a 3.5 grade point average and a score of at least 1100 on the SAT (or its equivalent). Application deadline is April 1; awards are announced September 15. Contact the undergraduate advisor in Wooten Hall, Room 141, for more information.

## **Majors**

## Latino Culture, Economy and Policy, BA

BA with major in Latino Culture, Economy and Policy (LCEP) examines the politics, history, language, culture, literature, sociology, anthropology, economics, and creative accomplishments of Latinos in the US. This diverse population includes people who trace their heritage to Mexico, Cuba, Puerto Rico, El Salvador, Guatemala, Nicaragua, and many other Latin American and Caribbean nations. Students take four required substantive classes (12 hours), four classes (12 hours) in two of three elective areas and also complete either an internship and/or senior research paper (6 hours). LCEP will prepare students to be more competitive in the increasingly challenging and diverse workforce environment.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

A minimum of 30 hours is required in the major, including:

## Required courses, 18 hours

- ANTH 3140 Latinos in the U.S.
- ENGL 4250 Latinx Literature
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- PSCI 3101 Latino Politics OR
- PSCI 3102 U.S. Immigration Policy

6 hours from:

- PSCI 4953 Capstone Internship OR
- PSCI 4954 Research Capstone

#### Electives, 12 hours

Plus four classes (12 hours) in two of three elective areas:

#### Culture and Humanities

- SOCI 2070 Introduction to Race and Ethnic Relations
- ENGL 3920 Ethnic American Literatures
- ENGL 3850 The Literature of Texas and the Southwest
- HIST 4200 The Spanish Frontier in North America
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- SOCI 2010 Race, Class, Gender and Ethnicity or
- WGST 2420 Race, Class, Gender and Ethnicity
- SOCI 4540 Race and Ethnic Minorities
- SPAN 3140 Mexican Civilization
- SPAN 4010 Aspects of Contemporary Mexican Culture
- SPAN 3110 Introduction to Hispanic Literature
- SPAN 3180 Latin American Culture Through Film
- SPAN 4385 Hispanic Culture in the United States
- THEA 4370 Contemporary Chicana/Chicano Theatre

#### Politics and Public Policy

- HIST 4160 Chicano Political History: 19th and 20th Century
- PSYC 4849 Topics in Psychology (when topic is "Psychology of Race in the United States")
- SOCI 4540 Race and Ethnic Minorities
- ECON 3150 Economics of Discrimination
- PSCI 3101 Latino Politics
- PSCI 3102 U.S. Immigration Policy
- PSCI 3103 U.S. Immigration Politics
- PSCI 3104 Race and Ethnic Politics
- PSCI 3105 Political Economy of Race, Gender and Immigration
- PSCI 3701 Politics of Mexico
- PSCI 3702 Latin American Politics
- PSCI 3703 Security in Latin America
- PSCI 3704 U.S.-Latin American Relations
- PSCI 4700 Topics in Comparative Politics (when topic is "Politics and Issues of Development")
- PSCI 4670 Third World Politics
- PSCI 4650 Comparative Public Policy

#### Country of Origin Studies

- ARTH 4820 Pre-Columbian Art of Mesoamerica
- ANTH 3210 Meso America
- ENGL 4255 Mexican American Non-Fiction and Criticism
- HIST 4190 Mexico, 1810-Present
- HIST 4172 Modern Latin America: 1810-Present
- HIST 4150 Mexican Immigration and the Chicano Community
- HIST 4171 Latin America: The Colonial Experience, 1492–1821
- HIST 4155 Mexican American Autobiography
- BUSI 4700 Topics in International Business Practices and Policies (when topic is "Mexican Business Practices and Policies")

- HIST 4180 Colonial Mexico and the Spanish Southwest
- PSCI 3701 Politics of Mexico
- PSCI 3702 Latin American Politics
- SPAN 3140 Mexican Civilization
- SPAN 4010 Aspects of Contemporary Mexican Culture

#### Minor

Students who wish to earn a minor are encouraged to choose Business Marketing or Management, Public Administration, Criminal Justice or International Studies.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C is required for an LCEP course to count toward the major.

## **Political Science, BA**

A Bachelor of Arts with a major in political science combines cutting-edge research with award-winning teaching to ensure your academic and career goals are met. Our courses provide a deep understanding of relevant issues in local, national and international governments.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in political science.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

### 36 hours in political science

Political science majors must complete 36 hours in political science:

 PSCI 2306 - US and Texas Constitutions and Institutions

or

- PSCI 2316 Honors U.S. and Texas Constitutions and Institutions
- PSCI 2305 US Political Behavior and Policy
- PSCI 2315 Honors US Political Behavior and Policy
- PSCI 3300 Political Science Research Methods
- 27 advanced hours, including at least one advanced course each in three of the listed areas of study; and completion of either PSCI 4951, PSCI 4952, PSCI 4953 or PSCI 4954.

#### Advanced courses

Advanced courses are offered in six areas of study:

## Field A, American government and politics

- PSCI 3010 American State and Local Government
- PSCI 3100 Topics in American Government \*
- PSCI 3101 Latino Politics
- PSCI 3103 U.S. Immigration Politics
- PSCI 3104 Race and Ethnic Politics
- PSCI 3105 Political Economy of Race, Gender and Immigration
- PSCI 3110 The Legislative Process
- PSCI 3120 Women and Politics
- PSCI 3130 Interest Groups
- PSCI 3140 LGBT Politics
- PSCI 3160 Mass Media in American Politics
- PSCI 3420 Bureaucracy and Public Policy
- PSCI 4020 Urban Politics
- PSCI 4100 Political Parties
- PSCI 4120 Public Opinion and Participation
- PSCI 4140 The Presidency
- PSCI 4450 Public Policy Analysis

#### Field B, Public law

- PSCI 3200 The American Legal System
- PSCI 3210 The U.S. Supreme Court
- PSCI 4200 Constitutional Law: Powers of Government
- PSCI 4210 Constitutional Law: Rights and Liberties
- PSCI 4220 Jurisprudence
- PSCI 4810 International Law
- PSCI 4230 The Constitution and the Rights of Criminal Defendants

#### Field C, Political theory and methodology

- PSCI 3310 Political Theory: Quest for Justice
- PSCI 3320 Political Theory: The State and its Critics
- PSCI 4320 American Political Theory
- PSCI 4360 International Ethics
- PSCI 4330 Topics in Political Theory \*
- PSCI 4300 Topics in Political Research Methodology

#### Field D, Public policy

- PSCI 3102 U.S. Immigration Policy
- PSCI 3420 Bureaucracy and Public Policy
- PSCI 4450 Public Policy Analysis
- PSCI 4490 Topics in Public Policy

### Field E, Comparative government and politics

- PSCI 3600 Governments and Politics around the World
- PSCI 3611 Politics of Central America and the Caribbean
- PSCI 3620 Politics of Western Europe
- PSCI 3621 Politics of Russia, Eurasia, and East Europe
- PSCI 3631 Peace and Conflict in Africa
- PSCI 3641 Politics of Japan
- PSCI 3642 Politics of China
- PSCI 3650 Middle East Politics

- PSCI 3700 Area Politics \*
- PSCI 3701 Politics of Mexico
- PSCI 3702 Latin American Politics
- PSCI 3703 Security in Latin America
- PSCI 3704 U.S.-Latin American Relations
- PSCI 4640 Revolution and Political Violence
- PSCI 4650 Comparative Public Policy
- PSCI 4660 Democracy and Democratization
- PSCI 4661 Politics of Autocracy
- PSCI 4662 Civil-Military Relations
- PSCI 4663 Comparative Judicial Politics
- PSCI 4670 Third World Politics
- PSCI 4671 Globalization and Development
- PSCI 4700 Topics in Comparative Politics
- PSCI 4720 Ethnicity in World Politics
- PSCI 4826 Women, War and Peace
- PSCI 4845 Foreign Policy Around the World

#### Field F, International relations

- PSCI 3500 Introduction to Peace Studies
- PSCI 3810 International Relations
- PSCI 4520 International Human Rights
- PSCI 4800 The Politics of International Organization
- PSCI 4815 Advocacy and Activism
- PSCI 4810 International Law
- PSCI 4820 Contemporary International Problems \*
- PSCI 4821 International Conflict
- PSCI 4823 International Criminal Tribunals and War Crimes
- PSCI 4826 Women, War and Peace
- PSCI 4827 Negotiation and Diplomacy
- PSCI 4828 Geography, History, and International Relations
- PSCI 4830 American Foreign Policy
- PSCI 4840 Major Problems of American Foreign Policy
- PSCI 4845 Foreign Policy Around the World
- PSCI 4850 Critical Issues in World Politics
- PSCI 4860 International Political Economy

#### Other advanced options

- PSCI 3165 Topics in Politics and Pop Culture
- PSCI 4950 Writing, Advocacy, and Communication

#### Notes

Courses listed in more than one area of study may be counted toward the requirements of only one area.

\*May be repeated for credit as topics vary.

### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

Academic requirements for graduation with a BA degree in political science: A student must have a minimum of 2.5 grade point average in all courses counting toward the political science major; the

student must have a 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work in all courses.

## **Grad Track Options**

## Political Science, BA with grad track option leading to Political Science, MA

The Department of Political Science offers a grad-track pathway in which the student can complete a Bachelor's Degree in four years, and then earn a master's degree in the fifth year. This is for highly motivated political science majors who have maintained at least a 3.5 GPA. Students must apply to this program by their junior year. Admitted students will take twelve graduate hours during their senior year, which can count both toward their bachelor's and master's degrees as permitted by university rules.

Undergraduate students who have been accepted to a grad track pathway option must complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they were admitted to the accelerated program or enrollment in graduate level course work may be suspended.

## Admission requirements and program policies

## Admission requirements

Students are eligible for acceptance at the end of their junior year, upon completion of 75 undergraduate hours, including:

- PSCI 2306 US and Texas Constitutions and Institutions
- PSCI 2305 US Political Behavior and Policy
- PSCI 3300 Political Science Research Methods
- one theory class
- a writing sample
- three letters of recommendation
- a statement of purpose
- a resume
- the submission of an application to the Toulouse Graduate School

Submission of GRE scores is not required.

For students in the UNT Honors College, admission to the graduate program is guaranteed for students who satisfy these requirements.

## Program policies

Undergraduate students who have been accepted to a grad track pathway option must complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester for which they were admitted to the accelerated program or enrollment in graduate level course work will be suspended.

Admitted students will take twelve graduate hours during their senior year, which will also count toward their BA as permitted by university rules.

## Program requirements

In lieu of 4 advanced undergraduate electives in the fourth year, students will take:

- PSCI 5340 Seminar in Political Science Scope and Methods
- PSCI 5320 Quantitative Political Research Methods

Plus two courses from the following:

- PSCI 5310 Proseminar in Political Theory
- PSCI 5610 Proseminar in Comparative Government
- PSCI 6000 Research Seminar
- PSCI 6900 Special Problems

See the BA with a major in political science for the remainder of the requirements for the bachelor's degree.

#### **Minors**

#### **Peace Studies minor**

Students wishing to obtain a minor in peace studies must complete a minimum of 18 hours (6 advanced), including PSCI 3500 plus at least one course from each of these three areas:

### Determinants of violence

- CJUS 4330 Domestic and International Terrorism
- CJUS 4350 Seminar on Violence
- EADP 4090 Terrorism and Emergency Management
- PSCI 4640 Revolution and Political Violence
- PSCI 4821 International Conflict

## Or, when topic is appropriate

- ANTH 4701 Topics in Sociocultural Anthropology
- HIST 4260 Topics in History
- HIST 4262 Topics in European History
- HIST 4263 Topics in African-, Asian- or Latin American History
- PSCI 4700 Topics in Comparative Politics
- PSCI 4820 Contemporary International Problems

## Conflict management

- COMM 3320 Communication and Conflict Management
- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PSCI 4660 Democracy and Democratization
- PSCI 4823 International Criminal Tribunals and War Crimes
- PSCI 4850 Critical Issues in World Politics

### Or, when topic is appropriate

- HIST 4260 Topics in History
- PSCI 4700 Topics in Comparative Politics

## Issues of justice

- ECON 3150 Economics of Discrimination
- HIST 3150 Historical and Cultural Development of the Mexican-American Community
- HIST 4315 History of Anti-Semitism from Ancient Times to the Present
- HIST 4390 The Holocaust, 1933–1945
- HIST 4440 African American History and Culture to 1865
- HIST 4450 African American History and Culture Since 1865
- HIST 4455 History of Black Women in America
- HIST 4465 Women in the United States to 1900
- HIST 4470 Women in the United States Since 1900
- PSCI 4210 Constitutional Law: Rights and Liberties
- PSCI 4360 International Ethics
- PSCI 4520 International Human Rights
- PSCI 4660 Democracy and Democratization
- PSCI 4720 Ethnicity in World Politics
- PSCI 4800 The Politics of International Organization
- PSCI 4810 International Law
- PSCI 4823 International Criminal Tribunals and War Crimes
- SOCI 4540 Race and Ethnic Minorities

## Or, when topic is appropriate

- HIST 4260 Topics in History
- HIST 4440 African American History and Culture to 1865
- PSCI 4490 Topics in Public Policy
- PSCI 4820 Contemporary International Problems
- PSCI 4850 Critical Issues in World Politics
- PSCI 4330 Topics in Political Theory

## Remaining 6 hours may be from

Any of the following courses may also be taken to fulfill the remaining 6 hours:

- ANTH 3130 African-American Anthropology
- HIST 4070 World War II: European Theater
- HIST 4350 Europe, 1914-1945
- HIST 4650 Evolution of Warfare to Napoleon
- HIST 4660 Evolution of Warfare from Napoleon
- JOUR 4240 Comparative International Media Systems
- PADM 4060 Practicum in Mediation and Dispute Resolution
- PSCI 3600 Governments and Politics around the World
- PSCI 3810 International Relations
- PSCI 4830 American Foreign Policy
- SOCI 4160 Developing Societies
- SOCI 4750 World Population Trends and Problems

## Or, when topic is appropriate

- ANTH 4701 Topics in Sociocultural Anthropology
- HIST 4260 Topics in History

## Additional information

Practicums, internships and special problems courses may also apply if approved by the Director of Peace Studies. Interested students should contact Dr. David Mason, Department of Political Science, Wooten Hall, by phone at 940-565-2386, or by e-mail at masontd@unt.edu

#### **Political Science minor**

A minor in political sciences requires 18 hours:

## Required courses

- PSCI 2306 US and Texas Constitutions and Institutions
- PSCI 2305 US Political Behavior and Policy

## Plus 12 hours

Plus 12 semester hours, including 6 advanced hours.

## **Undergraduate Academic Certificates**

## Legal studies certificate

A legal studies certificate may be earned by students who have completed a concentration of academic work designed to prepare them for admission to and success in law school, regardless of major or minor at UNT. The Department of Political Science will award the certificate to students who have completed 15 hours of approved course work and maintained a 3.25 in the courses taken for the certificate as well as a 3.0 cumulative UNT GPA. Classes that count toward the student's major, minor or core requirements may also count toward this certificate. In keeping with university policy, all course work for the certificate must be completed at UNT.

## Requirements

All recipients of the certificate MUST complete one course from each of the following five areas:

## Foundations, 3 hours

Choose from:

- PSCI 3200 The American Legal System
- CJUS 3210 Judicial and Legal Systems

## Analytical reasoning, 3 hours

Choose from:

- COMM 2140 Advocating in Public
- COMM 3840 Argumentation and Debate
- ECON 4550 Law and Economics
- PHIL 2050 Logic and Critical Thinking
- UCRS 3000 Legal Studies Survey

## Oral and written advocacy, 3 hours

Choose from:

- COMM 2040 Public Speaking
- ENGL 3110 Academic Writing in the Humanities
- PADM 4000 Mediation
- PADM 4050 Negotiation and Dispute Resolution
- PSCI 4950 Writing, Advocacy, and Communication

## Applied legal studies, 3 hours

Choose from:

- BLAW 4450 Corporation Law
- BLAW 4480 International Business Law
- CJUS 3201 Criminal Law
- PSCI 4200 Constitutional Law: Powers of Government
- PSCI 4210 Constitutional Law: Rights and Liberties
- PSCI 4230 The Constitution and the Rights of Criminal Defendants

## Critical thinking, 3 hours

Choose from:

- PHIL 3120 Social and Political Philosophy
- PHIL 3310 Ancient Philosophy
- PHIL 3320 Medieval Philosophy
- PHIL 3330 Modern Philosophy
- PHIL 3340 Nineteenth-Century Philosophy
- PHIL 3400 Ethical Theory
- PSCI 3310 Political Theory: Quest for Justice
- PSCI 3320 Political Theory: The State and its Critics
- PSCI 4220 Jurisprudence
- PSCI 4330 Topics in Political Theory

#### Additional information

For more information, please visit www.class.unt.edu/advising/pre-law. If you wish to declare your intent to seek a legal studies certificate, contact the College of Liberal Arts and Social Sciences Student Advising office (sscluster@unt.edu).

## **Peace Studies certificate**

Fifteen hours, at least 9 of which must be upper division, including PSCI 3500 - Introduction to Peace Studies and at least one course from each of three areas in the peace studies minor: determinants of violence, conflict resolution and issues of justice. Three hours of internship credit can be accepted.

## **Department of Psychology**

Main Departmental Office Terrill Hall, Room 316

Mailing address:

1155 Union Circle #311280 Denton, TX 76203-5017 940-565-2671

Fax: 940-565-4682

Web site: www.psychology.unt.edu

Undergraduate Advising Office Terrill Hall, Room 330 940-565-2376

Faculty

The Department of Psychology offers training for individuals interested in combining a major in psychology with a variety of career areas. Careful selection of courses required to complete a major in psychology along with an accompanying 18-hour minor from another field provide the following possibilities: (1) graduate training in such specialty areas of psychology as experimental, clinical, counseling, quantitative, health psychology/behavioral medicine, physiological; (2) application to dental, medical and law schools; or (3) entry-level employment in such fields as advertising, gerontology, child development/child care, computer science, criminal justice, marketing, recreation, rehabilitation, social work and technical writing. Other areas also are available upon consultation with an advisor.

## **Programs of study**

Programs offered by the department are described below.

## **Graduation requirements**

The following are graduation requirements for the psychology major, over and above those course requirements stated in the Bachelor of Arts and Bachelor of Science paragraphs below:

- Psychology, BA a GPA of 2.5 in all psychology courses must be maintained in order for the student to graduate. If the psychology GPA falls below 2.5, additional psychology courses must be taken and passed with high enough grades to retain a 2.5 major GPA to graduate.
- Psychology, BS a GPA of 2.5 in all psychology courses in order for the student to graduate. If the psychology GPA falls below 3.5, additional psychology courses must be taken and passed with high enough grades to retain a 2.5 major GPA to graduate.
- Psychology majors must earn a grade of C or better for any psychology courses used in the degree.

### **Majors**

## Psychology, BA

A Bachelor of Arts with a major in psychology gives you a scientific basis of psychological knowledge. With practical experience and classes, you learn the many ways psychology is applied to everyday life.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in psychology.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

At least 35 hours of psychology course work.

## Psychology core, 17 hours

These courses are prerequisites for many of the advanced psychology courses.

- PSYC 1630 General Psychology I
- PSYC 1650 Biological Psychology
- PSYC 2317 Quantitative Methods
- PSYC 3317 Quantitative Methods Lab
- PSYC 3650 Experimental Methods
- PSYC 4600 History and Systems

**Note:** PSYC 1630, PSYC 1650, PSYC 2317 and PSYC 3650 are prerequisites for many of the advanced psychology courses.

### Additional advanced courses, 18 hours

Plus 18 additional hours of psychology course work selected with and approved by a faculty advisor.

## Other course requirements

- MATH 1680/MATH 1681 or approved substitution.
- Completion of the university composition requirement with a grade of C or better (recommended before enrolling in advanced psychology course work).

### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

At least 18 hours of psychology course work must be taken at UNT. Of these 18 hours, at least 12 hours must be advanced hours.

## Graduation requirements

The following are graduation requirements for the psychology major:

- A GPA of 2.5 in all psychology courses must be maintained in order for the student to graduate with a psychology major. If the psychology GPA falls below 2.5, additional psychology courses must be taken and passed with high enough grades to retain a 2.5 major GPA to graduate as a psychology major.
- Psychology majors must earn a grade of C or better for any psychology courses used in the degree.

## Psychology, BS

A Bachelor of Science with a major in psychology gives you a scientific basis of psychological knowledge. This degree can prepare you to enter medical school, law school or seminary.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in psychology.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

At least 41 hours of psychology course work.

## Psychology core, 14 hours

- PSYC 1630 General Psychology I
- PSYC 2317 Quantitative Methods (3 hours; prerequisite MATH 1680 or MATH 1681)
- PSYC 3317 Quantitative Methods Lab (1 hours)
- PSYC 3650 Experimental Methods
- PSYC 4600 History and Systems

**Note:** PSYC 1630, PSYC 2317 and PSYC 3650 are prerequisites for many of the advanced psychology courses.

## Additional psychology courses, 27 hours

#### Foundation courses, 9 hours

- PSYC 3100 Social Psychology
- PSYC 3620 Developmental Psychology
- PSYC 4610 Abnormal Psychology

## Plus 18 hours from the following psychology categories

PSYC 4849 PSYC 4849 - Topics in Psychology may apply toward one of the categories when the topic is appropriate. See your academic advisor to have the course applied to the corresponding category.

#### Brain behavior and cognition

6 hours selected from:

- PSYC 1650 Biological Psychology
- PSYC 4640 Psychophysiology
- PSYC 4690 Introduction to Learning and Memory

#### Applied psychology

3 hours selected from:

- PSYC 3520 Introduction to Industrial Organizational Psychology
- PSYC 3530 Psychology of the Offender
- PSYC 3630 Introduction to Psychological Measurement
- PSYC 4110 Interviewing for Paraprofessionals in Psychology
- PSYC 4480 New Directions in Psychology
- PSYC 4510 Practicum

- PSYC 4900 Special Problems
- PSYC 4910 Special Problems

#### Diversity and inclusivity

3 hours selected from:

- PSYC 3490 Psychology of Women
- PSYC 4030 Multicultural Psychology
- PSYC 4040 Psychology of Race in the U.S.
- PSYC 4670 Behavioral and Biopsychosocial Challenges within LGBT Communities

#### Health and development

3 hours selected from:

- PSYC 2580 Health Psychology
- PSYC 3000 Positive Psychology
- PSYC 3480 Adult Development and Aging
- PSYC 4020 Psychology of Death and Dying
- PSYC 4300 Psychosocial Issues in HIV/AIDS
- PSYC 4470 Sexual Behavior
- PSYC 4700 Psychobiology of Stress: The Mind-Body Connection

#### Psychology and personality

3 hours selected from:

- PSYC 2480 Psychosocial Adjustment
- PSYC 4520 Personality
- PSYC 4620 Abnormal Child Psychology

## Other course requirements

- MATH 1680/MATH 1681 or approved substitution.
- Completion of the university composition requirement with a grade of C or better (required before enrolling in PSYC 3650).

### Minor

Optional.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

At least 18 hours of psychology course work must be taken at UNT. Of these 18 hours, at least 12 hours must be advanced hours.

A 2.0 overall GPA

A 2.5 Psychology major GPA.

A grade of C or better is required for each psychology class used in the major.

#### **Minors**

## **Psychology minor**

A minor in psychology requires 18 semester hours, including 6 advanced hours. Some fields may require more than the minimum 18 hours to provide adequate background for employment.

Faculty advisors are available to assist students who minor in psychology.

## **Department of Sociology**

Departmental Office Sycamore Hall, Suite 288

Mailing address: 1155 Union Circle #311157 Denton, TX 76203-5017 940-565-2296

Web site: www.unt.edu/soci

#### Donna Barnes, Chair

#### Faculty

The Department of Sociology offers a variety of degrees, including a Bachelor of Arts (BA) with a major in sociology; a Bachelor of Science (BS) with a major in sociology; a BS + MA/MS GradTrack, a Master of Arts (MA) and Master of Science (MS), both with majors in sociology; and a Doctor of Philosophy (PhD) with a major in sociology.

Faculty teach and conduct research in a variety of areas, including sustainable societies, sociology of disaster, globalization, medical sociology, sociology of the family, sociology of culture, environmental sociology, economic sociology, sociology of religion, sociology of education and other topics.

The undergraduate degree with a major in sociology focuses on developing a core set of marketable skills required by all sociologists and then allows students to investigate specific social institutions or structures of interest. Through a combination of required and elective courses, students develop well-rounded skills, grounded in both theory and research methods.

The program is designed to prepare students for graduate study in sociology or for professional careers in a variety of fields, including research, education, government, social services, probation, law enforcement and aging services. A minor in sociology provides useful background for those pursuing a degree in areas such as business, psychology, criminal justice, communications, education and music.

### **Degree Plan**

Degree plans are worked out in consultation with the undergraduate faculty advisor, Dr. Helen Potts. Call 940-565-2296 or e-mail Helen. Potts@unt.edu.

### **Majors**

## Sociology, BA

A Bachelor of Arts with a major in sociology provides a well-rounded and comprehensive understanding of social theory and research methods and prepares you for numerous careers in human services and corporations or for an entry-level research job as an interviewer or statistician.

#### **Degree Requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in sociology.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

33 hours in sociology, of which 24 must be advanced, including the sociology core curriculum (15 specified hours in sociology), of which 12 must be taken at UNT and at the advanced level (3000 or 4000). Note: Students must receive a C or better in sociology core curriculum courses.

## Sociology core curriculum

- SOCI 1510 Introduction to Sociology
- SOCI 3200 Sociological Theory
- SOCI 3220 Quantitative Data Collection
- SOCI 3240 Qualitative Data Collection
- SOCI 3280 Quantitative Data Analysis

#### Minor

Recommended but not required.

## Other requirements

- Minimum sociology grade point average of 2.25 is required for graduation.
- A total of 42 hours upper-division work (advanced courses).
- 30-hour residence requirement.

## Sociology, BS

Recommended for students intending to pursue graduate education in sociology or related fields.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Science with a major in sociology.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements (excluding foreign language).

## Major requirements

36 hours in sociology, of which 24 must be advanced, including the sociology core curriculum (15 specified hours in sociology), of which 12 must be taken at UNT and at the advanced level (3000 or 4000). Note: Students must receive a C or better in sociology core curriculum courses.

### Sociology core curriculum

- SOCI 1510 Introduction to Sociology
- SOCI 3200 Sociological Theory
- SOCI 3220 Quantitative Data Collection
- SOCI 3240 Qualitative Data Collection
- SOCI 3280 Quantitative Data Analysis

#### Minor

Recommended but not required.

### Other requirements

- Minimum sociology grade point average of 2.25 is required for graduation.
- A total of 42 hours upper-division work (advanced courses).
- 30-hour residence requirement.

## **Grad Track Options**

# Sociology, BS with grad track option leading to Sociology, MA/MS

The BS + MA/MS in *Sociology with a concentration in Research and Theory* program will prepare students for their future career paths and allow them more flexibility in employment. Following this academic path is an indicator of potential work ethic for employers, illustrates maturity, and the ability to handle a multitude of stressful situations, along with problem-solving capabilities. Students pursuing the BS + MA/MS in Sociology with a concentration in Research and Theory program will also be well prepared for any Ph.D. program, as they will graduate with a concentrated training in a variety of sociological theoretical thought and the ability to apply research methodology and statistical procedures in applied settings.

Earning a BS + MA/MS in Sociology with a concentration in Research and Theory will also prepare emerging professionals enrolled to fulfill the following career aspirations:

- attain and then sustain positions as project managers in the for- and not-for-profit sectors in organizations that require people who can operate as well as teach the skill sets and habits of mind necessary to manage expectations, forge and maintain relationships, and facilitate common understanding;
- use the knowledge they gain from their enrollment in this program to effectively begin Ph.D. programs in areas that include but are not limited to Sociology, Anthropology, Psychology, and other Social Science disciplines;
- assume management-level positions in a wide array of organizations (including non-profit organizations) that require those who work for them to be able to formulate, design, and effectively analyze evidence-based results gleaned from the social research processes, and then use this evidence to support crucial decisions and actions;
- assume leadership roles in both private and public sector organizations that involve establishing and sustaining community outreach;
- use the knowledge and skill sets such as research that they
  will have learned during their enrollment in this program to
  attain and fulfill positions in organizations that require the
  services of leaders who can actually innovate and, when
  necessary, apply theory as a means to resolve complex,
  systemic problems.

## **Admission Criteria**

To be eligible for acceptance, students must have completed a minimum of 75 undergraduate hours, including four of the six core Sociology courses for a BS in Sociology with a grade of "C" or better:

- SOCI 1510 Introduction to Sociology
- SOCI 3200 Sociological Theory
- SOCI 3220 Quantitative Data Collection
- SOCI 3240 Qualitative Data Collection
- SOCI 3280 Quantitative Data Analysis
- SOCI 4990 Sociology Capstone

## Requirements

To earn this "Grad Track" degree, an undergraduate student must have completed 90 credit hours toward the fulfillment of a specific UNT bachelor's degree program with a cumulative G.P.A. of 3.0 or better and have satisfied the rest of its stated admissions requirements. Students who are accepted into this program must elect to enroll in up to four, first-year-of-graduate-study, 5000-level courses in the Sociology Graduate MA/MS curriculum as substitutions for up to four, advanced elective courses in the undergraduate degree.

Each candidate must complete a minimum of 30 credit hours of study at 5000-level earned from passing the (up to) twelve hours of 5000-level courses with a letter grade of "C" or better to earn this degree. Candidates must earn 9 credit hours towards their degree from the required courses listed below.

- SOCI 5050 Sociological Theory (3 credit hours)
- SOCI 5200 Seminar on Research Methods and Design (3 credit hours)
- SOCI 5210 Introduction to Social Statistics (3 credit hours)
- SOCI 5XXX as approved by Grad Track advisor.

Once (up to) four, first-year-of-graduate-study, 5000-level courses in the Sociology MA/MS graduate program curriculum have been completed successfully (i.e. passed with a letter grade of "C" or better), the candidate's bachelor's degree can be conferred, as long as they have met the requirements for whatever undergraduate plan they have filed.

## Thesis and Non-Thesis Options

Within the BS + MA/MS program in Sociology with a Concentration in Research and Theory program, students will have the option of completing the Non-Thesis or Thesis Option.

The following courses must then be completed to fulfill the master's level portion of this Grad

Track degree program following the BS + MA/MS program in Sociology with a Concentration in Research and Theory program:

#### **Non-Thesis Option:**

- SOCI 5XXX Graduate Level Sociology Elective: 1 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 2 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 3 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 4 (3 credit hours)

as well as

 (6 credit hours; 2 5000-level courses) taken within a single UNT Department outside the Department of Sociology to constitute a minor area of study

## **Thesis Option:**

- SOCI 5XXX Graduate Level Sociology Elective: 1 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 2 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 3 (3 credit hours)
- SOCI 5XXX Graduate Level Sociology Elective: 4 (3 credit hours)

as well as:

 6 credit hours of Thesis, as mandated by the Department of Sociology Graduate Program

Students enrolled in the BS + MA/MS in Sociology with a concentration in Research and Theory program must file a graduate degree plan prior to completing 15 credit hours of study within it. It is strongly recommended that each candidate for this degree become familiar with the policies and regulations outlined in the graduate catalog. It is the responsibility of each individual student to meet all of the requirements of the Department of Sociology, the College of Liberal Arts and Social Sciences, and of the Toulouse Graduate School.

#### **Minors**

## **Sociology minor**

A minor in sociology requires a minimum of 18 hours, including 6 advanced and SOCI 1510.

## **Department of Spanish**

Main Departmental Office Language Building, Room 101

Mailing address: 1155 Union Circle #311127 Denton, TX 76203-5017 940-565-2404

Fax: 940-565-2581 Web site: spanish.unt.edu

#### Samuel Manickam, Spanish Chair

Faculty

#### Research

Research conducted by departmental faculty members in Spanish includes linguistics, cultural studies, Spanish and Latin American poetry, contemporary Spanish-American literature, Spanish literature of the Golden Age, Latino and Latin American theatre, Mexican literature and culture, literary theory and women's studies. Spanish literature of the 19th and 20th centuries is another area of interest.

### **Majors**

## Spanish, BA

The Spanish section provides insight into world cultures and languages. While perfecting your Spanish, you can consider teacher certification, a certificate in professional Spanish or a minor in another language. There are opportunities for Spanish majors to study abroad.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in Spanish.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements, 36-39 hours

A minimum of 36-39 hours of Spanish, including:

## Required Spanish courses, 9-12 hours

- SPAN 1010 Elementary Spanish and
- SPAN 1020 Elementary Spanish
- SPAN 1030 Review of Elementary Spanish
- SPAN 2040 Intermediate Spanish
- SPAN 2050 Intermediate Spanish

#### Note

Placement or credit by examination may be used to satisfy SPAN 1010, SPAN 1020, SPAN 2040 and SPAN 2050.

#### Spanish core, 21 hours

A core of 21 hours of specific course work must be met:

## Required grammar and literature courses, 6 hours

- SPAN 3110 Introduction to Hispanic Literature (this course is also a prerequisite for all 4000-level Spanish literature courses)
- SPAN 3003 Advanced Grammar

#### Composition and oral practice, 6 hours

6 hours selected from

- SPAN 3001 Advanced Conversation for Non-Native Speakers
   OR
- SPAN 3002 Advanced Conversation for Native/ Heritage Speakers
- SPAN 3004 Advanced Composition

## Hispanic culture (3000 level), 3 hours

3 hours of a 3000-level Hispanic culture course:

- SPAN 3140 Mexican Civilization
- SPAN 3150 Spanish Culture and Civilization
- SPAN 3160 Latin American Culture and Civilization
- SPAN 3180 Latin American Culture Through Film

## Hispanic literature survey (4000 level), 3 hours

3 hours of 4000-level Hispanic literature survey courses:

- SPAN 4310 Survey of Spanish Literature
- SPAN 4320 Survey of Spanish Literature
- SPAN 4360 Survey of Spanish-American Literature
- SPAN 4370 Survey of Spanish-American Literature

## Advanced Spanish courses, 9 hours

9 hours of advanced Spanish courses (3000- and 4000-level courses). At least 6 hours must be at the 4000 level.

## Other course requirements

None.

#### Minor

Suggested minors: Students who wish to earn a minor are encouraged to choose a second foreign language. Spanish majors should also consider history, geography, business, hospitality management and cultural studies courses that deal specifically with their area of interest.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- Students majoring in Spanish should consider taking history and geography courses that deal specifically with their language study.
- A minimum grade of C is required for a course to count toward the major.
- Minimum GPA of 2.75 in Spanish course work is required for graduation.

## **Grad Track Options**

## Spanish, BA with grad track option leading to Spanish, MA

### **Admissions Criteria**

Outstanding BA students in their senior year with a minimum overall GPA of 3.5; must have completed at least 75 hours of the B.A. in Spanish; recommended by at least two Spanish professors familiar with their work and performance and with whom they've taken at least 2 classes; 5-6 page writing sample of a research paper in Spanish; a 20-minute oral interview with 2 professors who will determine the candidate's preparation for graduate work in Spanish as well as oral ability and a one-page essay in Spanish explaining why the candidate wants to pursue a MA in Spanish.

### Requirements

Students will take 12 hours of graduate courses in Spanish in lieu of 12 elective hours at the undergraduate level; students cannot take graduate courses in lieu of required culture, civilization or literature survey courses at the undergraduate level; all graduate courses presently in the catalog qualify for the graduate track pathway.

#### **Minors**

## **Spanish minor**

A minor in Spanish consists of a minimum of 18-21 semester hours in Spanish, including 9 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to SPAN 1010 through SPAN 2050. A minimum grade of C is required for a course to count toward the minor.

#### All Level Teacher Certification

## **Spanish teacher certification**

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in Spanish.

## Requirements

- SPAN 1010 Elementary Spanish and
- SPAN 1020 Elementary Spanish

or

- SPAN 1030 Review of Elementary Spanish
- SPAN 2040 Intermediate Spanish
- SPAN 2050 Intermediate Spanish
- SPAN 3001 Advanced Conversation for Non-Native Speakers

OR

- SPAN 3002 Advanced Conversation for Native/ Heritage Speakers
- SPAN 3003 Advanced Grammar
- SPAN 3004 Advanced Composition
- SPAN 3110 Introduction to Hispanic Literature
- SPAN 4150 Foreign Language Teaching Methods
- SPAN 4210 Spanish Phonetics and Pronunciation or
- SPAN 4260 Linguistic Structures of Spanish

- 3 hours of 3000-level SPAN culture
- 6 hours of 4000-level SPAN literature
- Must pass the TEXES Languages Other than English (LOTE)-Spanish or the equivalent for Spanish or the Bilingual Target Language Proficiency Test (BTLPT) for Spanish.
- Must choose one of the following options to demonstrate level of oral proficiency in Spanish prior to graduation; Official ACTFL Oral Proficiency Interview (OPI); Official ACTFL Oral Proficiency Interview-Computer (OPI-C).

## Education courses, 21 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

## Additional requirements

Students must also meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## **Undergraduate Academic Certificates**

## **Professional Spanish certificate**

This certificate requires 12 hours of advanced Spanish, including:

## Professional Spanish, 6 hours

Two courses in professional Spanish chosen from:

- SPAN 3510 Spanish for Law Enforcement
- SPAN 3520 Spanish for Social Services
- SPAN 3530 Spanish for Hotel and Restaurant Management
- SPAN 3540 Spanish for Travel and Tourism
- SPAN 3550 Spanish for the Medical Professions I
- SPAN 3560 Spanish for the Medical Professions II
- SPAN 3570 Spanish in the Bilingual Classroom
- SPAN 4040 Spanish Writing for the Mass Media Professions
- SPAN 4080 Business Spanish

## 6 additional advanced hours

Two other Spanish courses at the 3000 or 4000 level.

# Department of Technical Communication

Main Departmental Office Auditorium Building, Room 317

Mail address:

1155 Union Circle #305298 Denton, TX 76203-5017 940-565-4458

Fax: 940-369-8976

Undergraduate Advising Office Auditorium Building, Room 105C

Email: tcoffice@unt.edu

Web site: http://techcomm.unt.edu

## James David Meernik, Regents Professor and Chair

#### Facult

The field of technical communication focuses on making technical topics understandable and using technology to make information usable. The Department of Technical Communication emphasizes evidence-based approaches to preparing students with the technical communication skills required in modern workplaces: writing, designing, and coding. We offer graduate and undergraduate degrees and certificates. Courses are taught by an internationally recognized faculty whose research is at the forefront of the field. Students have leadership opportunities through teaching assistant positions for both undergraduate and graduate students, lab tutor positions in our TECM Lab, and involvement in our student organization. We facilitate connections among faculty, students, and practitioners through client-sponsored course projects, internships, regular networking events, and our industry-led Advisory Board.

A degree in technical and professional communication prepares students for entry-level positions as technical writers/editors, content developers, or usability professionals, most commonly working on teams to create user guides, web content, and proposals in companies within the information technology, consulting, and healthcare industries. Texas employs more technical communicators than any other state except California, and the DFW metroplex employs the fourth most technical communicators among metropolitan areas in the United States. The number of employed technical communicators should increase 8% from 2018 to 2028, which is greater than the 5% increase expected for all occupations and the 4% for all media and communication workers (Bureau of Labor Statistics, 2019 edition). Our MA graduates enjoy a 100% placement rate.

## **Majors**

## Professional and Technical Communication, BA

The Bachelor of Arts program prepares students for entry-level positions as technical writers/editors, content developers, or usability professionals, most commonly working on teams to create user guides, web content, and proposals in companies within the information technology, consulting, and healthcare industries.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in professional and technical communication.

## General Requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements (excluding foreign language).

## Major Requirements

## Foundation Courses (12 hours)

- TECM 2700 Technical Writing
- TECM 3010 The Profession of Technical Communication
- TECM 3550 Content Strategy in Technical Communication
- TECM 4180 Advanced Technical Communication

## Technical Communication Core Courses (12 hours)

- TECM 3100 Visual Technical Communication
- TECM 3200 Information Design for Electronic Media
- TECM 4100 Proposal Writing
- TECM 4190 Technical Editing

## Research Methods (6 hours)

- TECM 4300 Usability and User Experience in Technical Communication
- TECM 4500 Content Analysis in Technical Communication

## Additional Courses (6 hours)

Six additional hours in Technical Communication (TECM) at the 3000 or 4000 level.

## Other Course Requirements

A minimum grade of C is required in all Technical Communication (TECM) courses counting toward the Bachelor of Arts degree with a major in Professional and Technical Communication.

A minimum cumulative GPA of 2.5 for all Technical Communication (TECM) courses is required for graduation.

For more information, see department advisor.

## Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

A minimum grade of C is required in all Technical Communication (TECM) courses counting toward the Bachelor of Science degree with a major in Professional and Technical Communication.

A minimum cumulative GPA of 2.5 for all Technical Communication (TECM) courses is required for graduation.

For more information, see department advisor.

## Professional and Technical Communication, BS

The Bachelor of Science program prepares students for entrylevel positions as technical writers/editors, content developers, or usability professionals, most commonly working on teams to create user guides, web content, and proposals in companies within the information technology, consulting, and healthcare industries.

## **Degree requirements**

The following requirements must be satisfied for a Bachelor of Science with a major in professional and technical communication.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements.

## Major requirements

## Foundation Courses (12 hours)

- TECM 2700 Technical Writing
- TECM 3010 The Profession of Technical Communication
- TECM 3550 Content Strategy in Technical Communication
- TECM 4180 Advanced Technical Communication

## Technical Communication Core Courses (12 hours)

- TECM 3100 Visual Technical Communication
- TECM 3200 Information Design for Electronic Media
- TECM 4100 Proposal Writing
- TECM 4190 Technical Editing

## Research Methods (6 hours)

- TECM 4300 Usability and User Experience in Technical Communication
- TECM 4500 Content Analysis in Technical Communication

## Additional Courses (6 hours)

Six additional hours in Technical Communication (TECM) at the 3000 or 4000 level.

## Other course requirements

## Foreign language requirement options

Complete one of the following course groups (2 courses in total) to substitute for the foreign language requirement of the Liberal Arts and Social Sciences degree requirement.

#### Group 1: Computer science

Complete any two CSCE courses with a grade of C or higher.

## Group 2: Business computing

Complete the following with a grade of C or higher.

- BCIS 2610 Introduction to Computers in Business
- BCIS 3610 Basic Information Systems
- BCIS 3630 Object-Oriented Programming for Business

#### Group 3: Data analysis

Complete the following with a grade of C or higher.

- DSCI 2710 Data Analysis with Spreadsheets
- DSCI 3710 Business Statistics with Spreadsheets

#### Group 4: Information science

Complete the following with a grade of C or higher.

- INFO 4203 Information Indexing and Organization
- INFO 4223 Introduction to Metadata for Information Organization

or

• INFO 3020 - Introduction to Computation with Python

## Other requirements

A minimum grade of C is required in all TECM courses counting toward the Bachelor of Arts degree with a major in Professional and Technical Communication.

A minimum cumulative GPA of 2.5 for all TECM courses is required for graduation.

For more information, see department advisor.

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## **Grad Track Options**

## Professional and Technical Communication, BA or BS with grad track option leading to Professional and Technical Communication MA

The Department of technical communication offers a five-year BA or BS/Master's program for highly motivated Technical Communication majors. The combined grad track program will enable students to earn a BA/BS and MA in five years. The combined grad track will also help students save money and prepare themselves for the rigors of graduate education while still enrolled as an undergraduate.

All applications are reviewed by the department's Director of Graduate Studies. Students must should contact the department o arrange a meeting.

## Eligibility

To be eligible to apply to the grad track program, students must

- Have maintained a cumulative 3.5 GPA, to include transfer credit
- Have completed 75 undergraduate hours, including TECM 2700 and TECM 3010 with A's (75 credits are required for admission)
- Be a declared technical communication major
- Meet with the department's Director of Graduate Studies and Undergraduate Advisor for a short interview

The admission decision is made by the department's Director of Graduate Studies. The student's GPA and the following criteria inform that decision:

- A resume
- A response to a writing prompt
- Nominations from from two TECM faculty
- An interview with the department's Director of Graduate Studies

The learning outcomes in the undergraduate courses are met by the graduate courses. Grad-track students will choose four courses in consultation with the Director of Graduate Studies to replace undergraduate courses and to ensure that classes meet the appropriate level of preparation in both degree programs:

- TECM 5170: Grants and Proposals (replaces TECM 4100: Proposal Writing)
- TECM 5191: Digital Literacies for Professional Communicators (replaces TECM 3200: Information Design for Electronic Media)
- TECM 5185: Principles of Technical Communication (replaces TECM 4180: Advanced Technical Communication)
- TECM 5195: Editing Technical Documents (replaces TECM 4190: Technical Editing)
- TECM 5200: Digital Content Strategy (replaces TECM 3550: Content Strategy)
- TECM 5280: Designing Technical Documents (replaces TECM 3100: Visual Technical Communication)
- TECM 5750: Measuring Usability and User Experience for Professional and Technical Communication (replaces TECM 4300: Usability and User Experience in Technical Communication)
- TECM 5000-level elective for TECM 4000-level elective

#### Restrictions

The grad-track pathway requires students to take 12 graduate credits (4 courses) in their undergraduate senior year. Course work taken for undergraduate credit is considered advance credit, students must complete the 4 graduate courses within 12 calendar months of enrolling in their first graduate course

Students are not permitted to take more than 12 graduate credits until they fully complete the requirements for the BA or BS degree. Students who complete the 12 credits are automatically admitted to the MA program.

Students admitted to a grad track program must complete 90 credit hours before taking the courses in this program. Students must complete the bachelor's degree within one academic year of their first grad track course in order to have the graduate course credits transferred to their graduate plan of study.

Students in the grad track must apply formally for admission to the graduate program associated with the pathway. This requires submitting a formal application for admission to the Toulouse Graduate School typically during the fall semester of their senior year.

#### **Minors**

### **Technical Communication minor**

The minor requires a total of 18 semester hours. A minimum grade of C is required in each technical communication course counted toward the minor.

## Required courses, 9 hours

- TECM 2700 Technical Writing
- TECM 4180 Advanced Technical Communication
- TECM 4190 Technical Editing

## Remaining 9 hours

Students must choose an additional three courses (9 hours) from the following list. At least two of these courses must be at the 3000 or 4000 level.

- TECM 1500 New Media Experience
- TECM 1700 Introduction to Professional, Science, and Technical Writing
- TECM 3100 Visual Technical Communication

- TECM 3200 Information Design for Electronic Media
- TECM 4100 Proposal Writing
- TECM 4200 Research Methods for the Practitioner
- TECM 4250 Writing Technical Procedures and Manuals
- TECM 4700 Writing in the Sciences

# Undergraduate Academic Certificates Digital Media Studies certificate (TECM)

## Certificate requirements, 15 hours

Students may receive a certificate in digital media studies by successfully completing the following courses with a grade of B or higher.

## Required courses, 9 hours

- COMM 3420 Communication and New Technology
- TECM 1500 New Media Experience
- MRTS 3620 Digital Media and Society

## Electives, 6 hours

Selected from the following courses:

- COMM 3820 Social Media Perspectives
- COMM 4320 Communications and Virtual Gaming
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 4270 Strategic Social Media
- MRTS 3360 Social Media Strategies
- MRTS 3525 Content Development for Digital Media
- MRTS 4410 Topics in Digital Media Studies (Gender and Digital Cultures)
- MRTS 4410 Topics in Digital Media Studies (Video Game Perspectives)
- MRTS 4415 Topics in Film and Television Studies (Media Genres/Authors - Video Game Authors)
- MRTS 4450 Topics in Media Industry Studies (Digital Distribution)
- MRTS 4450 Topics in Media Industry Studies (Mobile Media)
- MRTS 4450 Topics in Media Industry Studies (Video Game History)
- Internship option (TECM 4920, MRTS 4480 or COMM 4800) with departmental approval
- Other courses approved by certificate advisor

## **Technical Communication certificate**

Students may receive a certificate in technical writing from the Department of Technical Communication by successfully completing the following courses with a grade of B or higher:

#### Courses, 12 hours

- TECM 2700 Technical Writing
- Nine additional hours in TECM courses at the 3000 or 4000 level

## Additional information

Contact the undergraduate advisor for more information.

## Department of World Languages, Literatures and Cultures

Main Departmental Office Language Building, Room 101

Mailing address: 1155 Union Circle #311127 Denton, TX 76203-5017 940-565-2404 Fax: 940-565-2581

Web site: www.worldlanguages.unt.edu

Marijn S. Kaplan, Chair, World Languages, Literatures and Cultures

Faculty

The Department of World Languages, Literatures and Cultures offers students instruction that enables them to understand, speak, read and write the language chosen for study. Further, the department helps students to gain, through the use of these tools, a knowledge of the countries where the language is spoken and, as a result of this knowledge, to gain an understanding of the people themselves.

The department's place in the College of Liberal Arts and Social Sciences is based on the effective performance of the task of creating a climate of understanding between peoples separated by linguistic and cultural barriers. The department maintains and promotes a strong program of studies in French, German, and Japanese furnishing the appropriate courses in language, literature, culture and pedagogy.

#### **Departmental examination**

Prior to enrollment in a foreign language course, a student who has earned high school credit for a foreign language or who has acquired language skills will be required to take an examination to determine appropriate placement. Based on the results of the examination and if credit is desired, the student will pay a fee for the posting of 3–12 hours of credit corresponding to credit earned in courses 1010–2050. Students will be required to enroll for their first language course at UNT according to the course level indicated by the results of the examination. Any questions should be directed to the Department of World Languages, Literatures and Cultures.

### Faculty-led study abroad programs

Students majoring, minoring or just wanting to complete their foreign language requirement abroad can participate in several faculty-led programs offered by the department in French, German, Italian, Japanese and Russian. Contact the departmental office for additional details.

#### **Bilingual Education concentration**

Interested students should consult with the Department of Teacher Education and Administration in the College of Education for further information.

All program courses in the Department of World Languages, Literatures and Cultures are taught in the specific language of the corresponding program, except for those carrying the prefix LANG or WLLC.

#### **Majors**

## French, BA

Programs offered by the Department of World Languages, Literatures and Cultures provide insight into world cultures and languages. You can perfect your French as well as earn a certificate in professional French through immersive study at UNT and abroad.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in French.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

## 39 hours of French, including

- FREN 1010 Elementary French
- FREN 1020 Elementary French
- FREN 2040 Intermediate French
- FREN 2050 Intermediate French
- FREN 3040 France Today
   or
- FREN 3045 Topics in the Francophone World
- FREN 3050 Advanced Readings in French
  or
- FREN 3055 Image of the Artist in France Throughout the Ages
- FREN 3060 French Phonetics and Pronunciation
- FREN 3065 Advanced French Conversation
- FREN 3070 Advanced French Grammar and Composition

or

- FREN 3075 Writing in French: Style and Technique
  or
- FREN 3095 French for Science and Technology
- Plus 15 semester hours of advanced work, including 9 hours in 4000-level courses or above

## Placement or credit by examination may be used to satisfy

FREN 1010, FREN 1020, FREN 2040, FREN 2050

## Suggested minors for BA with a major in French

Students who wish to earn a minor are encouraged to choose a second foreign language, English, history, business, hospitality management, economics or computer science.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- Students majoring in French should consider taking history and geography courses that deal specifically with their language study.
- Minimum grade of C is required for a course to count toward the major.
- Minimum GPA of 2.75 in French course work is required for graduation.

#### German, BA

Programs offered by the Department of World Languages, Literatures and Cultures provide insight into world cultures and languages. You can perfect your German through the study at UNT and abroad.

## **Degree Requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in German.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of the catalog and the College of Liberal Arts and Social Sciences requirements.

## Major requirements

## 39 hours of German, including

- GERM 1010 Elementary German
- GERM 1020 Elementary German
- GERM 2040 Intermediate German
- GERM 2050 Intermediate German
- Plus 27 semester hours of advanced work, including 9 hours in 4000-level courses or above

## Placement or credit by examination may be used to satisfy

GERM 1010, GERM 1020, GERM 2040, GERM 2050

## Suggested minors for BA with a major in German

Students who wish to earn a minor are encouraged to choose a second foreign language, English, history, business, hospitality management, economics or computer science.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- Students majoring in German should consider taking history and geography courses that deal specifically with their language study.
- Minimum grade of C is required for a course to count toward the major.
- Minimum GPA of 2.75 in German course work is required for graduation.

## Japanese, BA

Programs offered by the Department of World Languages, Literatures and Cultures provide insight into world cultures and languages. You can perfect your Japanese as well as earn a certificate of achievement in Japanese through immersive study at UNT and abroad.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Arts with a major in Japanese.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences degree requirements.

## Major requirements

## 39 hours of Japanese, including

- JAPN 1010 Elementary Japanese
- JAPN 1020 Elementary Japanese
- JAPN 2040 Intermediate Japanese
- JAPN 2050 Intermediate Japanese
- JAPN 3020 Advanced Japanese I
- JAPN 3030 Advanced Japanese II

#### Courses, 21 hours

Students take an additional 21 semester hours of advanced work, including 9 hours in 4000-level courses.

## Suggested minors for BA with a major in Japanese

Students who wish to earn a minor are encouraged to choose a second foreign language, English, history, business, hospitality management, economics or computer science.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Liberal Arts and Social Sciences.

## Other requirements

- Students majoring in Japanese should consider taking history and geography courses that deal specifically with their language study.
- Minimum grade of C is required for a course to count toward the major.
- Minimum GPA of 2.75 in Japanese course work is required for graduation.

#### **Grad Track Options**

## French, BA with grad track option leading to French, MA

The Department of World Languages, Literatures and Cultures offers a grad track pathway through which students can complete a bachelor's degree in four years and then earn a master's degree in the fifth year. This is for highly motivated French majors who have maintained a high GPA in advanced French courses. Students

must apply to this program during their junior year; at the time of application, students must have already completed 12 advanced hours in French.

Students will not be fully admitted to the Toulouse Graduate School until the bachelor's degree has been earned; however, students may be conditionally admitted to this Grad Track Pathway after successfully completing 75 credit hours. Students conditionally admitted to this Grad Track Pathway must complete 90 credit hours before enrolling in Pathway courses.

## Admission requirements and program policies

## Admission requirements

Students are eligible for acceptance upon completion of 75 undergraduate hours, including at least 12 hours of advanced French courses.

Minimum cumulative GPA of 3.5.

Recommended minimum GPA of 3.8 in 12 or more hours of advanced French courses.

French proficiency level of advanced or higher for writing and speaking is required (according to the Proficiency Guidelines published by the American Council on the Teaching of Foreign Languages).

The following items must be submitted:

- one letter of recommendation from a full-time member of the French faculty
- a statement of purpose (1-2 pages in English)
- a writing sample (minimum 2 pages in French)
- an application to the Toulouse Graduate School

Submission of GRE scores is not required.

For students in the UNT Honors College, admission to the graduate program is guaranteed for students who satisfy these requirements.

## Program policies

Undergraduate students who have been accepted to a grad track pathway option must complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they are enrolled in graduate-level courses; otherwise, enrollment in graduate-level courses may no longer be allowed.

Admitted students will take 12 graduate hours during their senior year, which count first toward the bachelor's degree, and then, upon completion of the bachelor's degree, the courses may be transferred to the master's degree.

## Program requirements

In lieu of 4 advanced French courses in the fourth year, students will take any French courses at the 5000 level, except FREN 5016 and FREN 5026.

See French, BA for the remainder of the requirements for the bachelor's degree.

- FREN 5150 Seminar in French
- FREN 5200 Seminar in French
- FREN 5300 French Linguistics
- FREN 5310 Analysis of French Discourse
- FREN 5320 New Technologies for Teaching French
- FREN 5330 History of the French Language
- FREN 5340 French Structures and Stylistics
- FREN 5350 Theory and Analysis of Literary Texts
- FREN 5360 French Translation Theory & Practice
- FREN 5410 Topics in Medieval Literature
- FREN 5430 Topics in Renaissance Literature

- FREN 5450 17th and 18th century French Theatre
- FREN 5460 The 17th and 18th Century French Epistolary Novel
- FREN 5500 Nineteenth and Twentieth-Century French Poetry
- FREN 5520 Nineteenth-Century French Prose
- FREN 5540 Twentieth-Century French Novel
- FREN 5600 French Women Writers
- FREN 5710 History of French Civilization to 1789
- FREN 5715 History of French Civilization Since 1789
- FREN 5720 Contemporary France
- FREN 5730 Topics on Contemporary France
- FREN 5740 Quebec Society and Culture

#### **Minors**

#### **Arabic minor**

A minor in Arabic consists of a minimum of 18 semester hours in Arabic, including 6 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to ARBC 1010 through ARBC 2050. A minimum grade of C is required for a course to count toward the minor.

## **Asian Studies minor**

Various courses are offered in the areas of anthropology, art, history, geography, language, philosophy, political science, and world languages to complete the 18-hour minor in Asian studies. Students interested in this minor should contact Angela Harris, Department of World Languages, Literatures and Cultures (Angela.Harris@unt.edu).

#### **Chinese minor**

A minor in Chinese consists of a minimum of 18 semester hours in Chinese, including 6 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to CHIN 1010 through CHIN 2050. A minimum grade of C is required for a course to count toward the minor.

#### French minor

A minor in French consists of a minimum of 21 semester hours in French, including 9 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to FREN 1010 through FREN 2050. A minimum grade of C is required for a course to count toward the minor.

#### German minor

A minor in German consists of a minimum of 21 semester hours in German, including 9 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to GERM 1010 through GERM 2050. A minimum grade of C is required for a course to count toward the minor.

### **Italian minor**

A minor in Italian consists of a minimum of 18 semester hours in Italian, including 6 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to ITAL 1010 through ITAL 2050. A minimum grade of C is required for a course to count toward the minor.

## Japanese minor

A minor in Japanese consists of a minimum of 21 semester hours in Japanese, including JAPN 3020 and JAPN 3030. Demonstration of proficiency may be substituted for credit in courses equivalent to JAPN 1010 through JAPN 2050. A minimum grade of C is required for a course to count toward the minor.

#### Latin minor

A minor in Latin consists of a minimum of 18 semester hours in Latin, including 6 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to LATI 1010 through LATI 2050. A minimum grade of C is required for a course to count toward the minor.

#### **Russian Studies minor**

The minor in Russian Studies requires a total of 21 hours, including 9 advanced hours. Demonstration of proficiency may be substituted for credit in courses equivalent to RUSS 1010 through RUSS 2050. A minimum grade of C is required for a course to count toward the minor.

## Required courses, 12 hours

- RUSS 1010 Elementary Russian
- RUSS 1020 Elementary Russian
- RUSS 2040 Intermediate Russian
- RUSS 2050 Intermediate Russian
   Demonstration of proficiency may be substituted for credit in courses equivalent to RUSS 1010 through RUSS 2050.

#### 6 advanced hours from:

- RUSS 3070 Russian Composition and Conversation
- RUSS 3080 Russian Through Music and Film
- RUSS 4080 Business Russian
- WLLC 3800 Russian Folklore and Magic
- WLLC 3810 Russian Popular Culture

## 3 additional advanced hours from:

- HIST 4050 Russia from the 9th to the 19th Century
- HIST 4055 The Russian Empire from 1700 to 1917
- HIST 4060 Russia in the 20th and 21st Centuries
- HIST 4061 Russian Cultural History of the 19th and 20th Centuries
- RUSS 3070 Russian Composition and Conversation
- RUSS 3080 Russian Through Music and Film
- RUSS 4080 Business Russian
- WLLC 3800 Russian Folklore and Magic
- WLLC 3810 Russian Popular Culture

## All Level Teacher Certification

#### French teacher certification

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in French.

## Requirements

- FREN 1010 Elementary French
- FREN 1020 Elementary French
- FREN 2040 Intermediate French
- FREN 2050 Intermediate French
- FREN 3040 France Today
- FREN 3045 Topics in the Francophone World
- FREN 3050 Advanced Readings in French

or

278

- FREN 3055 Image of the Artist in France Throughout the Ages
- FREN 3060 French Phonetics and Pronunciation
- FREN 3065 Advanced French Conversation
- FREN 3070 Advanced French Grammar and Composition

or

• FREN 3075 - Writing in French: Style and Technique

or

- FREN 3095 French for Science and Technology
- FREN 4150 Foreign Language Instruction and Assessment
- 6 hours of 4000-level French courses
- 6 hours of 3000- or 4000-level French courses
- Must pass the TEXES Languages Other than English (LOTE) - French or the equivalent for French
- Must choose one of the following options to demonstrate level of oral proficiency in French prior to graduation: Official ACTFL Oral Proficiency Interview (OPI); Official ACTFL Oral Proficiency Interview - Computer (OPI-C).

## Education courses, 21 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

### Additional requirements

Students must also meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

#### German teacher certification

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification in German.

## Requirements

- GERM 1010 Elementary German
- GERM 1020 Elementary German
- GERM 2040 Intermediate German
- GERM 2050 Intermediate German
- GERM 3060 Advanced German I (Oral Communication) or

- GERM 3070 Advanced German II (Written Communication) or
- GERM 3034 Advanced German Grammar
- GERM 4150 Foreign Language Instruction and Assessment
- 6 hours of 4000-level German courses
- 15 hours of 3000- or 4000-level German courses
- Must pass the TEXES Languages Other than English (LOTE)-German or the equivalent for German
- Must choose one of the following options to demonstrate the candidate's level of oral proficiency in German: Official ACTFL Oral Proficiency Interview (OPI); Official ACTFL Oral Proficiency Interview - Computer (OPI-C)

## Education courses, 21 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

## Additional requirements

Students must also meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 105.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

## **Undergraduate Academic Certificates**

## **Certificate of Achievement in Japanese**

## Required courses

12 advanced hours, 6 of which must be at the 4000 level.

#### **Professional French certificate**

This undergraduate academic certificate requires 12 hours of advanced French, including:

## Professional French, 6 hours

Selected from:

- FREN 3090 Professional French
- FREN 3095 French for Science and Technology
- FREN 4080 Business French
- FREN 4085 French Media and Current Events
- FREN 4090 French for Tourism
- FREN 4400 French Linguistics and Translation
- FREN 4430 French Social Media

#### 6 additional advanced hours

Two other French courses at the 3000 or 4000 level.

# Department of Aerospace Studies

Departmental Office AFROTC Building, Room 123

AFROTC-Det 835

Mailing address: 1155 Union Circle #305400 Denton, TX 76203-5017 940-565-2074

Web site: afrotc.unt.edu

Lt Col Robert Koo, Chair

#### **Faculty**

Bonney, Koo, Hood, Frisinger, McCombs, Markwordt, Kuruvilla

The Air Force Reserve Officer Training Corps (AFROTC) program (Aerospace Studies) recruits, educates and commissions officer candidates as an integral part of the UNT curriculum. The Air Force ROTC program consists of three parts: the General Military Course (first two years); Summer Field Training (two weeks over the summer); and the Professional Officer Course (last two years). Students enroll in AERO classes at the same time and in the same manner as other UNT courses. AERO courses normally receive academic credit as part of a student's electives. Each instructor is an active duty Air Force officer.

#### Four-year program

The first two years of the Air Force ROTC four-year program—the General Military Course (GMC)—consist of one hour of classroom work and two hours of leadership laboratory each week. Cadets who wish to compete for an enrollment allocation and entry into the last two years of the program—the Professional Officer Course (POC)—must do so under the requirements of the Professional Officer Course Selection Process. This process uses qualitative factors such as grade point average, unit commander evaluation and aptitude test scores to determine a student's officer potential. After POC selection, students must complete the two-week Field Training encampment at an assigned Air Force base. Cadets enrolled in the POC attend class three hours a week and participate in a weekly leadership laboratory lasting two hours. All GMC and POC cadets must also participate in weekly physical training consisting of at least two sessions lasting one hour each.

In the POC, cadets apply what they have learned in the GMC an at Field Training. The AFROTC detachment at UNT has a cadet corps based on the Air Force organizational pattern of flight, squadron, group and wing. POC cadets are assigned to leadership positions, conduct the leadership laboratories and manage the unit's cadet corps.

Once enrolled in the POC, cadets are enlisted in the Air Force Reserve and assigned to the obligated reserve section. This entitles them to a monthly, non-taxable allowance during the calendar year.

#### Two- and three-year programs

The last two years of the AFROTC program consist of the Professional Officer Course (POC). Students with at least two undergraduate academic years remaining at UNT may apply for a two- or three-year program, sign up for GMC courses, and compete for an enrollment allocation for entry into the POC. Entrance into the POC is highly competitive; two- and three-year applicants must be selected through the selection process described above.

#### **Leadership Laboratory**

Cadets must take a required Leadership Laboratory (LLAB) that consists of a two-hour block per week throughout their enrollment in AFROTC. LLAB is conducted within the framework of the cadet organization with a progression of experiences designed to develop each student's leadership potential. The curriculum involves study of Air Force customs and courtesies, drill and ceremonies, career

opportunities in the Air Force, and the life and work of an Air Force junior officer. Students develop leadership in a wide variety of practical, supervised environments.

#### **Physical Training (PT)**

Each cadet must attend at least two one-hour Physical Training (PT) sessions per week. PT is designed to motivate cadets to pursue an active, physically fit lifestyle. Cadets must meet Air Force physical fitness requirements to attend Field Training, enter the POC and to be commissioned.

#### Uniforms and textbooks

Uniforms and textbooks for AFROTC courses are issued at no cost to the cadets.

#### **Scholarships**

Current emphasis in the Air Force ROTC college scholarship program is to award scholarships to candidates pursuing undergraduate engineering or other scientific and technical disciplines. Nearly 90 percent of Air Force ROTC scholarships are awarded in these disciplines. However, students in every degree program enjoy scholarship opportunities as the Air Force seeks to engage students who excel both academically and militarily. Scholarships are awarded at various amounts in increments of four, three and two years and entitlements may be extended to cover a fifth year of school if the student is taking an approved technical major.

## **Eligibility requirements**

Air Force ROTC is open to any male or female UNT student completing any undergraduate academic degree. Graduate students may be eligible for the Air Force ROTC program, but should consult the UNT Air Force ROTC recruiting officer for additional details due to the program's unique requirements.

#### GMC entry requirements include:

- 1. full-time student status (minimum 12 hours);
- good physical condition;
- 3. being of good moral character; and
- being able to compete for POC before reaching 29 years if programmed for flying training or 39 years if programmed for non-flying training.

#### POC entry requirements include:

- 1. requirements 1–4 above;
- 2. U.S. citizenship;
- 3. at least a 2.0 cumulative grade point average;
- at least two undergraduate academic years remaining at UNT;
- 5. passing score on the Air Force Physical Fitness Assessment;
- 6. pass Air Force medical examination; and
- 7. completion of Summer Field Training.

Contact the Aerospace Studies department at 940-565-2074 for additional information on how to join.

#### **Active-duty service commitments**

Cadets in the POC and second-year Air Force scholarship cadets are contract cadets who agree to accept a commission as a second lieutenant in the Air Force after completing all Air Force ROTC and academic degree requirements. Most cadets incur a four-year, active-duty commitment which begins after commissioning, but may extend to up to ten years of active duty if selected for certain career fields (e.g. pilot).

#### **Credit for University Core Curriculum**

With written approval from the student's major department, completion of upper-division AERO courses may be substituted for up to 3 hours credit toward the Political Science requirement of the University Core Curriculum.

#### **Courses of instruction**

All courses of instruction are located in Course descriptions.

The GMC curriculum includes 1000- and 2000-level AERO lecture courses with associated lab (LLAB) and recitation (PT) hours. The POC curriculum includes 3000- and 4000-level AERO lecture courses with associated lab (LLAB) and recitation (PT) hours.

#### **Minors**

## **Aerospace Studies minor**

## Requirements

A minor in aerospace studies requires 18 hours, including:

- Two semesters of GMC or applicable cooperative education class approved by department chair
- AERO 3310 Leading People and Effective Communication
- AERO 3320 Leading People and Effective Communication
- AERO 4310 National Security Affairs/Preparation for Active Duty
- AERO 4320 National Security Affairs/Preparation for Active Duty

# Department of Military Science

Departmental Office 1500 S. Bonnie Brae St. MGVP Army ROTC

Mailing address: 1155 Union Circle #310977 Denton, TX 76203-5017 940-369-8011

Web site: www.armyrotc.unt.edu

LTC Kelley Keating, Chair

### **Faculty**

CPT Kenneth Metcalf, 1LT Maria Salih, SFC Kenneth DiCristofano, SFC Paul Tetlack

The Department of Military Science offers an Army ROTC program that develops leadership skills and provides military education vital to a career as an Army officer as an integral part of the UNT curriculum. Active-duty Army personnel provide all classroom instruction and program administration.

The program is open to male and female students. Freshmen may enroll in the four-year program, and sophomores through graduate students with at least two undergraduate or graduate academic years remaining at UNT may apply for a two- or three-year program. Deviations from these programs must be approved by the chair of the Department of Military Science. Students who complete any program with at least a bachelor's degree are awarded commissions as U.S. Army officers.

## Three- and four-year program eligibility requirements

- 1. Full-time student (12 credit hours).
- 2. Good physical condition (ACFT 420 or above).
- Good moral character.
- Able to complete the Basic/Advanced Course prior to the age of 31 years (year of commissioning). Non-scholarship students can be granted waivers up to 39 years of age.
- 5. Able to meet eligibility requirements 2–5 of the two-year program below after the first two years of Army ROTC training (Basic Course).

Enrollment procedures for the first two years of Army ROTC, known as the Basic Course, are the same as for any other course at UNT. In the last semester of the Basic Course, students who wish to enroll for the last two years of the program, known as the Advanced Course, must contract with the U.S. Army.

Requirements for contracting (non-scholarship) are a 2.5 GPA, approved medical screening (DODMERB), and a passing score on the Army Physical Fitness Test. As a Contracted cadet, each student receives a tax-free stipend for the duration of the school year of \$450 per month.

#### Two-year program eligibility requirements

- 1. Meet eligibility requirements 1–4 of the four-year program.
- U.S. citizen.
- Have at least a 2.5 cumulative grade point average to be awarded an Army scholarship.
- Have at least two undergraduate or graduate academic years remaining at UNT.
- Pass a physical fitness test and pass a Department of Defense Medical Examination Review Board (DODMERB) medical examination.
- Complete a paid six-week summer training course at Fort Knox, Ky.

Once students in the two-year program compete successfully for a slot and enter into the Advance Course, they will receive the same stipend as other cadets. Each student accepted into the two-year program must contract with the U.S. Army.

#### **Credit for required courses**

Completion of 12 semester hours of upper division ROTC courses can be substituted for PSCI 2305 with prior written approval from the student's major department.

#### **Leadership Laboratory**

A required corresponding level leadership laboratory is taken an average of three hours per week throughout the student's enrollment in AROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential.

Leadership laboratory involves a study of Army customs and courtesies, tactics and techniques, drill and ceremonies, career opportunities in the Army, and the life and work of an Army junior officer. Students develop their leadership potential in a practical, supervised laboratory, which typically includes scenario-driven activities.

### Army ROTC physical training (PT) program

This required program includes three mandatory one-hour PT sessions each week. PT involves enhancing the fitness level of cadets and prepares them to meet AROTC and Army standards. The program is designed to motivate cadets to pursue a physically fit and active lifestyle and to improve both safety and efficiency of physical training within AROTC. Cadets must meet physical fitness requirements in order to be commissioned.

#### Special consideration to veterans

Students with prior active duty military service may be granted waivers on a portion of the Basic Course. For information, consult the department office.

#### **Uniforms**

Uniforms and equipment for Army ROTC courses are issued to contracted/scholarship cadets. Textbooks and study material are issued at no cost to non-contracted cadets.

#### **Scholarships**

Scholarships, available to qualified students in the four-year, two-year and two and a half-year programs, provide full tuition, fees, a textbook allowance (\$1,200) and a tax-free subsistence allowance between \$300 and \$500 per month. Competition is based on SAT or ACT results, high school or college academic record, and extracurricular and athletic activities. For information, contact the department office.

#### **Minors**

## **Military Science minor**

To be eligible for a minor in military science, the student must meet the following requirements.

- Be enrolled in the University of North Texas ROTC program (see program description).
- Have military science accepted as a minor by the student's major degree department

## Course requirements

Successfully complete, with a grade of B or better, four of the following courses:

- MILS 3341 Leadership I
- MILS 3342 Leadership II
- MILS 4341 Advanced Leadership I
- MILS 4342 Advanced Leadership II
- MILS 4391 Conference Course

#### Plus 6 additional hours

Successfully complete 6 additional military science hours with a grade of B or better (MILS 1180 can be repeated for credit to meet this requirement).

## Army ROTC Advanced Camp

Successfully complete the Army ROTC Advanced Camp offered annually in the summer.

## U.S. Army prerequisites

Meet all U.S. Army prerequisites to earn a commission as an Army officer upon graduation.

## **University Courses**

Main Office General Academic Building, Room 220 College of Liberal Arts and Social Sciences

Mailing address: 1155 Union Circle #305189 Denton, TX 76203-5017 940-565-2051

Jean B. Schaake, Associate Dean

University Courses are interdisciplinary and may be counted as elective hours by all eligible UNT students. On recommendation of the department concerned, they may be counted toward a major or minor.

# Frank W. and Sue Mayborn School of Journalism

Main Office Sycamore Hall, Room 206

Mailing address: 1155 Union Circle #311460 Denton, TX 76203-5017 940-565-2205 Fax: 940-565-2370

Office of Student Advising Sycamore Hall, Room 205 940-565-3365

Web sites: www.journalism.unt.edu

#### Andrea Miller, Dean

#### **Faculty**

Careers in journalism and strategic communication are exciting, dynamic and critical to the future of an informed and enlightened American society. The Mayborn School of Journalism provides students with the creative, practical and critical-thinking skills for a successful career in the following fields:

- news, political, entertainment and sports reporting and producing; visual (stills and video) and written content creation across platforms that includes storytelling for social media, web outlets, television, newspapers, magazines, books:
- advertising and strategic communication in corporations, agencies, profit and non-profit organizations, and media;
- public relations and strategic communication in agencies, corporations, government, and non-profit organizations;
- teach journalism and mass communication in secondary schools.

The curriculum prepares students with hands-on skills for work in multiple media platforms; to develop their skills to analyze, evaluate and inform; and to consider the ethical implications of mass communication and its impact in today's world. Students learn in multimedia labs using state-of-the-art equipment and software. The Mayborn School of Journalism comprises five concentrations: advertising, broadcast and digital journalism, digital and print journalism, photojournalism, and public relations.

The journalism major with a broadcast and digital, print and digital, or photojournalism concentration prepares students for careers in reporting, writing, producing, editing and photojournalism (shooting video and stills) for social media, web outlets, television, newspapers, magazines and radio. With a strong focus on multiplatform journalism, students receive hands-on opportunities as news reporters, sports reporters, writers, producers, photojournalists, designers, and editors for online, on air and in print for the *North Texas Daily*, NTDaily.com, NTDaily TV, Hatch photo agency and other area media. Teacher certification is available in journalism.

Students receive hands-on experience from faculty with extensive professional experience in broadcast, print, online and digital news. They also can complete internships at news outlets including newspaper, television, radio and web organizations in the Dallas-Fort Worth area, the nation's fifth largest media market, and in other news organizations in the area and across the state.

The journalism major with an advertising or public relations concentration prepares students to work in strategic communication in a variety of settings: advertising/public relations, marketing agencies, corporations, non-profit agencies, government, public affairs, media, entertainment and more. Students gain critical thinking skills, creative practice and professional experience by working with real world clients to develop campaigns that accomplish the strategic communication goals of the companies.

Students create materials including advertisements for traditional and non-traditional media, newsletters, news releases, public service announcements, web sites and social media strategies. Students also plan and execute events. Students can gain experience through SWOOP, the student-managed advertising and public relations agency.

Faculty in the advertising and public relations concentrations have decades of professional experience and extensive networks and contacts in the industries. Students are required to complete internships at companies in Dallas-Fort Worth, which is the fifth largest media market and one of the fastest growing corporate job hubs in the nation.

#### Vision statement

To create the most innovative professional and academic program while maintaining our journalism heritage.

#### Mission statement

To prepare students with ethical values, life-time communication and intellectual skills, as well as for successful careers in the professions represented by the school's undergraduate departments and graduate degree programs.

#### Accreditation

The Frank W. and Sue Mayborn School of Journalism is among the elite journalism programs that have earned national accreditation by the ACEJMC, the Accrediting Council on Education in Journalism and Mass Communication. (University of Kansas School of Journalism, Stauffer-Flint Hall 1435 Jayhawk Blvd., Lawrence, KS 66045; telephone 785-864-3973; or visit www2.ku.edu/~acejmc/FULLINFO.HTML.)

#### **Academic advising**

Information about academic matters is available in the Office of Student Advising for the School of Journalism. Students will work with professional and faculty advisors concerning degree audits, application of transfer credit, individual career needs and general academic requirements.

### Degree audit

Each student should have a degree audit prepared by the School of Journalism. This official degree audit should be made upon completion of the pre-major requirements, typically by the end of the sophomore year. Transfer students should have degree audits prepared during their first term/semester at UNT. Information is available from the Journalism Office of Student Advising office, Sycamore Hall, Room 205.

#### **Programs of study**

The program is divided into five concentrations: advertising, broadcast and digital journalism, digital and print journalism, photojournalism, and public relations.

#### Core curriculum

Candidates for the Bachelor of Arts degree in the Mayborn School of Journalism must complete the University Core and the Journalism degree requirements shown below. Students should see the Office of Student Advising for their major for more information.

#### **University Core Curriculum**

- Communication (English Composition and Rhetoric) (6 hours): See approved list in the Academics section of this catalog
- Mathematics (3 hours): See "University Core Curriculum Requirements" in the Academics section of this catalog.
- Life and Physical Sciences (6 hours): See "University Core Curriculum Requirements" in the Academics section of this catalog.
- American History (6 hours): See approved list in the Academics section of this catalog.

- 5. Government/Political Science (6 hours): See approved list in the Academics section of this catalog.
- Creative Arts (3 hours): See approved list in the Academics section of this catalog.
- Language, Philosophy and Culture (3 hours): See approved list in the Academics section of this catalog.
- 8. Social and Behavioral Sciences (3 hours): See approved list in the Academics section of this catalog.
- Component Area Option (6 hours): See approved list in the Academics section of this catalog.

## Mayborn School of Journalism degree requirements

The following requirements are in addition to or a specification of the University Core Curriculum requirements for Bachelor of Arts degrees.

- Mathematics (3 hours, also satisfies the university core): MATH 1680. Students must follow all prerequisites as listed in this catalog.
- Foreign Language (6–8 hours, or proficiency): two foreign language classes in the same language from 1010 and 1020 are required. Students may test out of these courses and still satisfy the requirement.
- Social Science/Marketing (12 advanced hours): selected from 3000- or 4000-level courses in anthropology, economics, geography (regional science only), history, philosophy, political science, psychology, social work, sociology and MKTG 3650.

#### Major and minor

For requirements in the major and minor, students should consult "University Core Curriculum" in the Academics section of this catalog, and department or division sections.

#### Other requirements

Elective hours as needed at either the lower level or advanced level to meet the minimum of 120 semester hours for graduation, including 42 advanced hours. Electives should be chosen in consultation with an advisor.

#### **Internships**

Students can gain additional experience through internships at web outlets, television and radio stations, newspapers, magazines, book publishing companies, advertising agencies, public relations agencies, and large and small businesses throughout the Dallas–Fort Worth region and the nation.

Because a journalism education provides students with strong writing, research and critical thinking skills, journalism graduates also find work at a variety of jobs outside the media industry or use the degree to enter graduate or law studies.

#### **Mayborn Conference**

The Mayborn School of Journalism hosts the nationally acclaimed Mayborn Literary Nonfiction Conference each year in July. For more information, go to journalism.unt.edu/maybornconference.

## **North Texas Daily**

The award-winning *North Texas Daily*, UNT's student newspaper in print and online, provides practical experience for UNT students in and outside the School of Journalism. The Student Publications Committee selects the editor each term/semester, and staff jobs are open to any UNT student. The *Daily* is published once a week in the fall and spring terms/semesters and less frequently in the summer. The *Daily* has been providing news and entertainment to UNT students since 1948. For more information, contact the *Daily's* advisor at 940-565-2205, or visit the Daily's web site at www.ntdaily.com.

#### **North Texas Daily TV**

Beside working on the student-run newspaper NTDaily and NTDaily com, students may also practice the skills they learn in journalism classes by working on the NTDaily TV newscast, sports talk shows and highlight shows, community affairs, and other local programs. The student-produced programming is shown on Denton Community Television (DCTV), the city's public access channel which is operated on campus by the Mayborn School of Journalism. Students may also create and produce other programming of interest to the university community and residents of Denton.

#### **SWOOP Agency**

SWOOP is a student-managed advertising and public relations agency doing real work for real clients. Under the guidance of faculty with professional agency experience, students come up with big ideas that build their clients' businesses while also building their resumes. Students work on a variety of projects in positions such as account management, account planning, media, public relations, copy writing, art direction and social media. Students may apply as volunteers or receive practicum credit.

## Ad Team/National Student Advertising Competition

Ad Team is a group of dedicated students who come together to create, develop and execute an integrated communications campaign for a national client. This intensive immersion in an advertising campaign, under the guidance of veteran faculty, culminates in the American Advertising Federation's National Student Advertising Competition where the Ad Team pitches its campaign to a panel of professional judges from the communications industry.

#### **HATCH**

HATCH is a student-run agency that offers real world experience for visual storytellers. Student photographers cover events, produce portraits, document anything from research to architecture and tell stories through multimedia video. The experience gives photojournalism students the opportunity to get hands-on training plus on-the-job work experience. The team includes photographers with diverse skills including studio and on-location lighting, documentary or editorial storytelling and more.

#### Majors

## Journalism with a concentration in Advertising, BA

A concentration in advertising from the Mayborn School of Journalism emphasizes advertising. You will graduate with competitive visual creative skills gained from extensive hands-on experience working in state-of-the-art technology labs and with different media.

#### Program requirements

## Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the Mayborn School of Journalism requirements.

## Major requirements

46 semester hours in journalism in advertising, public relations, digital and print journalism, broadcast and digital journalism, or photojournalism. Students may take no more than 48 hours in journalism. Check catalog for prerequisites before enrolling in any advanced course.

## Journalism foundation requirements

The following requirements are prerequisites for all advanced journalism courses:

- 1. Complete the following with a 2.0 cumulative UNT GPA:
  - JOUR 1210 Mass Communication and Society
  - JOUR 2000 Principles of Advertising and Public Relations
  - JOUR 2310 Introduction to Media Writing
- 2. The journalism math requirement for all concentrations:
  - MATH 1680 Elementary Probability and Statistics
- 3. Complete the following with a grade of C or better:
  - ENGL 1310 First-Year Writing I
  - ENGL 1320 First-Year Writing II
- Students must pass the grammar, spelling and punctuation (GSP) exam to be permitted to enroll in JOUR 2310.
   Students who transfer credit for JOUR 2310 must take the grammar, spelling and punctuation (GSP) exam during their first term/semester at UNT.

## Advertising concentration

49 semester hours in journalism.

## Foundation courses, 9 hours

- JOUR 1210 Mass Communication and Society
- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2310 Introduction to Media Writing

## Upper-level course requirements

## Writing course, 3 hours

JOUR 3050 - Advertising Copywriting

#### Visual communication courses, 6 hours

- JOUR 3055 Advertising Art Direction
- JOUR 3210 Applied Design for Advertising and Public Relations

#### Critical thinking course, 3 hours

JOUR 3020 - Advertising Account Planning

#### Audience analysis course, 3 hours

JOUR 3040 - Advertising Media Strategy

## Campaigns course, 6 hours

- JOUR 4070 Advertising Campaigns
- JOUR 4075 Advertising Campaigns Competition

#### Professional application courses, 6 hours

JOUR 3070 - Advertising Agency Management

#### And 3 hours selected from

- JOUR 4020 Advertising Industry in New York
- JOUR 4052 Advertising Portfolio
- JOUR 4055 Broadcast Advertising
- JOUR 4060 Advertising Agency Account Management
- JOUR 4270 Strategic Social Media

## Internship/practicum, 1 hour

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4805 Advertising and Public Relations Practicum
- JOUR 4815 SWOOP Agency Practicum

#### Capstone course, 3 hours

 JOUR 4470 - Ethics, Law and Diversity in Advertising and Public Relations

#### 9 additional hours

9 additional hours selected from professional application, internship/practicum, or selected from:

- JOUR 2300 Principles of News
- JOUR 3200 Mass Communication Research Methods
- JOUR 3260 Web Design for Journalism
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3400 Fundamentals of Public Relations Practices
- JOUR 4030 Advertising and Public Relations for Social Good
- JOUR 4055 Broadcast Advertising
- JOUR 4060 Advertising Agency Account Management
- JOUR 4065 Advanced Art Direction
- JOUR 4075 Advertising Campaigns Competition
- JOUR 4210 Topics in Journalism and Mass Media
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4270 Strategic Social Media
- JOUR 4290 Media Innovation Lab
- JOUR 4520 Advertising and Public Relations Study Abroad
- JOUR 4820 History of American Media

## Other course requirements

 MKTG 3651 - Foundations of Marketing Practice for Non-Business Majors

### Minor

#### Business concentration, 18 hours

- MKTG 3010 Professional Selling
- MKTG 3651 Foundations of Marketing Practice for Non-Business Majors
- MKTG 4120 Consumer Behavior
- Plus 9 hours of upper-level marketing and/or management classes approved by advertising and public relations

#### Or, another 18 hour minor

Must be outside the Mayborn School of Journalism.

#### **Flectives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information, see an academic advisor in the Mayborn School of Journalism.

## Other requirements

Students majoring in journalism are required to maintain a 2.0 cumulative UNT GPA to enroll in journalism courses and have a 2.5 journalism GPA in order to graduate.

- A grade of C or higher is required for all journalism courses to be applied toward the major/minor degree requirements.
- b. No more than 12 semester hours of journalism credit will be accepted from a transfer student who is entering with fewer than 75 semester credit hours. For students transferring with 75 or more semester credit hours, a maximum of 18 transfer journalism hours will be accepted for credit toward the bachelor's degree.
- A minimum of 72 semester credit hours must be completed outside of journalism. These 72 semester credit hours may not include MRTS.

## Journalism with a concentration in Broadcast and Digital Journalism, BA

Students interested in careers in broadcast media—such as broadcast news reporters, writers and producers—enroll in the school's broadcast and digital journalism concentration. You will learn to cover a news "beat," shoot video and stills, and edit using nonlinear editing systems. You also learn to appear on camera, to do live reporting and anchoring, and to produce content for on air and online, including newscasts and webcasts.

## **Program requirements**

## Degree Requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the Mayborn School of Journalism requirements.

## Major requirements

46 semester hours in journalism in either broadcast and digital journalism. Students may take no more than 48 hours in journalism. Check catalog for prerequisites before enrolling in any advanced course.

## Journalism foundation requirements

The following requirements are prerequisites for all advanced journalism courses.

- 1. Complete the following with a 2.0 cumulative UNT GPA:
  - JOUR 1210 Mass Communication and Society
  - JOUR 2310 Introduction to Media Writing
- 2. The journalism math requirement for all concentrations:
  - MATH 1680 Elementary Probability and Statistics
- Complete the following with a grade of C or better:
  - ENGL 1310 First-Year Writing I
  - ENGL 1320 First-Year Writing II
- Students must pass the grammar, spelling and punctuation (GSP) exam to be permitted to enroll in JOUR 2310.
   Students who transfer credit for JOUR 2310 must take the grammar, spelling and punctuation (GSP) exam during their first term/semester at UNT.

## Broadcast Journalism concentration

46 semester hours in journalism.

#### Foundation courses, 6 hours

- JOUR 1210 Mass Communication and Society
- JOUR 2310 Introduction to Media Writing

## Writing/reporting/editing, 6 hours

- JOUR 3322 Copyediting
- JOUR 3323 News Writing for Broadcast and Web

## Advanced writing/reporting/editing, 6 hours

- JOUR 4410 Reporting of Public Affairs
- JOUR 4323 Advanced Writing and Reporting for Broadcast and Web

## Visual journalism, 9 hours

- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3340 Digital Media for Journalists
- JOUR 4343 Visual News Storytelling

## Critical thinking, 3 hours

#### Selected from:

- JOUR 4240 Comparative International Media Systems
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4820 History of American Media

## Professional application, 1 hour

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4810 News or Sports Practicum

#### Law and ethics, 3 hours

• JOUR 4620 - Mass Communication Law and Ethics

## Capstone, 3 hours

JOUR 4999 - News Capstone

#### 9 additional hours

Critical thinking, professional application courses from above lists not previously taken, or selected from:

- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2300 Principles of News
- JOUR 3210 Applied Design for Advertising and Public Relations
- JOUR 3260 Web Design for Journalism
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 3310 Feature Writing
- JOUR 3321 News Reporting and Writing
- JOUR 3330 Mobile Journalism
- JOUR 3410 Public Relations for Non-Profits
- JOUR 3420 Public Relations Writing
- JOUR 3700 Fundamentals of Photojournalism
- JOUR 4210 Topics in Journalism and Mass Media
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4220 Business Journalism

- JOUR 4270 Strategic Social Media
- JOUR 4280 Media Management
- JOUR 4290 Media Innovation Lab
- JOUR 4321 Opinion Writing
- JOUR 4350 Sports Journalism
- JOUR 4355 Sport Media Relations
- JOUR 4530 News Study Abroad
- JOUR 4720 Multimedia Storytelling for News
- JOUR 4850 Magazine Production
   Students may take an additional 2 hours in either the practicum or internship courses.

## Minor

An 18-hour minor outside the Mayborn School of Journalism.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/or the minimum total hours required for the degree. For specific information see an academic advisor in the Mayborn School of Journalism

## Other requirements

Students majoring in journalism are required to maintain a 2.0 cumulative UNT GPA to enroll in journalism courses and have a 2.5 journalism GPA to graduate.

- a. A grade of C or higher is required for all journalism courses to be applied toward the major/minor degree requirements.
- b. No more than 12 semester hours of journalism credit will be accepted from a transfer student who is entering with fewer than 75 semester credit hours. For students transferring with 75 semester credit hours or more, a maximum of 18 transfer journalism hours will be accepted for credit toward the bachelor's degree.
- c. A minimum of 72 semester credit hours must be completed outside of journalism. These 72 semester credit hours may not include MRTS.

## Journalism with a concentration in Digital and Print Journalism, BA

In the Mayborn School of Journalism, you learn to communicate and tell stories relevant to society's needs. The digital and print journalism concentration focuses on news reporting and trains you in digital practices currently employed in the industry.

#### **Program requirements**

## Degree requirements

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the Mayborn School of Journalism requirements.

## Major requirements

46 semester hours in journalism in advertising, public relations, digital and print journalism, broadcast and digital journalism, or photojournalism. Students may take no more than 48 hours in journalism. Check catalog for prerequisites before enrolling in any advanced course.

## Journalism foundation requirements

The following requirements are prerequisites for all advanced journalism courses:

- 1. Complete the following with a 2.0 cumulative UNT GPA:
  - JOUR 1210 Mass Communication and Society
  - JOUR 2310 Introduction to Media Writing
- 2. The journalism math requirement for all concentrations:
  - MATH 1680 Elementary Probability and Statistics
- 3. Complete the following with a grade of C or better:
  - ENGL 1310 First-Year Writing I
  - ENGL 1320 First-Year Writing II
- Students must pass the grammar, spelling and punctuation (GSP) exam to be permitted to enroll in JOUR 2310.
   Students who transfer credit for JOUR 2310 must take the grammar, spelling and punctuation (GSP) exam during their first term/semester at UNT.

## Digital and print journalism concentration

46 semester hours in journalism.

#### Foundation courses, 6 hours

- JOUR 1210 Mass Communication and Society
- JOUR 2310 Introduction to Media Writing

## Writing/reporting/editing, 6 hours

- JOUR 3321 News Reporting and Writing
- JOUR 3322 Copyediting

## Advanced writing/reporting/editing, 6 hours

One required course:

JOUR 4410 - Reporting of Public Affairs

#### Plus 3 hours selected from

- JOUR 3310 Feature Writing
- JOUR 4321 Opinion Writing
- JOUR 4350 Sports Journalism

## Visual journalism, 9 hours

One required course:

 JOUR 3300 - Introduction to Visual Communication for News

#### Plus 6 hours selected from

- JOUR 3340 Digital Media for Journalists
- JOUR 3700 Fundamentals of Photojournalism
- JOUR 4720 Multimedia Storytelling for News
- JOUR 4850 Magazine Production

## Critical thinking course, 3 hours

Selected from:

- JOUR 4240 Comparative International Media Systems
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4820 History of American Media

## Professional application course, 1 hour

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4810 News or Sports Practicum

#### Law and ethics, 3 hours

JOUR 4620 - Mass Communication Law and Ethics

## Capstone course, 3 hours

• JOUR 4999 - News Capstone

#### 9 additional hours

9 additional hours selected from advanced writing/reporting/editing, critical thinking, visual journalism or professional application courses listed above or selected from:

- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2300 Principles of News
- JOUR 3210 Applied Design for Advertising and Public Relations
- JOUR 3260 Web Design for Journalism
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 3323 News Writing for Broadcast and Web
- JOUR 3330 Mobile Journalism
- JOUR 3410 Public Relations for Non-Profits
- JOUR 3420 Public Relations Writing
- JOUR 4210 Topics in Journalism and Mass Media
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4220 Business Journalism
- JOUR 4270 Strategic Social Media
- JOUR 4280 Media Management
- JOUR 4290 Media Innovation Lab
- JOUR 4323 Advanced Writing and Reporting for Broadcast and Web
- JOUR 4343 Visual News Storytelling
- JOUR 4355 Sport Media Relations
- JOUR 4530 News Study Abroad

## Other course requirements

None.

#### Minor

An 18-hour minor outside the Mayborn School of Journalism.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information, see an academic advisor in the Mayborn School of Journalism.

## Other requirements

Students majoring in journalism are required to maintain a 2.0 cumulative UNT GPA to enroll in journalism courses and have a 2.5 journalism GPA in order to graduate.

 A grade of C or higher is required for all journalism courses to be applied toward the major/minor degree requirements.

- b. No more than 12 semester hours of journalism credit will be accepted from a transfer student who is entering with fewer than 75 semester credit hours. For students transferring with 75 or more semester credit hours, a maximum of 18 transfer journalism hours will be accepted for credit toward the bachelor's degree.
- A minimum of 72 semester credit hours must be completed outside of journalism. These 72 semester credit hours may not include MRTS.

# Journalism with a concentration in Photojournalism, BA

In the Mayborn School of Journalism, you learn to communicate and tell visual stories relevant to society's needs. The photojournalism concentration trains you in visual storytelling practices currently employed in the industry.

# **Program requirements**

# Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the Mayborn School of Journalism requirements.

# Major requirements

46 semester hours in journalism in photojournalism. Students may take no more than 48 hours in journalism. Check catalog for prerequisites before enrolling in any course.

# Journalism foundation requirements

The following requirements are prerequisites for all advanced journalism courses.

- 1. Complete the following with a 2.0 cumulative UNT GPA:
  - JOUR 1210 Mass Communication and Society
  - JOUR 2310 Introduction to Media Writing
- 2. The journalism math requirement for all concentrations:
  - MATH 1680 Elementary Probability and Statistics
- 3. Complete the following with a grade of C or better.
  - ENGL 1310 First-Year Writing I
  - ENGL 1320 First-Year Writing II
- Students must pass the grammar, spelling and punctuation (GSP) exam to be permitted to enroll in JOUR 2310.
   Students who transfer credit for JOUR 2310 must take the grammar, spelling and punctuation (GSP) exam their first term/semester at UNT.

# Photojournalism concentration

46 semester hours in journalism.

#### Foundation courses, 6 hours

- JOUR 1210 Mass Communication and Society
- JOUR 2310 Introduction to Media Writing

#### Writing/reporting/editing, 6 hours

- JOUR 3321 News Reporting and Writing OR
- JOUR 3323 News Writing for Broadcast and Web
- JOUR 3322 Copyediting

# Advanced writing/reporting/editing, 6 hours

• JOUR 4410 - Reporting of Public Affairs

#### And 3 hours selected from

- JOUR 3310 Feature Writing
- JOUR 4321 Opinion Writing
- JOUR 4350 Sports Journalism

#### Visual journalism, 12 hours

- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3700 Fundamentals of Photojournalism
- JOUR 4720 Multimedia Storytelling for News
- JOUR 4730 Advanced Photojournalism Portfolio

### Critical thinking, 3 hours

#### Selected from:

- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4240 Comparative International Media Systems
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4820 History of American Media

# Professional application, 1 hour

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4810 News or Sports Practicum

#### Law and ethics. 3 hours

• JOUR 4620 - Mass Communication Law and Ethics

#### Capstone, 3 hours

• JOUR 4999 - News Capstone

### 6 additional hours

6 additional hours selected from advanced writing/reporting/editing, critical thinking, or professional application courses listed above, or selected from:

- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2300 Principles of News
- JOUR 3210 Applied Design for Advertising and Public Relations
- JOUR 3260 Web Design for Journalism
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 3323 News Writing for Broadcast and Web
- JOUR 3330 Mobile Journalism
- JOUR 3340 Digital Media for Journalists
- JOUR 3410 Public Relations for Non-Profits
- JOUR 3420 Public Relations Writing
- JOUR 4210 Topics in Journalism and Mass Media
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4220 Business Journalism
- JOUR 4270 Strategic Social Media
- JOUR 4280 Media Management

- JOUR 4290 Media Innovation Lab
- JOUR 4323 Advanced Writing and Reporting for Broadcast and Web
- JOUR 4343 Visual News Storytelling
- JOUR 4355 Sport Media Relations
- JOUR 4850 Magazine Production

#### Minor

An 18-hour minor outside the Mayborn School of Journalism.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the Mayborn School of Journalism.

# Other requirements

Students majoring in journalism are required to maintain a 2.0 cumulative UNT GPA to enroll in journalism courses and have a 2.5 journalism GPA to graduate.

- A grade of C or higher is required for all journalism courses to be applied toward the major/minor degree requirements.
- b. No more than 12 semester hours of journalism credit will be accepted from a transfer student who is entering with fewer than 75 semester credit hours. For students transferring with 75 semester credit hours or more, a maximum of of 18 transfer journalism hours will be accepted for credit toward the bachelor's degree.
- A minimum of 72 semester credit hours must be completed outside of journalism. These 72 semester credit hours may not include MRTS.

# Journalism with a concentration in Public Relations, BA

A concentration in public relations from the Mayborn School of Journalism emphasizes public relations. You will graduate with competitive skills of persuasion gained from extensive hands-on experience working in state-of-the-art technology labs and with different media.

# **Program requirements**

# Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General University Requirements" in the Academics section of this catalog and the Mayborn School of Journalism.

# Major requirements

46 semester hours in journalism in public relations. Students may take no more than 48 hours in journalism. Check catalog for prerequisites before enrolling in any course.

# Journalism foundation requirements

The following requirements are prerequisites for all advanced journalism courses.

- 1. Complete the following with a 2.0 cumulative UNT GPA:
  - JOUR 1210 Mass Communication and Society
  - JOUR 2310 Introduction to Media Writing

- 2. The journalism math requirement for all concentrations:
  - MATH 1680 Elementary Probability and Statistics
- 3. Complete the following with a grade of C or better:
  - ENGL 1310 ENGL 1310 First-Year Writing I
  - ENGL 1320 ENGL 1320 First-Year Writing II
- Students must pass the grammar, spelling and punctuation (GSP) exam to be permitted to enroll in JOUR 2310.
   Students who transfer credit for JOUR 2310 must take the grammar, spelling and punctuation (GSP) exam during their first term/semester at UNT.

#### Public Relations concentration

46 semester hours in journalism.

#### Foundation courses, 6 hours

- JOUR 1210 Mass Communication and Society
- JOUR 2310 Introduction to Media Writing

### Upper-level course requirements

#### Writing, 9 hours

- JOUR 3322 Copyediting
- JOUR 3420 Public Relations Writing
- JOUR 4460 Public Relations Communication

#### Visual communication, 3 hours

 JOUR 3210 - Applied Design for Advertising and Public Relations

#### Critical thinking, 6 hours

- JOUR 3400 Fundamentals of Public Relations Practices
- JOUR 4470 Ethics, Law and Diversity in Advertising and Public Relations

#### Audience analysis, 3 hours

 JOUR 3200 - Mass Communication Research Methods

#### Professional application, 6 hours

JOUR 4270 - Strategic Social Media

#### And 3 hours selected from

- JOUR 3410 Public Relations for Non-Profits
- JOUR 4440 Public Relations Case Studies

#### Internship/practicum, 1 hour

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4805 Advertising and Public Relations Practicum
- JOUR 4815 SWOOP Agency Practicum

#### Campaigns Capstone, 3 hours

• JOUR 4480 - Public Relations Campaigns

#### 9 additional hours

9 additional hours selected from professional application, internship/practicum or selected from:

- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 2300 Principles of News

- JOUR 3040 Advertising Media Strategy
- JOUR 3070 Advertising Agency Management
- JOUR 3260 Web Design for Journalism
- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3450 Public Relations Practices for Business
- JOUR 4030 Advertising and Public Relations for Social Good
- JOUR 4210 Topics in Journalism and Mass Media
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4290 Media Innovation Lab
- JOUR 4350 Sports Journalism
- JOUR 4355 Sport Media Relations
- JOUR 4520 Advertising and Public Relations Study Abroad
- JOUR 4820 History of American Media

#### Other course requirements

 MKTG 3651 - Foundations of Marketing Practice for Non-Business Majors

#### Minor

#### Business concentration, 18 hours

- MKTG 3010 Professional Selling
- MKTG 4120 Consumer Behavior
- Plus 9 hours of approved upper-level marketing and/or management classes (see Office of Student Advising).
- MKTG 3651 Foundations of Marketing Practice for Non-Business Majors

#### Or, another 18 hour minor

Must be outside the Mayborn School of Journalism.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the Mayborn School of Journalism.

# Other requirements

Students majoring in journalism are required to maintain a 2.0 cumulative UNT GPA to enroll in journalism courses and have a 2.5 journalism GPA to graduate.

- a. A grade of C or higher is required for all journalism courses to be applied toward the major/minor degree requirements.
- b. No more than 12 semester hours of journalism credit will be accepted from a transfer student who is entering with fewer than 75 semester credit hours. For students transferring with 75 semester credit hours or more, a maximum of 18 transfer journalism hours will be accepted for credit toward the bachelor's degree.
- A minimum of 72 semester credit hours must be completed outside of journalism. Those 72 semester credit hours may not include MRTS.

#### **Grad Track Options**

# Journalism, BA with grad track option leading to Journalism, MA

### Requirements

To be eligible for the journalism grad track, students must:

- Have successfully completed 75 or more undergraduate credit hours and be classified as a junior.
- Have a minimum cumulative GPA of 3.5
- 3. Have successfully completed all of the following Journalism courses:
  - Broadcast/Digital, Print/Digital, Photo Journalism students (4 courses): JOUR 2310, JOUR 3321 or JOUR 3323, JOUR 3322 and JOUR 3300
  - Advertising students (4 courses): JOUR 2000, JOUR 2310, JOUR 3020 and JOUR 3040
  - Public relations students (3 courses): JOUR 2310 , JOUR 3210 and JOUR 3322.

Once admitted to the pathway program, undergraduate students can take up to 12 hours from the following classes after they have completed 90 hours of undergraduate study. Their grad track course work must be determined in consultation with the director of graduate studies/graduate academic advisor.

A grade of "B" or better is required in all classes taken for credit in the pathway for the course to count for the master's degree. Once the BA is completed, these courses may be transferred to the MA degree.

Undergraduate students who have been accepted to a grad track option must complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they start taking graduate courses. They also must submit a portfolio and be accepted officially into the Mayborn Graduate Institute of Journalism before completing their grad track to start their MA program. If they fail, their enrollment in additional graduate-level course work beyond 12 hours will be suspended. The MA program requires students to write a master's thesis.

Students should try to take as many of the following four core required courses as they can during their grad track program:

- JOUR 5040 Media Studies and Theories
- JOUR 5250 Quantitative Research
- JOUR 5260 Qualitative Research
- JOUR 5310 Media Ethics

Depending on their concentration and degree plan, grad track students are allowed to take some of the following elective courses:

- JOUR 5050 Readings in Mass Communication
- JOUR 5100 Case Problems in Public Relations
- JOUR 5130 International Advertising and Public Relations Study Abroad
- JOUR 5140 Strategic Persuasion and Media Effects
- JOUR 5150 International Mass Communication
- JOUR 5210 Race, Gender and the Media: A Methods Approach
- JOUR 5220 Advanced Business Journalism
- JOUR 5330 Strategic Social Media
- JOUR 5350 Seminar in Journalism and Mass Communication
- JOUR 5520 Advanced Study in Advertising & Public Relations for Social Good
- JOUR 5550 Principles of Magazine Production: Denton Live
- JOUR 5700 Advanced Feature Writing
- JOUR 5760 International News and Media Study Abroad

# Journalism, BA with grad track option leading to Journalism, MJ

### Requirements

To be eligible for the journalism grad track, students must:

- Have successfully completed 75 or more undergraduate credit hours and be classified as a junior.
- 2. Have a minimum cumulative GPA of 3.5
- Have successfully completed all of the following Journalism courses:
  - Broadcast/Digital, Print/Digital, Photo Journalism students (4 courses): JOUR 2310, JOUR 2300, JOUR 3321 or JOUR 3322 or JOUR 3323, and JOUR 3300:
  - Advertising students (4 courses): JOUR 2000, JOUR 2310; JOUR 3020 and JOUR 3040;
  - Public relations students (3 courses): JOUR 3210, JOUR 3210 and JOUR 3322.

Once admitted to the pathway program, undergraduate students can take up to 12 hours from the following classes after they have completed 90 hours of undergraduate study. Their grad track course work must be determined in consultation with the director of graduate studies/graduate academic advisor.

A grade of "B" or better is required in all classes taken for credit in the pathway for the course to count for the master's degree. Once the BA is completed, these courses may be transferred to the MJ degree.

Undergraduate students who have been accepted to a grad track option must complete all of their bachelor's degree requirements and graduate within 12 months of the first day of the semester in which they start taking graduate courses. They also must submit a portfolio and be accepted officially into the Mayborn Graduate Institute of Journalism before completing their grad track to start their MJ program. If they fail, their enrollment in additional graduate-level course work beyond 12 hours will be suspended. Writing a master's thesus is optional in the MJ program.

Students should try to take as many of the following four core required courses as they can during their grad track program:

- JOUR 5040 Media Studies and Theories
- JOUR 5250 Quantitative Research
- JOUR 5260 Qualitative Research
- JOUR 5310 Media Ethics

Depending on their concentration and degree plan, grad track students are allowed to take some of the following elective courses:

- JOUR 5050 Readings in Mass Communication
- JOUR 5100 Case Problems in Public Relations
- JOUR 5130 International Advertising and Public Relations Study Abroad
- JOUR 5140 Strategic Persuasion and Media Effects
- JOUR 5150 International Mass Communication
- JOUR 5210 Race, Gender and the Media: A Methods Approach
- JOUR 5220 Advanced Business Journalism
- JOUR 5330 Strategic Social Media
- JOUR 5350 Seminar in Journalism and Mass Communication
- JOUR 5520 Advanced Study in Advertising & Public Relations for Social Good
- JOUR 5550 Principles of Magazine Production: Denton Live
- JOUR 5700 Advanced Feature Writing
- JOUR 5760 International News and Media Study Abroad

#### **Minors**

#### Journalism minor

Students who wish to minor in journalism will take 18 hours with at least 9 hours of upper-level classes. All students are required to take one entry-level course plus 5 other courses. Depending on the electives chosen, a student could select a general journalism minor or one with a focus in strategic communications or news. (See the Frank W. and Sue Mayborn School of Journalism for a list of selected courses and prerequisites.)

To receive a minor in journalism, a grade of C or better must be earned in each journalism course completed in residence or transferred to UNT.

Nine hours of upper-level journalism courses must be taken in residence at UNT.

The grammar, spelling and punctuation exam (GSP) is required for a minor in news and for all courses that have the GSP exam listed as a prerequisite.

Prerequisites for upper-level classes must be completed.

#### Certificates

### **Advertising Creative certificate**

The Advertising Creative Certification is designed for students who are interested in working in the creative-side of advertising. The program consists of 18 semester credit hours with courses that include both copywriting and art direction as well as the computer programs require of creative advertising professionals. Students will work on developing their portfolios as part of this coursework.

A grade of C or better is required in all coursework.

# Requirements

- JOUR 3050 Advertising Copywriting
- JOUR 3055 Advertising Art Direction
- JOUR 3210 Applied Design for Advertising and Public Relations
- JOUR 4052 Advertising Portfolio
- JOUR 4055 Broadcast Advertising
- JOUR 4065 Advanced Art Direction

### **Secondary Teacher Certification**

#### Journalism teacher certification

The Mayborn School of Journalism encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Office of Student Advising in GAB, Room 107, can assist students with specific requirements for teacher certification in Journalism. Upon completion of this program, students will be prepared to sit for the certification examinations in Journalism.

#### Requirements

Newswriting-editorial required courses:

- JOUR 1210 Mass Communication and Society
- JOUR 2310 Introduction to Media Writing
- JOUR 3210 Applied Design for Advertising and Public Relations
- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3321 News Reporting and Writing
- JOUR 3322 Copyediting
- JOUR 3323 News Writing for Broadcast and Web
- JOUR 3340 Digital Media for Journalists
- JOUR 4100 Supervising School Media
- JOUR 4620 Mass Communication Law and Ethics

- JOUR 4820 History of American Media
- One course from JOUR 3700 or JOUR 4850
- One hour from professional application courses (either JOUR 4800 or JOUR 4810)

#### Note

See Journalism with a concentration in Digital and Print Journalism, BA for GPA requirements.

# Professional education requirements, 21 hours

Students must also meet all GPA requirements to apply for state certification. In order to enroll for the first required education course, the student must make application to the certification program in the College of Education in Matthews Hall, Room 106.

All state certification requirements and information on required examinations is available on the web site of the State Board for Education Certification (SBEC), www.tea.state.tx.us.

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4060 Content Area Reading
- EDCI 4070 Teaching Diverse Populations
- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School
- EDCI 4840 Instructional Strategies and Classroom Management

# Undergraduate Academic Certificates Advertising Agency Leadership certification

The Advertising Agency Leadership Certification focuses on courses that provide a solid foundation for an advertising professional to lead a team of advertising specialists who work in advertising agencies. The program consists of 12 hours of advertising courses plus 6 specified hours in marketing and management.

A grade of C or better is required in all coursework.

### Requirements, 18 hours

- JOUR 3020 Advertising Account Planning
- JOUR 3040 Advertising Media Strategy
- JOUR 3070 Advertising Agency Management
- JOUR 4060 Advertising Agency Account Management
- MKTG 3660 Advertising Management
- MGMT 3330 Communicating in Business

#### Note:

JOUR 2000 is a prerequisite for JOUR 3020, JOUR 3040 and JOUR 3070

# Media Entrepreneurship and Innovation certificate

The Media Entrepreneurship and Innovation certificate prepares students for the rapidly changing media communications environment. Perhaps more importantly, it gives them the tools to create jobs or startup as the industry continually evolves.

A grade of B or better is required in all coursework counted towards the certificate.

# Requirements, 18 hours

Students must have successfully taken JOUR 3210 or ASTU 3030 or JOUR 3300. A grade of B or better is required in every course counted toward the certificate.

#### Required courses, 6 hours

- JOUR 3270 Media Entrepreneurship and Innovation
- JOUR 4290 Media Innovation Lab (capstone class to be taken as last class)

#### 6-9 hours

Students select 6-9 hours from:

- JOUR 3250 Game Design for Journalism
- JOUR 3260 Web Design for Journalism
- JOUR 4030 Advertising and Public Relations for Social Good
- JOUR 4215 Media Performance for News and Public Relations
- JOUR 4270 Strategic Social Media

#### 3-6 hours

Courses taken outside the unit with school approval.

# **Sports Media certificate**

The Mayborn School of Journalism's certificate in sports media is designed to enhance writing, reporting, broadcast and multimedia skills for careers in the field of sports journalism.

# Requirements

Students must have journalism major status. A grade of at least B is required in every course counted toward the certificate.

# Required courses, 16 hours

#### 3 hours

Selected from:

- JOUR 3321 News Reporting and Writing
- JOUR 3322 Copyediting
- JOUR 3323 News Writing for Broadcast and Web

#### 3 hours

Selected from:

- JOUR 3300 Introduction to Visual Communication for News
- JOUR 3400 Fundamentals of Public Relations Practices

#### 6 hours from

- SOCI 2050 Sociology of Sport
- JOUR 4350 Sports Journalism or
- JOUR 4355 Sport Media Relations

#### Plus one course

Selected from:

- JOUR 4800 Professional Internship
- JOUR 4810 News or Sports Practicum

#### Elective, 3 hours

Selected from:

- JOUR 3340 Digital Media for Journalists
- JOUR 4270 Strategic Social Media

# College of Merchandising, Hospitality and Tourism

Main Office Chilton Hall, Room 331

Mailing address: 1155 Union Circle #311100 Denton, TX 76203-5017 940-565-2436 Fax: 940-565-4348

Web site: cmht.unt.edu

Jana Hawley, Dean

Tammy Kinley, Associate Dean

The mission of the College of Merchandising, Hospitality and Tourism is to transform learning, research and engagement for a global experience economy. Our vision is to lead the paradigm shift in learning and research of digitally networked, sustainable and socially responsible products and services for empowered consumers in the global economy.

#### **Academic advising**

Information regarding academic matters is available in the office of the CMHT dean. Advising for entering freshmen and transfer students is available from academic advisors in the College of Merchandising, Hospitality and Tourism. The advising staff answers questions concerning degree audits, application of transfer credit, general academic requirements, policies and procedures and application for graduation, and assists students in the selection and sequencing of courses.

#### Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree and core requirements should consult their academic advisor.

#### **Bachelor of Science**

The College of Merchandising, Hospitality and Tourism offers the Bachelor of Science degree with majors in consumer experience management, digital retailing, home furnishings merchandising, hospitality management, merchandising, and retail. The college also offers teacher certifications in Family and Consumer Sciences and in Hospitality, Nutrition and Food Science.

#### **Degree audit**

Each student should have a degree audit prepared by the College of Merchandising, Hospitality and Tourism advising office. This degree audit should be made by the end of the freshman year. Transfer students should have degree audits prepared during their first term/semester at UNT.

#### **Minors**

The minor requires at least 18 hours, including 6 advanced. To receive a minor in any of the Merchandising and Digital Retailing or Hospitality and Tourism Management programs, a grade of C or above must be earned in each College of Merchandising, Hospitality and Tourism course completed in residence or transferred to UNT.

#### **Scholarships**

The College of Merchandising, Hospitality and Tourism offers a number of endowed scholarships to undergraduate and graduate students. Information about CMHT academic scholarships may be obtained at cmht.unt.edu/cmht-competitive-scholarship.

Completed scholarship applications are due February 1 in the office of the Dean of the College of Merchandising, Hospitality and Tourism. A minimum GPA of 3.0 is required for academic awards, unless otherwise noted. To keep a scholarship, a student must maintain:

- 3.0 GPA each term/semester and 3.0 overall GPA;
- status as a major in the College of Merchandising, Hospitality and Tourism, taking required courses on degree audit and enrolling in at least two College of Merchandising, Hospitality and Tourism classes per term/ semester:
- full-time status (i.e., 12 credit hours for undergraduate students and 9 credit hours for graduate students).

#### Accreditation

The hospitality management program is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA) (P.O. Box 400, Oxford, MD 21654; 410-226-5527).

# **Undergraduate Academic Certificates Transformational Leadership certificate**

The transformational leadership certificate is offered to students seeking advanced levels of professional achievement. Today, more than ever, retail and hospitality companies need transformational leaders. Leaders who are inspirational, visionary, collaborative, resourceful, and polished. For current CMHT students, the certificate supports skill development in communication, team building, corporate culture, change management, conflict resolution, and ethics, and workplace diversity.

#### Required courses, 12 hours

Students complete 12 credits from the courses listed below.

- CMHT 3450 Effective Leadership Communication
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4800 Seminar in Merchandising, Hospitality and Tourism
- MDSE 2790 Talent Development
   or
- HMGT 3860 Foundations in Leading Hospitality Organizations & Talent

# **Department of Hospitality** and Tourism Management

Main Office Chilton Hall, Room 331

Mailing address: 1155 Union Circle #311100 Denton, TX 76203-5017 940-565-2436 Fax: 940-565-4348

Web site: www.cmht.unt.edu

#### Kim Williams, Department Chair

**Faculty** 

#### Mission

The mission of the Department of Hospitality and Tourism Management is to educate students for leadership in the global hospitality and tourism industries and to advance the profession through excellence in teaching, research and service.

#### Accreditation

The hospitality management program is accredited by the Accreditation Commission for Programs in Hospitality Administration (ACPHA) (P.O. Box 400, Oxford, MD 21654; 410-226-5527).

#### **Majors**

# Event Design & Experience Management, BS

The Bachelor of Science in Event Design and Experience Management will not only help graduates design, plan, and execute impactful events, but it will also develop leaders. The B.S. in Event Design and Experience Management is intended for students seeking careers as Event and Meeting Professionals under titles such as Event or Meeting Coordinator, Manager, Designer, Architect or Producer. The in-depth course of study examines the interrelated industry components of meetings, conventions, trade shows, and special events (including weddings). Students will have the opportunity to gain practical experience and create unique events in the new UNT CoLab located in downtown Denton, TX.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the Department of Hospitality and Tourism Management requirements.

#### Major requirements

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management
- EDEM 1600 Introduction to Global Event Management
- EDEM 3240 Convention and Event Management
- EDEM 3500 Event Catering Operations
- EDEM 3510 Entertainment and Experiences in Hospitality and Events
- EDEM 4500 Strategic Event Design
- HMGT 3200 Hospitality Industry Law
- HMGT 2280 Hospitality Accounting I Financial

- HMGT 3260 Resort and Club Management
- HMGT 3300 Hospitality Industry Marketing and Sales
- HMGT 3860 Foundations in Leading Hospitality Organizations & Talent
- HMGT 4600 Information Technology in Hospitality and Tourism
- HMGT 4820 Facilities Planning, Equipment, Layout and Design

#### Plus 15 hours from:

- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- HMGT 1450 Principles of Nutrition
- HMGT 1470 Introduction to Professional Food Preparation
- HMGT 2800 Foundations of International Travel and Tourism
- HMGT 2810 Introduction to International Sustainable Tourism
- HMGT 3100 Casino Management
- HMGT 3470 Global Kitchen: A Culinary Journey
- HMGT 3700 Hotel Operations
- HMGT 3920 Recent Developments in the Hospitality Industry
- HMGT 4001 Chicago Study Tour
- HMGT 4300 Survey of Beverages in the Hospitality Industry
- HMGT 4210 Hospitality Cost Controls
   or
- HMGT 4490 Hospitality Revenue Management
- RESM 2150 Leadership in Recreation, Event, and Sport Organizations
- RESM 3050 Operations and Logistics in Recreation, Event, and Sport Organizations
- RESM 4050 Management of Recreation, Event, and Sport Organizations
- RESM 4340 Event Production in the Recreation, Event and Sport Industries

#### Minor

No minor is required.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

#### Other requirements

- It is required that students entering the College of Merchandising, Hospitality and Tourism have a minimum grade point average of at least 2.0 on all courses completed at UNT.
- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, EDEM, MDSE, RETL, HFMD, DRTL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - A minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, EDEM, MDSE, RETL, HFMD. DRTL and HMGT courses.

- 2. A minimum of 2.0 grade point average in all courses completed at UNT.
- A minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

# **Hospitality Management, BS**

The Bachelor of Science with a major in hospitality management gives you a solid academic education combined with extensive training in hospitality business skills, using the best modern technology. You can also gain insight into the industry through field trips, attending special lectures and meeting executives in our executive-in-residence program.

#### Degree requirements

The following requirements must be satisfied for a Bachelor of Science.

# Hours required and general/school requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

# Major requirements

#### CHMT core, 9 hours

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management (Students are required to complete 500 documented pre-internship work hours in the hospitality industry, plus 300 internship work hours, for a total of 800 hours. See course description for details.)

# Hospitality management, 45 hours

A total of 45 hours including the following courses:

- HMGT 1470 Introduction to Professional Food Preparation
- HMGT 2810 Introduction to International Sustainable Tourism
- HMGT 1500 Orientation to the Hospitality Industry
- HMGT 2280 Hospitality Accounting I Financial
- HMGT 2800 Foundations of International Travel and Tourism
- HMGT 3200 Hospitality Industry Law
- HMGT 3251 Restaurant Operations
- HMGT 3860 Foundations in Leading Hospitality Organizations & Talent
- HMGT 3260 Resort and Club Management
- HMGT 3300 Hospitality Industry Marketing and Sales
- HMGT 3700 Hotel Operations
- HMGT 4210 Hospitality Cost Controls
- HMGT 4480 Hospitality Industry Finance
- HMGT 4600 Information Technology in Hospitality and Tourism
- HMGT 4820 Facilities Planning, Equipment, Layout and Design
- HMGT 4860 Hospitality Business Strategies

#### Plus 9 hours selected from

- CMHT 2560 Food Retailing: Issues and Trends
- CMHT 3450 Effective Leadership Communication
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- CMHT 4800 Seminar in Merchandising, Hospitality and Tourism
- DRTL 3090 Consumer Engagement in Digital Channels
- HMGT 1450 Principles of Nutrition
- HMGT 3100 Casino Management
- EDEM 3240 Convention and Event Management
- HMGT 3470 Global Kitchen: A Culinary Journey
- HMGT 3920 Recent Developments in the Hospitality Industry
- HMGT 4001 Chicago Study Tour
- HMGT 4300 Survey of Beverages in the Hospitality Industry
- HMGT 4490 Hospitality Revenue Management
- Other relevant lower- and upper-division courses as approved

# Other course requirements:

HMGT 2460, Nutrition Science, is recommended (satisfies a portion of the Life and Physical Sciences requirement).

# Minor requirements

None.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

# Other requirements

#### **GPA** requirements

- It is required that students entering the College of Merchandising, Hospitality and Tourism have a minimum grade point average of at least 2.0 on all courses completed
- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, EDEM, MDSE, HFMD, DRTL, RETL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - A minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, EDEM, MDSE, HFMD, DRTL, RETL and HMGT courses.
  - 2. A minimum of 2.0 grade point average in all courses completed at UNT.
  - A minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

# Hospitality Management, BS (Hospitality, Nutrition and Food Science teacher certification)

The Bachelor of Science with a major in hospitality management gives you a solid academic education combined with extensive training in hospitality business skills, using the best modern technology. By getting your certification in hospitality, nutrition and food science, you will also be prepared to begin a career in teaching.

#### Degree requirements

The department offers the Bachelor of Science degree with a major in hospitality management leading to certification in Hospitality, Nutrition and Food Science (grades 8–12).

# Hours required and general/college requirements

A minimum of 120–129 semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements, plus requirements for teacher certification as outlined by the College of Education

# Hospitality, Nutrition and Food Science

60 hours, including:

- HDFS 4133 Adolescence and Emerging Adulthood
- HDFS 4413 Family Life Education
- HMGT 1450 Principles of Nutrition (may be used to satisfy the Discovery requirement of the University Core Curriculum)
- HMGT 1470 Introduction to Professional Food Preparation
- HMGT 1500 Orientation to the Hospitality Industry
- HMGT 2800 Foundations of International Travel and Tourism
- HMGT 2860 Management Foundations in the Hospitality Industry
- HMGT 3250 Restaurant Operations I
- HMGT 3260 Resort and Club Management
- HMGT 3700 Hotel Operations
- MDSE 2790 Talent Development
- HMGT 4210 Hospitality Cost Controls
- HMGT 4250 Restaurant Operations II
- HMGT 4600 Information Technology in Hospitality and Tourism
- HMGT 4820 Facilities Planning, Equipment, Layout and Design
- CMHT 4750 Managing a Diverse Workforce (may be used to satisfy the Capstone requirement of the University Core Curriculum)
- CMHT 4790 Internship in Merchandising and Hospitality Management
- 12 hours of electives

# Other course requirements (3 hours)

 HDFS 1013 - Human Development (may be used to satisfy the Social and Behavioral Sciences requirement of the University Core Curriculum)

#### Electives

# Other requirements

#### Admission to teacher education

Prior to enrolling in the first education courses, students must have:

- Completed a minimum of 60 semester hours, including the University Core Curriculum. (See "General University Requirements" in the Academics section of this catalog. Programs in teacher education require specific courses contained in parts of the University Core Curriculum to satisfy particular degree requirements. Students should consult program advisors for best choices in the core.);
- A 2.75 UNT GPA:
- A 2.75 overall GPA (includes courses transferred to UNT, plus all courses taken at UNT);
- Passed the THEA test (with test scores of 240 reading; 230 math and 220 writing; contact the Student Advising Office in Matthews Hall, Room 105, for further information on the THEA requirement); and
- Formally applied and been admitted to Teacher Education through the College of Education Student Advising Office in Matthews Hall, Room 105.

# Professional education requirements, 21 hours

#### Pedagogy, 12 hours

- EDCI 3800 Professional Issues in Teaching
- EDCI 3830 Teaching/Learning Process and Evaluation
- EDCI 4070 Teaching Diverse Populations
- EDCI 4840 Instructional Strategies and Classroom Management

#### Reading/English/language arts, 3 hours

EDCI 4060 - Content Area Reading

#### Internship (student teaching), 6 hours

- EDCI 4108 Student Teaching in the Secondary School
- EDCI 4118 Student Teaching in the Secondary School

# Eligibility for teacher certification and endorsements

Teacher certification is a function of the State Board for Educator Certification. Completion of the bachelor's degree and the required education courses does not necessarily result in certification by the agency. In order to receive recommendation for teacher certification through the University of North Texas, students must have:

- Successfully completed an approved teacher education program for the preparation of secondary teachers;
- Successfully completed student teaching, including attendance at appropriate seminars and passing a comprehensive teacher preparation examination; and
- Passed the content examination from the American Association of Family and Consumer Sciences.

Students completing course requirements for the Family and Consumer Sciences teacher certificate will be eligible to apply to the American Association of Family and Consumer Sciences for the Certified Family and Consumer Science credential.

#### **Grad Track Options**

# Hospitality Management, BS with grad track option leading to Hospitality Management, MS

The grad pathway leading toward an MS with a major in hospitality management offers students an opportunity to earn first a Bachelor of Science then a Master of Science degree in a shorter time period and at less cost. Exceptional students in the Department of Hospitality and Tourism Management can obtain degrees in an expedited time frame. The grad pathway is intended for selected students as preparation to pursue career goals or for preparation to pursue a doctoral degree.

# Admission requirements and program policies

Students meeting the admission criteria will be admitted to the Hospitality Management Grad Track Pathway. The full-time faculty member with oversight responsibility will monitor each student's progress through unofficial transcripts and will meet at least once a semester with the student to review progress on the Grad Track Pathway. Students will be advised each semester separately with the HTM Graduate Faculty Advisor and the HTM graduate faculty with oversite responsibility. The director of undergraduate cademic advising will ensure that the student is on track to complete the bachelor's degree within one year after first enrolling in an associated graduate course. The program will be promoted through Preview and Orientation events, on the CMHT website, through CMHT Advising office, and HTM faculty. A packet with criteria for admission and information about the program will be distributed to advisors, faculty, and prospective qualified students.

### Admission requirements

Students seeking admission to the Grad Track Pathway in Hospitality Management will apply both to the program area and for conditional admission to the Toulouse Graduate School. An applicant must have successfully completed 75 or more credit hours of their bachelor's degree program with an overall GPA of at least 3.5 before applying.

Two letters of recommendation from faculty in the Hospitality and Tourism Department are required.

Students conditionally admitted can begin enrolling in the Pathway courses after completing at least 90 credit hours of coursework towards their bachelor's degree program. Students must complete the bachelor's degree within one academic year of their first pathway course in order to have the graduate course credits transferred to their graduate plan of study. Grad Track Pathway applicants must receive approval from their undergraduate advisor and the Pathways Graduate program from which they seek admission to ensure that the Graduate Pathways Courses satisfy degree requirements for their bachelor's degree programs prior to admission to a Grad Track Pathway

Students seeking admission to the program should first speak to the HTM Graduate Faculty Advisor.

# Program policies

Students conditionally admitted to the graduate school will start taking pathways courses after completion of at least 90 credit hours of course work toward the bachelor's degree program. Students must complete the bachelor's degree within one academic year of their first pathways course in order to have the graduate course credits transferred to their graduate plan of study.

Students who satisfy all requirements for the undergraduate degrees and who successfully complete the graduate courses required by the grad track pathway curriculum receive unconditional admission to the graduate degree program.

Grad track pathway applicants must receive approval from their undergraduate advisor and the graduate pathways program from which they seek admission to ensure that the graduate pathways

courses satisfy degree requirements for the bachelor's degree programs prior to admission to a grad track pathway.

# Program requirements

Students may select up to 12 hours from the following courses, which are all 3 credits. A maximum of 6 hours may be taken from the dual-numbered courses marked with (\*).

- CMHT 5000 Global Discovery in Merchandising and Hospitality Management\*
- CMHT 5100 Introduction to Research in Merchandising and Hospitality
- CMHT 5350 Contemporary Issues and Trends in Merchandising and Hospitality Management
- CMHT 5600 Managing Customer Experiences
- CMHT 5830 Legal and Regulatory Aspects of Merchandising and Hospitality Management
- HMGT 5200 Survey of Beverages in the Hospitality Industry\*
- HMGT 5210 Hospitality Cost Controls\*
- HMGT 5260 Hospitality Business Strategies\*
- HMGT 5480 Hospitality Industry Finance\*
- HMGT 5580 Hospitality and Tourism Information Technology Strategies
- HMGT 5630 Advanced Convention and Event Management
- HMGT 5630 Event Management
- HMGT 5820 Facilities, Planning, Equipment Layout and Design\*

For the remainder of the bachelor's degree requirements, please see the Bachelor of Science with a major in hospitality management.

Students may select up to 12 hours from the following table of courses, which are all 3 credits. Of those 12 hours, only 6 hours may be from the dual-numbered courses.

#### **Minors**

# **Hospitality Management minor**

# Required courses

- HMGT 1450 Principles of Nutrition (may be used to satisfy the Discovery requirement of the University Core Curriculum)
- HMGT 1470 Introduction to Professional Food Preparation
- HMGT 1500 Orientation to the Hospitality Industry
- HMGT 2800 Foundations of International Travel and Tourism

or

 HMGT 2810 - Introduction to International Sustainable Tourism

### Plus two of the following

- EDEM 3240 Convention and Event Management
- HMGT 3260 Resort and Club Management
- HMGT 3700 Hotel Operations
- HMGT 3920 Recent Developments in the Hospitality Industry
- HMGT 4300 Survey of Beverages in the Hospitality Industry
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- CMHT 4750 Managing a Diverse Workforce

#### Certificates

# **Event Management certificate**

The Event Managment certificate requires 12 hours of coursework.

# Required courses, 12 hours

• EDEM 3240 - Convention and Event Management

### Plus 9 hours from the following:

- CMHT 3950 Creating Consumer Experiences
- HMGT 3300 Hospitality Industry Marketing and Sales
- HMGT 3920 Recent Developments in the Hospitality Industry
- HMGT 4300 Survey of Beverages in the Hospitality Industry

### **Hotel Operations certificate**

The Hotel Operations certificate requires 12 hours of coursework.

# Required courses, 12 hours

• HMGT 3700 - Hotel Operations

### Plus 9 hours from the following:

Choose one course from each of the following sets.

- HMGT 2800 Foundations of International Travel and Tourism
  - or
- HMGT 2810 Introduction to International Sustainable Tourism
- HMGT 3260 Resort and Club Management or
- HMGT 3300 Hospitality Industry Marketing and Sales
- HMGT 4490 Hospitality Revenue Management or
- HMGT 4600 Information Technology in Hospitality and Tourism

# Department of Merchandising and Digital Retailing

Main Office Chilton Hall, Room 331

Mailing address: 1155 Union Circle #311100 Denton, TX 76203-5017 940-565-2436 Fax: 940-565-4348

Web site: www.cmht.unt.edu

#### **Faculty**

#### Mission

The mission of the department of Merchandising and Digital Retailing is to develop talent for careers in the trend-driven global retail marketplace. The mission embraces innovative and diverse curricula, experiential learning, applied technologies, research experiences, industry involvement and professional development of students. A merchandising degree can lead to careers in the multifaceted industry, including product development, manufacturing, wholesaling and retailing.

#### **Majors**

# **Consumer Experience Management, BS**

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, for fulfillment of degree requirements for the Bachelor of Science degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

### CMHT core, 9 hours

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management

# Merchandising and digital retailing core, 12 hours

- DRTL 2090 Introduction to Digital Retailing
- MDSE 2750 Consumers in a Global Market
- MDSE 2790 Talent Development
- MDSE 4660 Advanced Application

# Consumer experience management foundation, 18 hours

- DRTL 3090 Consumer Engagement in Digital Channels
- MDSE 3750 Consumer Studies
- RETL 4330 Consumer Analytics and Data Visualization
- RETL 3950 Visual Merchandising and Promotion
- MDSE 4850 Brand Development
- RETL 4880 Omnichannel Retail Strategy

# Consumer experience management applications, 6 hours

Students select 6 hours from the following courses.

- HMGT 2800 Foundations of International Travel and Tourism
- EDEM 3240 Convention and Event Management
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing

# Interdisciplinary concentrations, 15-33 hours

Students may choose one or two concentrations.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

# **Digital Retailing, BS**

Our digital retailing program is a unique program among U.S. universities. It is an interdisciplinary degree that focuses on e-commerce merchandising processes. Through innovative course work, you develop skills in merchandising processes, marketing, consumer segments and design architecture.

The following requirements must be satisfied for a Bachelor of Science with a major in digital retailing:

# Degree requirements

# Hours required and general/school requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

# Major requirements

### CMHT core, 9 hours including:

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management

### Digital retailing

A total of 42 hours including the following courses:

- DRTL 2080 Digital Platforms and Web Site Development in Digital Retailing
- DRTL 2090 Introduction to Digital Retailing
- DRTL 3090 Consumer Engagement in Digital Channels
- DRTL 3190 Digital Retailing Strategies
- DRTL 4070 Digital Retail Analytics
- DRTL 4090 Digital Merchandising
- MDSE 2750 Consumers in a Global Market
- MDSE 2790 Talent Development
- MDSE 3750 Consumer Studies
- MDSE 4660 Advanced Application
- RETL 3880 Profit-Centered Retailing

#### Plus 9 hours selected from

- CMHT 3450 Effective Leadership Communication
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- DRTL 4000 Digital Study Tour
- HFMD 2400 Introduction to the Furniture Industry
- HFMD 2655 Textiles for Home Furnishings
- HFMD 3570 Decorative Accessories Merchandising
- HMGT 2800 Foundations of International Travel and Tourism
- HMGT 2810 Introduction to International Sustainable Tourism
- HMGT 3300 Hospitality Industry Marketing and Sales
- HMGT 3920 Recent Developments in the Hospitality Industry
- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2650 Textiles for Apparel
- MDSE 3510 Profit-Centered Merchandising
- MDSE 4250 Product Development
- MDSE 4001 New York Study Tour for Merchandising and Digital Retailing
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing
- MDSE 4003 Global Discovery: Hong Kong/China
- MDSE 4004 Global Discovery: Europe
- MDSE 4010 Global Sourcing
- MDSE 4020 E-Passport: Virtual Study Abroad
- MDSE 4510 Advanced Buying, Planning and Allocation
- MDSE 4560 Sustainable Strategies in Merchandising
- MDSE 4850 Brand Development
- RETL 2550 Retailing Principles
- RETL 3950 Visual Merchandising and Promotion
- RETL 4080 Retail Start-Up
- RETL 4330 Consumer Analytics and Data Visualization
- RETL 4880 Omnichannel Retail Strategy

# Other course requirements

#### Journalism, 6 hours

- JOUR 2000 Principles of Advertising and Public Relations
- JOUR 3040 Advertising Media Strategy
- JOUR 4270 Strategic Social Media

#### Business, 6 hours

- ACCT 2010 Accounting Principles I (Financial Accounting)
- MKTG 3650 Foundations of Marketing Practice

#### Minor

None required.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

### **GPA** requirements

- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, MDSE, HFMD, DRTL, RETL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - a minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, MDSE, HFMD, DRTL, RETL and HMGT courses;
  - a minimum of 2.0 grade point average in all courses completed at UNT; and
  - a minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

# Home Furnishings Merchandising, BS

The Bachelor of Science with a major in home furnishings merchandising teaches you how to apply merchandising strategies in a consumer-driven global market and to understand the growing industry phenomenon of brand extension across apparel and home furnishings products.

#### **Program requirements**

# Degree requirements

# Hours required and general/school requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

# Major requirements

#### CMHT core, 9 hours

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management

### Home furnishings merchandising

A total of 48 hours including the following courses:

- HFMD 2380 Aesthetics and Environment
- HFMD 2400 Introduction to the Furniture Industry
- HFMD 2655 Textiles for Home Furnishings
- MDSE 2790 Talent Development
- HFMD 3355 Historic and Contemporary Styles of Home Furnishings
- HFMD 3405 Drawing and Planning for Home Furnishings
- HFMD 3410 CAD for Home Furnishings
- HFMD 3570 Decorative Accessories Merchandising
- HFMD 4400 Estimating for Home Furnishings
- MDSE 3510 Profit-Centered Merchandising
- MDSE 3750 Consumer Studies
- MDSE 4010 Global Sourcing
- MDSE 4660 Advanced Application
- MDSE 4850 Brand Development

#### Plus 9 hours selected from

- CMHT 3450 Effective Leadership Communication
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- DRTL 2080 Digital Platforms and Web Site Development in Digital Retailing
- DRTL 2090 Introduction to Digital Retailing
- DRTL 3090 Consumer Engagement in Digital Channels
- DRTL 4000 Digital Study Tour
- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2490 Introduction to Retail Merchandising
- MDSE 2750 Consumers in a Global Market
- MDSE 4250 Product Development
- MDSE 3650 Advanced Textiles
- MDSE 4001 New York Study Tour for Merchandising and Digital Retailing
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing
- MDSE 4003 Global Discovery: Hong Kong/China
- MDSE 4004 Global Discovery: Europe
- MDSE 4020 E-Passport: Virtual Study Abroad
- MDSE 4510 Advanced Buying, Planning and Allocation
- MDSE 4560 Sustainable Strategies in Merchandising
- RETL 2550 Retailing Principles
- RETL 3880 Profit-Centered Retailing
- RETL 3950 Visual Merchandising and Promotion
- MDSE 4850 Brand Development

### Business focus, 9 hours

- ACCT 2010 Accounting Principles I (Financial Accounting)
- MKTG 3650 Foundations of Marketing Practice
- MGMT 3720 Organizational Behavior

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

# **GPA** requirements

- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, MDSE, HFMD, DRTL, RETL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - a minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, MDSE, HFMD, DRTL, RETL and HMGT courses;
  - b. a minimum of 2.0 grade point average in all courses completed at UNT; and
  - a minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

# Merchandising, BS

As a student pursuing the Bachelor of Science with a major in merchandising, you become skilled in consumer studies, textiles, fashion theory, trend analysis, brand development, and promotion. This curriculum was developed in consultation with leaders of the Dallas-Fort Worth retail industry to give you the essential skills for the job market.

### **Program requirements**

# Degree requirements

# Hours required and general/school requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

# Major requirements

#### CMHT core, 9 hours

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management

### Merchandising

A total of 48 hours including the following courses:

- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2490 Introduction to Retail Merchandising
- MDSE 2650 Textiles for Apparel
- MDSE 2750 Consumers in a Global Market
- MDSE 2790 Talent Development
- MDSE 4250 Product Development
- MDSE 3350 Historic Costume
- MDSE 3370 Social Psychology of Dress and Appearance
- MDSE 3510 Profit-Centered Merchandising
- MDSE 3750 Consumer Studies
- MDSE 4010 Global Sourcing
- MDSE 4660 Advanced Application
- DRTL 3090 Consumer Engagement in Digital Channels

#### Plus 9 hours to be selected from

- CMHT 3450 Effective Leadership Communication
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- CMHT 4800 Seminar in Merchandising, Hospitality and Tourism
- DRTL 2090 Introduction to Digital Retailing
- DRTL 3190 Digital Retailing Strategies
- DRTL 4000 Digital Study Tour
- HFMD 2380 Aesthetics and Environment
- HFMD 2400 Introduction to the Furniture Industry
- HFMD 3570 Decorative Accessories Merchandising
- MDSE 3650 Advanced Textiles
- MDSE 4001 New York Study Tour for Merchandising and Digital Retailing
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing

- MDSE 4003 Global Discovery: Hong Kong/China
- MDSE 4004 Global Discovery: Europe
- MDSE 4020 E-Passport: Virtual Study Abroad
- RETL 4080 Retail Start-Up
- MDSE 4510 Advanced Buying, Planning and Allocation
- MDSE 4560 Sustainable Strategies in Merchandising
- RETL 2550 Retailing Principles
- RETL 3880 Profit-Centered Retailing
- RETL 3950 Visual Merchandising and Promotion
- RETL 4330 Consumer Analytics and Data Visualization
- MDSE 4850 Brand Development
- RETL 4880 Omnichannel Retail Strategy

### Business focus, 9 hours

- ACCT 2010 Accounting Principles I (Financial Accounting)
- MKTG 3650 Foundations of Marketing Practice
- MGMT 3720 Organizational Behavior

#### **Electives**

Hourse required for electives may vary based on course selections and the University Core Curriculum requirements.

# **GPA** requirements

- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, MDSE, HFMD, DRTL, RETL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - a minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, MDSE, HFMD, DRTL, RETL and HMGT courses:
  - a minimum of 2.0 grade point average in all courses completed at UNT; and
  - a minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

#### Retail, BS

# Degree requirements

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, for fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Merchandising, Hospitality and Tourism requirements.

#### Major requirements

#### CMHT core, 9 hours

- CMHT 3950 Creating Consumer Experiences
- CMHT 4750 Managing a Diverse Workforce
- CMHT 4790 Internship in Merchandising and Hospitality Management

#### Retailing, 48 hours

Retail specialization, 33 hours

- DRTL 3090 Consumer Engagement in Digital Channels
- MDSE 2790 Talent Development
- MDSE 3510 Profit-Centered Merchandising
- MDSE 3750 Consumer Studies
- MDSE 4660 Advanced Application
- RETL 2550 Retailing Principles
- RETL 3880 Profit-Centered Retailing
- RETL 3950 Visual Merchandising and Promotion
- RETL 4330 Consumer Analytics and Data Visualization
- MDSE 4850 Brand Development
- RETL 4880 Omnichannel Retail Strategy

Interdisciplinary concentrations, 15-24 hours

Students may choose one or two concentrations.

- DRTL 3190 Digital Retailing Strategies
- DRTL 4860 Digital Branding in Practice
- GEOG 4220 Applied Retail Geography
- HFMD 3570 Decorative Accessories Merchandising
- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2490 Introduction to Retail Merchandising
- MDSE 4850 Brand Development
- MDSE 4001 New York Study Tour for Merchandising and Digital Retailing
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing
- MDSE 4003 Global Discovery: Hong Kong/China
- MDSE 4004 Global Discovery: Europe
- MDSE 4010 Global Sourcing

#### Business focus, 9 hours

These courses must be completed with a grade of C or better.

- ACCT 2010 Accounting Principles I (Financial Accounting)
- ECON 1100 Principles of Microeconomics
- MGMT 3860 Human Resource Management

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements.

#### **GPA** requirements

- A grade of C or above must be earned in each merchandising and hospitality management course completed in residence or transferred to UNT. This includes all courses with prefixes CMHT, MDSE, HFMD, DRTL, RETL and HMGT.
- Academic requirements for graduation with a BS from the College of Merchandising, Hospitality and Tourism include:
  - a minimum of 2.0 grade point average in the professional field, with minimum grades of C required in all CMHT, MDSE, HFMD, DRTL, RETL and HMGT courses:
  - b. a minimum of 2.0 grade point average in all courses completed at UNT; and
  - a minimum of 2.0 grade point average in all work attempted, including transfer, correspondence, extension and residence work.

#### **Grad Track Options**

# Merchandising, BS with grad track option leading to Merchandising, MS

The grad pathway leading toward an MS with a major in merchandising offers students an opportunity to earn first a Bachelor of Science then a Master of Science degree in a shorter time period and at less cost. Exceptional students in the Department of Merchandising and Digital Retailing can obtain degrees in an expedited time frame. The grad pathway is intended for selected students as preparation to pursue career goals or for preparation to pursue a doctoral degree.

# Admission requirements and program policies

### Admission requirements

Students seeking admission to the pathways graduate program apply both to the program area and to the graduate school for conditional admission. An applicant must have successfully completed 75 or more credit hours of their bachelor's degree program with an overall GPA of at least 3.5 before applying.

# Program policies

Students conditionally admitted to the graduate school will start taking pathways courses after completion of at least 90 credit hours of course work toward the bachelor's degree program. Students must complete the bachelor's degree within one academic year of their first pathways course in order to have the graduate course credits transferred to their graduate plan of study.

Students who satisfy all requirements for the undergraduate degrees and who successfully complete the graduate courses required by the grad track pathway curriculum receive unconditional admission to the graduate degree program.

Grad track pathway applicants must receive approval from their undergraduate advisor and the graduate pathways program from which they seek admission to ensure that the graduate pathways courses satisfy degree requirements for the bachelor's degree programs prior to admission to a grad track pathway.

### Program requirements

Students may select up to 12 hours from the following courses, which are all 3 credits. A maximum of 6 hours may be taken from courses marked with (\*).

- CMHT 5000 Global Discovery in Merchandising and Hospitality Management\*
- CMHT 5100 Introduction to Research in Merchandising
- CMHT 5300 Research Methods in Merchandising and Hospitality Management
- CMHT 5440 Consumer Theory
- CMHT 5550 Promotional Strategies
- CMHT 5600 Managing Customer Experiences
- MDSE 5090 Virtual Merchandising\*
- MDSE 5510 Advanced Buying, Planning and Allocation\*
- MDSE 5560 Sustainable Strategies Merchandising\*
- MDSE 5650 International Sourcing
- MDSE 5660 Advanced Merchandising Applications\*
- MDSE 5850 Brand Development\*

For the remainder of the bachelor's degree requirements, please see the Bachelor of Science with a major in merchandising.

#### **Minors**

# **Consumer Experience Management** minor

The Consumer Experience Management (CEXM) minor examines the consumer's experience in the journey of search, acquisition, use and disposal of products and services. CEXM supports interdisciplinary applications across many fields of study including retail, hospitality, tourism, travel, information, entertainment, recreation, health care, finance, sports management, gaming, business, decision science, computer science, engineering, and public health. Through six distinct courses, students gain a comprehensive theory-based understanding of the consumer journey as it is applied through a global perspective, social networks, strategies, analytics, and applications.

# Required courses, 18 hours

- CMHT 3950 Creating Consumer Experiences
- DRTL 3090 Consumer Engagement in Digital Channels
- MDSE 2750 Consumers in a Global Market
- MDSE 3750 Consumer Studies
- RETL 4330 Consumer Analytics and Data Visualization
- one course selected in consultation with a CMHT academic advisor

# Home Furnishings Merchandising minor

The minor in home furnishings merchandising requires 18 hours.

### Required courses

- HFMD 2380 Aesthetics and Environment
- HFMD 2400 Introduction to the Furniture Industry
- HFMD 3355 Historic and Contemporary Styles of Home Furnishings
- HFMD 3570 Decorative Accessories Merchandising
- HFMD 4400 Estimating for Home Furnishings or
- HFMD 3410 CAD for Home Furnishings

#### Plus 3 hours selected from

- DRTL 3090 Consumer Engagement in Digital Channels
- HFMD 2655 Textiles for Home Furnishings
- MDSE 3510 Profit-Centered Merchandising
- MDSE 3750 Consumer Studies
- MDSE 4010 Global Sourcing

# Alternative requirements for interior design majors

Students majoring in interior design who wish to minor in home furnishings merchandising are encouraged to take the following courses (instead of the courses listed above):

- HFMD 2400 Introduction to the Furniture Industry
- HFMD 3570 Decorative Accessories Merchandising
- MDSE 3750 Consumer Studies

#### Plus 9 hours selected from

- DRTL 3090 Consumer Engagement in Digital Channels
- HFMD 3355 Historic and Contemporary Styles of Home Furnishings
- HFMD 4400 Estimating for Home Furnishings
- MDSE 4010 Global Sourcing

# Merchandising minor

### Required

- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2490 Introduction to Retail Merchandising
- MDSE 3370 Social Psychology of Dress and Appearance
- MDSE 4010 Global Sourcing
- DRTL 3090 Consumer Engagement in Digital Channels

#### Plus one of the following

- MDSE 2750 Consumers in a Global Market
- MDSE 3750 Consumer Studies

# **College of Music**

Main Office Music Building, Room 247

Mailing address: 1155 Union Circle #311367 Denton, TX 76203-5017 940-565-2791 Fax: 940-565-2002

Web site: www.music.unt.edu

#### John W. Richmond, Dean

Warren Henry, Senior Associate Dean for Academic Affairs Felix Olschofka, Associate Dean for Operations Emilita Marin, Assistant Dean for Business and Finance Raymond Rowell, Assistant Dean for Enrollment Management and External Affairs

Steven Harlos, Chair, Division of Keyboard Studies Benjamin Brand, Chair, Division of Music History, Theory and Ethnomusicology

Kimberly Cole Luevano, Chair, Division of Instrumental Studies Joseph Klein, Chair, Division of Composition Studies Robert Parton, Chair, Division of Jazz Studies Sean Powell, Chair, Division of Music Education Molly Fillmore, Chair, Division of Vocal Studies Andrew Trachsel, Chair, Division of Conducting and Ensembles

#### Kirsten Soriano Broberg, Director of Undergraduate Studies

Office of Undergraduate Advising Music Building, Room 1005 940-565-3730

#### Jaymee Haefner, Director of Graduate Studies

Office of Graduate Studies in Music Music Building, Room 268 940-565-3739

#### Joel D. Wiley, Director of Admissions

Chilton Hall, Room 211 940-565-4349

#### Faculty

The College of Music, among the largest in the nation, offers a comprehensive musical environment and unlimited opportunities for the pursuit of excellence in the musical arts for talented and dedicated musicians. The breadth of the musical experience includes the study and performance of the extended gamut of Western art music, the music of global cultures, and the creative contributions of contemporary jazz and electronic/experimental media.

The depth of the instruction is provided by a faculty of internationally acclaimed performers, composers, scholars, and educators who are able to share their knowledge, skills and insights with the next generation of musicians, from the baccalaureate to the doctoral and artist levels. The entire program is enhanced by the holdings of the UNT Music Library, the largest and most comprehensive collection among universities in the South and Southwest. Graduates of the College of Music hold positions of leadership and influence throughout the nation in the areas of concert, opera, symphony and jazz performance, in higher education and scholarship, and in public school music education. The College of Music, with its wealth of campus concert experiences and varied instructional programs, is a unique asset in the cultural and intellectual life of the university community; in turn, its effectiveness is enhanced by being part of a large, comprehensive university.

The College of Music is accredited by the National Association of Schools of Music (11250 Roger Bacon Drive, Suite 21, Reston, VA 20190; 703-437-0700).

#### **Our Mission and Vision**

The mission of the UNT College of Music is to serve our diverse musical culture with excellence, integrity, and imagination.

The vision of the UNT College of Music is to provide leadership, artistry, and expertise to every facet of the music profession.

#### Admission requirements

#### Freshman and transfer admission

Admission to the College of Music is contingent on clear admission to the university.

Those students who intend to be music majors must qualify by audition on their principal instrument or voice. Preference will be given to applications received by December 1 for fall admission. For additional procedures and opportunities, please contact the College of Music at collegeofmusic@unt.edu.

#### Repertoire

Audition repertoire requirements for all instruments can be found on our web site at music.unt.edu/comp/admissions/undergraduate-repertoire. Transfer applicants for composition must also submit a composition portfolio at music.unt.edu/comp/admissions/undergraduate.

Prospective students unable to audition in person may submit a recording representative of their performance abilities.

After passing an audition and being accepted, students planning to major in composition may begin the undergraduate program through open enrollment in Beginning Composition I (see "Supplemental Information for the Bachelor of Music with a Major in Composition").

At Freshman Orientation, students will take placement examinations in piano. Transfer students will take similar examinations at Transfer Orientation.

#### **Scholarships**

In addition to UNT scholarships, College of Music scholarships and service awards are available for study in all of the college's programs. All prospective students who apply and audition for admission to the College of Music are considered for scholarship, based on their audition. Scholarship recipients are required to enroll full-time, maintain minimum academic grade requirements and perform in appropriate music laboratories and ensembles as assigned.

For information, audition dates and step by step instructions on how to apply to UNT and the College of Music, visit our web site at music.unt.edu/admissions/undergraduate-how-to-apply.

#### **General requirements for majors**

#### **Music fees**

Music fees are charged for private music lessons, practice on university instruments, instrument rental (only a limited number of instruments are available for rental), practice rooms and lockers. Music course fees average approximately \$55 per course. Total music course fees per semester will average approximately \$450 for undergraduate students. For specific fees, check essc.unt.edu/saucs.

All fees must be paid before instruction is given or use of facilities is permitted.

#### Applied music

Study in applied music (private lessons) is identified by the categories major, concentration or secondary. The type and amount of applied study is specified in the student's degree plan.

**Applied major** — study of the student's principal instrument (or voice) toward a degree in performance.

Concentration — applied music study of the student's principal instrument (or voice) toward a degree other than in performance.

**Secondary** — study of an instrument or voice in addition to the major or concentration.

#### **Upper Division Examination**

The Upper Division Examination is administered to all music majors at the conclusion of the fourth consecutive long term/semester of study at the MUAM or MUAC 1500 level. It will be given during pre-finals week in place of the Jury Examination by the appropriate faculty, i.e., the area of declared applied major or concentration. The Upper Division Examination determines admission and continuation in applied study at the MUAM or MUAC 3500 level. Guitarists who major in jazz studies will take the Upper Division Examination on jazz guitar.

#### **Juries**

During each term/semester of required applied study, the student must pass performance examination(s) before a jury composed of faculty members. Jury requirements are available on request from the music office (please specify major, concentration or secondary, and particular performance medium — voice, trumpet, etc.).

#### Concert/recital attendance

Each student with a major in music is expected to attend a variety of concerts and recitals in addition to required departmental recitals as a graduation requirement.

#### Music history and theory lecture series attendance

As a graduation requirement, each undergraduate student with a declared major in music theory (BM) or a declared emphasis in music history (BA) is expected to attend all lectures presented in the division of music history, theory and ethnomusicology lecture series during each long term/semester of full-time enrollment (12 hours).

#### **Music laboratories**

Music laboratories are an integral part of the college. Each Bachelor of Music student must enroll in a laboratory each long term/semester. Exceptions require final approval from the associate dean for academic affairs.

A minimum of eight terms/semesters is required for the Bachelor of Music degree, except the BM in general, choral and instrumental music (teacher certification), which requires a minimum of seven terms/semesters. Six terms/semesters are required for the Bachelor of Arts degree.

Laboratories are a cappella choir, concert choir, University Singers, men's chorus, women's chorus, symphony orchestra, concert orchestra, wind symphony, wind orchestra, concert band, marching band, brass band, lab bands, jazz guitar lab, jazz repertory ensemble, Latin jazz lab, jazz keyboard laboratory, jazz singers, accompanying and electronic ensemble. Auditions are held at the beginning of the term/semester and are prerequisite for admission to the laboratory.

A Cappella Choir — organized in 1938; composed of 45 voices; has made more than 700 appearances, including annual tours, and television and radio broadcasts; yearly performances with major symphony orchestras; professional recordings; two European tours sponsored by the State Department. Rehearsals: 4 hours a week.

Concert Choir — organized in 1940; major performing ensemble of about 50 mixed voices; membership may be shifted from one choir to another. Rehearsals: 4 hours a week.

**University Singers** — composed of 50-70 voices selected primarily from undergraduate students. Repertoire includes selections from a broad range of vocal literature. Rehearsals: 4 hours a week.

**Men's Chorus** — subsidiary organization of the a cappella and concert choirs; membership may be shifted from one choir to another. Gives several concerts a year. Rehearsals: 4 hours a week.

**Women's Chorus** — subsidiary organization of the a cappella and concert choirs; membership may be shifted from one choir to another. Gives several concerts a year. Rehearsals: 4 hours a week.

Wind Orchestra — composed of about 105 musicians; has appeared at state, regional and national music conventions; programs include standard symphonic works and premieres of contemporary compositions; presents at least eight campus concerts per year. Rehearsals: 6 hours a week.

Concert Orchestra — subsidiary organization of the Symphony Orchestra; membership may be shifted from one orchestra to another. Gives several concerts a year. Rehearsals: 6 hours a week.

Wind Symphony — study and performance of traditional and contemporary band literature, requiring an advanced level of performance ability. Appears by invitation at state, regional and national conventions; annual spring tour. Rehearsals: 6 hours a week.

Symphonic Band — study and performance of repertoire for the wind band. Public concerts each term/semester. Rehearsals: 4 hours a week

**Concert Band** — study and performance of standard band repertoire. Public concerts each term/semester. Rehearsals: 4 hours a week.

Marching Band — offered fall term/semester only. Open to all students within the university who have had high school band experience. Study and performance of the fundamentals of drill and pageantry at athletic events. Rehearsals: 6 hours a week.

Lab Bands — 19-piece jazz ensembles. Open to all university students by audition. Study and performance of traditional and progressive repertoire. Public concerts each term/semester. One O'Clock Lab Band has won numerous awards and has received Grammy nominations; toured Mexico, Europe, the former USSR and Australia. Rehearsals: 4 hours a week.

Jazz Guitar Laboratory — composed of 15 electric guitarists, bass and drums. Open to all by audition. The music performed is a combination of big band literature and original music, which provide the student with an opportunity to develop reading skills and section playing. Public concerts each term/semester. Rehearsals: 4 hours a week.

Jazz Repertory Ensemble — a history-based learning and performing group dedicated to the collection, study, preservation, and re-creation of classic music from the entire history of jazz. The ensemble ranges in number from 15 to 20 students. The group is committed to playing only authentic compositions and arrangements or recreations of classic recorded performances by such jazz legends as Fletcher Henderson, Count Basie, Duke Ellington, Benny Goodman, Woody Herman, Gil Evans and Charles Mingus. Rehearsals: 4 hours a week.

Latin Jazz Laboratory — this ensemble ventures into musical fusions between Latin American rhythmic expressions and American Jazz compositional/improvisational forms. Open to all by audition with priority given to jazz studies majors. Rehearsals: 4 hours a week.

Jazz Keyboard Laboratory — the repertoire is devoted primarily to electronic idioms and the reading of notated melodic passages as well as chord symbols. Open to all by audition. Good acoustic piano technique and improvisational skills are required. Rehearsals: 4 hours a week

Jazz Singers Laboratory — mixed voices and rhythm, composed of 15 to 20 musicians. Open by audition; required of vocal jazz majors. Jazz Singers I has appeared at numerous international conventions and records annually.

**Accompanying** — for students majoring in piano and for students with piano concentrations who desire proficiency in reading and accompanying.

Electronics Ensemble—Students participating in the Electronics Ensemble perform using electronics including computers, tablets, smart phones, electronic instruments, and/or other electronic hardware devices and interfaces. This ensemble is required for Electronics Concentrations and is otherwise available by audition and through consultation with the student's area of concentration. The ensemble collaborates on group performances, but members may also be assigned to other performing ensembles as appropriate.

#### **Chamber music**

Chamber music coaching is offered under course numbers MUCM 3510/MUCM 5510, MUCM 3520/MUCM 5520, MUCM 3530/MUCM 5530, MUCM 3540/MUCM 5540 and MUCM 3550/MUCM 5550. Small groups include string quartets, strings with piano, woodwind and brass quintets, saxophone quartets and jazz groups.

#### **Ensembles**

A variety of conducted ensembles is offered under course numbers MUEN 2602/MUEN 5602, MUEN 2605 /MUEN 5605, MUEN 2611/MUEN 5611, MUCM 3617/MUEN 5617, MUEN 2621/MUEN 5621, MUEN 2624 /MUEN 5624, MUEN 2625/MUEN 5625, MUEN 2626, MUCM 3630/MUEN 5630 and MUEN 4585/MUEN 5585. Many groups perform publicly, appear at conventions and tour extensively. Ensembles include brass choir, trumpet choir, horn choir, trombone choir, tuba-euphonium ensemble, wind ensemble, collegium musicum, percussion ensemble and marimba ensemble, steel drum band, African ensemble, gamelan ensemble, flute choir, jazz ensembles, strings, classical guitar and electric guitar, NOVA ensemble and harp ensemble.

#### **Opera Theatre**

The UNT Opera Theatre presents at least one fully mounted major operatic production each year, accompanied by orchestra, with scenery, costumes and lighting. Auditions are open to all students. Those chosen for solo roles should be currently enrolled in opera theatre courses or have been enrolled previously.

Voice majors take MUEN 3040 - Opera Theatre, as part of their degree requirements.

#### Music achievement examinations

Students must pass all required achievement examinations before applying for graduation.

Upper Division Examination — The Upper Division Examination is administered to all music majors at the conclusion of the fourth consecutive long term/semester of study at the MUAM or MUAC 1500 level. It will be given during pre-finals week in place of the Jury Examination by the appropriate faculty, i.e., the area of declared applied major or concentration. The Upper Division Examination determines admission and continuation in applied study at the MUAM or MUAC 3500 level. Guitarists who major in jazz studies will take the Upper Division Examination on jazz guitar.

Piano Proficiency Examination — This examination is required of all students majoring in music. To prepare for this examination, all non-keyboard majors must enroll in secondary piano — MUAG 1011, MUAG 1012, MUAG 1013, MUAG 1014, or MUAS 1501 — each long term/semester until the proficiency is passed. A list of examination requirements for non-keyboard majors is available from the music office. Keyboard majors and concentrations should consult the keyboard division for departmental requirements.

Voice Proficiency Examination — If noted on the degree plan, the student must demonstrate knowledge of breath control, principles of enunciation and pronunciation in singing and tone placement, and essentials in interpretation. Examination compositions are chosen by faculty.

Instrumental Proficiency Examination — This proficiency examination is for the student whose course outline requires brass, woodwinds, strings and/or percussion class. A working knowledge of all instruments is required.

Concentration Proficiency Examination — This examination must be passed for each concentration (all majors except performance and jazz studies); it covers applied music requirements through the third year of study.

Conducting Proficiency Examination — This examination is required for students who major in general, choral and instrumental music and who transfer conducting course work from another institution. It must be passed prior to student teaching.

**Jazz Studies Continuation Examination** — This examination is required for all jazz majors. It must be passed prior to enrolling in upper-level courses (MUJS 3360, MUJS 3370, MUJS 4610, MUJS 4620 or MUJS 4470).

Jazz Studies Applied Concentration Examination — This examination must be passed by each student majoring in jazz studies. Performance and Vocal Emphasis students must pass this exam before a senior recital is allowed.

**Jazz Arranging Proficiency Examination** — This examination must be passed by each student majoring in jazz with an emphasis of jazz arranging before a senior recital is allowed.

#### Music education student review

This examination is required for a major in general, choral and instrumental music. It must be passed prior to student teaching.

#### Academic advising

Information about academic matters is available in the main office, from the division chairs for the various degree programs and performing instruments, and from the degree program advisors (Chilton Hall, Room 211). For further information, see the *College of Music Handbook* or visit www.music.unt.edu/advising.

### **Degree plan**

The degree plan is an official document that lists courses completed, courses to be completed, proficiency examinations and all other requirements for a particular degree program. Each student makes a degree plan in conference with a designated music advisor. The degree plan should be made by the end of the sophomore year. Transfer students should have degree plans made during their first term/semester at UNT.

# Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree requirements and core requirements should consult a degree program advisor.

#### **Bachelor of Music**

This degree may be earned with a major in (1) performance; (2) general, choral and instrumental music; (3) composition; or (4) jazz studies

The student who majors in performance may choose piano (performance), organ (performance), organ (church music), harpsichord, voice or an orchestral instrument. Additional choices include classical guitar and multiple woodwinds.

Each student should secure from the music office or advisor the eight-term/semester outline for the chosen major.

Instruction in each area is designed to train students for public performance and teaching in schools or private studios, to prepare them for passing barrier examinations, to develop them culturally, to develop musicianship and technical proficiency, to strengthen sight-reading and the ability to assimilate music without guidance, and to prepare them for participation in church services, orchestras, ensemble groups or graduate work. The curriculum for general, choral and instrumental music majors also leads to teacher certification by the State of Texas. Instruction is given in both group and individual settings.

#### **Degree requirements**

Candidates for the Bachelor of Music must meet the following requirements.

- Hours required and general/college
  requirements: Completion of a minimum of 121–134 total
  semester hours (depending on major, see below); 31 hours
  must be completed at UNT; 42 hours must be advanced
  (24 of which must be taken at UNT). Fulfillment of degree
  requirements for the Bachelor of Music degree as specified
  in the University Core Curriculum in the Academics section
  of this catalog and the College of Music requirements.
- Major requirements: Major of 32–66 hours in music in a prescribed field, depending on the program. See specific degree for exact hours.
- 3. Other course requirements: See individual major below.

- Minor: Minor of 18 hours minimum, 6 of which must be advanced. See specific degree plan for required minor below
- 5. Electives: See individual major.
- 6. Other requirements:
  - O Piano Proficiency Examination.
  - Other proficiency examinations as required in specific programs. See individual major.
  - Participation in a music laboratory (MULB) each long term/semester with a minimum of eight terms/ semesters, except the BM with a major in general, choral and instrumental music (teacher certification), which requires a minimum of seven terms/semesters.

#### **General academic requirements**

- Completion of University Core Curriculum (42 hours). See University Core Curriculum in the Academics section of this catalog. Some courses required on degree plans may be used to fulfill requirements under the Creative Arts; Language, Philosophy and Culture; and Component Area Option categories of the core.
- Completion of College of Music Core Curriculum (52-63 hours): music theory, 12 hours; music history and literature, 9 hours; ethnomusicology, 3 hours; upper-level music elective, 3 hours; music laboratory each long term/semester, a minimum of 8 hours (or 7 hours for majors in general, choral and instrumental music); concentration or major instrument, 14-24 hours; secondary instrument, 2 hours; conducting, 2 hours.
- Completion of major program requirements and electives, for a total of 121–134 hours.

General academic requirements for all music majors include completion of courses in the University Core Curriculum. Consult the degree outlines for the various programs and the list of courses to satisfy University Core Curriculum Requirements available from the degree program advisor.

Majors in general, choral and instrumental music also must satisfy specific Teacher Certification course requirements, most of which are included in the University Core Curriculum (consult the degree outline). In addition to developmental reading, music theory, music history and literature, ethnomusicology, performance, conducting and music laboratory requirements, a general, choral and instrumental music major must complete 18 hours of professional education that include 6 hours of music education courses to complete the course requirement of 129 hours.

#### **Teacher certification**

Requirements for all-level music certification are included in the requirements for the BM with a major in general, choral and instrumental music.

Consult the College of Music and the College of Education for further requirements.

#### **Bachelor of Arts**

Students completing the Bachelor of Arts degree with a major in music will have developed a strong understanding of music history and literature, ethnomusicology and theory. Musicianship skills will be developed to a level commensurate with a liberal arts degree. The curriculum can serve as a basis for advanced degrees in non-performance areas of music. This degree may be earned with an emphasis in (1) general music or (2) music history and literature.

#### **Degree requirements**

Candidates for the Bachelor of Arts with a major in music must meet the following requirements.

Hours required and general/college
requirements: Completion of a minimum of 120 total
semester hours, of which 42 must be advanced, and
fulfillment of degree requirements for the Bachelor of Arts
degree as specified in the "General Degree Requirements"

- in the Academics section of this catalog and the College of Music requirements.
- Major requirements: Major of 52 hours in music, depending on the program. See specific degree for exact hours.
- 3. Other course requirements: See individual major.
- 4. Minor: Optional.
- 5. Electives: See individual major.
- 6. Other requirements:
  - Piano Proficiency Examination.
  - Successful completion of Upper Division Examination in applied lessons (MUAC).

#### **General academic requirements**

- Completion of University Core Curriculum (42 hours). See University Core Curriculum in the Academics section of this catalog. Some courses required on degree plans may be used to fulfill requirements under the Creative Arts, Life and Physical Sciences, and Component Area Options categories of the core.
- For the emphasis in music history and literature, students must complete all music history credits with no grade lower than B.

#### **Academic Review and Dismissal Policy**

Transcripts of music majors (BM and BA) will be reviewed in the freshman and sophomore years. Students who have received three or more grades of D, F or WF in any courses during their studies at UNT will be notified of insufficient academic progress. Students who continue to show insufficient academic progress in subsequent semesters will be dismissed from the College of Music. In most cases, students who are placed on university academic probation or suspension will be removed from the UNT College of Music. Students may appeal this decision by contacting the College of Music Dean for Academic Affairs.

Accepted music majors who are classified as music undecided (MUND) must officially declare a major before registering for their fourth long semester at UNT. Failure to meet this requirement may result in dismissal from the College of Music. MUND students are required to meet with a music advisor each long semester.

#### **Professional Expectation Policy**

The UNT College of Music expects music majors (BM and BA) to be committed to their degree and follow the UNT Code of Student Conduct. Students shall exhibit professional behavior at all times, which includes (but is not limited to): class attendance, meeting attendance (including seminars, masterclasses, and departmentals), and respectful interactions with all members of the UNT community. Students are also expected to adhere to professional standards as outlined in division/area handbooks. In cases where there is substantial evidence of unprofessional behavior, students will be removed from the UNT College of Music. Students may appeal this decision by contacting the College of Music Dean for Academic Affairs.

#### **Center for Experimental Music and Intermedia**

The Center for Experimental Music and Intermedia (CEMI) provides extensive instructional, research, and performance facilities for composers, researchers, and presenters of computer music and intermedia compositions. It also presents the annual CEMI Event Series featuring computer music and intermedia works created at the University of North Texas and elsewhere, and supports an ongoing program of professional composer residencies. The advanced studio facilities of the division of composition studies are utilized for electroacoustic composition, software synthesis, algorithmic composition, intermedia composition, MIDI applications, computer music notation, digital sampling and resynthesis, and other computer music applications.

#### **Majors**

#### Composition, BM

Students in the undergraduate program in composition will be expected to demonstrate knowledge and understanding of contemporary repertoire, composers, styles, instrumentation, and electroacoustic/computer music, which are applied through a variety of compositional techniques to produce original compositions. Students completing the program will have a clear sense of the social and cultural context of their work and their place therein. Graduates will be prepared for professional careers in the field or for graduate studies in composition.

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Music with a major in composition.

# Hours required and general/college requirements

A minimum of 129 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

27-32 hours, including:

- MUCP 1180 Contemporary Materials and Techniques
- MUCP 1190 Contemporary Materials and Techniques
- MUCP 2180 Intermediate Composition I
- MUCP 2190 Intermediate Composition II
- MUCP 3180 Advanced Composition I
- MUCP 3190 Advanced Composition II
- MUCP 4180 Advanced Composition III
- MUCP 4195 Senior Composition Capstone Project
- MUCP 3320 Instrumentation
- MUCP 3670 Introduction to Electroacoustic Music

#### Plus 6 hours selected from

- MUCP 4320 Orchestration
- MUCP 4590 Intermedia Performance Arts to be taken concurrently with
- MUEN 4595 Intermedia Performance Arts
- MUCP 4685 Topics in Composition
- MUCP 4690 Topics in Computer Music Media
- MUCP 4695 Topics in Contemporary Music

#### Music history and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Followed by

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)
- MUAG 3800 Fundamentals of Conducting
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUAC (1000-level applied concentration) (8)
- MUAC (3000-level applied concentration; any one instrument or voice) (4)
- MULB, Music Laboratory (1000 level) (any music laboratory; 4 must be band, orchestra or choir) (each long term/semester; minimum of 8)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

### Minor requirements

21 hours of music theory, including:

- MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3410 Sixteenth-Century Counterpoint
   MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 3510 Form Analysis

#### **Electives**

7-12 hours (or as many as needed to complete the requirements for the degree).

# Supplemental information

- Any music major may begin the undergraduate composition program by enrolling in MUCP 1180 - MUCP 1190 (Beginning Composition I and II), which is to be taken either concurrently with or following successful completion of MUTH 1400 - MUTH 1410 or MUTH 1500 - MUTH 1510. Continuation in the program is contingent upon meeting the following requirements:
  - Completion of the following with no grade lower than a B
    - MUCP 1180 Contemporary Materials and Techniques I
    - MUCP 1190 Contemporary Materials and Techniques II
  - Completion of the following with no grade lower than a B

- MUTH 1400 Theory I
- MUTH 1410 Aural Skills I
- MUTH 1500 Theory II
- MUTH 1510 Aural Skills II
- Successful completion of the Freshman
   Barrier Examination (see Composition Student
   Handbook composition.music.unt.edu/compositionhandbook);
- d. Acceptance at the concentration level on an instrument or voice:
- e. Continuous enrollment in a music laboratory;
- Regular attendance at composition division events; and
- Consent of the composition faculty.
- Only those students who have fulfilled the following requirements by the end of the term/semester they are enrolled in MUCP 2190 will be allowed to major in composition:
  - a. Completion of following with no grade lower than B
    - MUCP 2180 Intermediate Composition I
    - MUCP 2190 Intermediate Composition II
    - MUTH 2400 Theory III
    - MUTH 2410 Aural Skills III
    - MUTH 2500 Theory IV
    - MUTH 2510 Aural Skills IV
  - b. Successful completion of Upper Divisional Examination:
  - Successful completion of Piano Proficiency Examination;
  - d. Continuous enrollment in concentration instrument/ voice with no grade lower than B;
  - e. Continuous enrollment in a music laboratory;
  - Regular attendance at composition division events; and
  - g. Composition faculty recommendation of continuation in the program following jury review.
- Composition majors must meet with the degree program advisor each term/semester until the first 60 hours of course work are completed. It is highly recommended that students continue to meet with the advisor on a regular basis throughout the remainder of the degree program.
- 4. All students enrolled in composition lessons are expected to attend division events, including concerts, reading sessions, seminars and weekly Music Now departmentals. Failure to attend these events may result in a lower composition lesson grade. This requirement is additional to any other attendance and assigned work expectations of the course. Exceptions must be approved in advance by the composition instructor.
- Composition majors must achieve a grade of B or better in all required theory and composition courses in order to remain in the program.
- Students may enroll in no more than one composition lesson each term/semester.
- Composition majors are expected to present at least one public performance and/or reading of an original composition each semester; this may include Spectrum programs, composer forums, concerts, reading sessions, student recitals, or performances at off-campus venues.
- Composition degree candidates are to maintain a portfolio
  that includes completed works, recordings and a record of
  works and performances. This portfolio is submitted to the
  composition faculty for evaluation at the senior capstone
  project hearing.

- 9. During the senior year a Senior Composition Capstone Project of original work will be presented, the content of which will be determined in consultation with the composition instructor and approved by the composition faculty in a hearing at the beginning end of the term/ semester in which prior to that when the senior capstone is presented. The fulfillment of this requirement is contingent upon approval of the senior capstone and portfolio by the composition faculty. Students must be enrolled in MUCP 4195 during the term/semester in which the capstone is presented.
- 10. Candidates must participate in a music laboratory each long term/semester they are enrolled and must complete a minimum of eight terms/semesters of laboratory requirements, four of which must be in band, orchestra or choir. Any deviation from this plan must be approved by the Associate Dean for Academic Affairs.
- 11. Candidates must pass the Concentration Proficiency
  Examination in the principal instrument or voice prior to the senior capstone project hearing.
- 12. Completion of the University Core Curriculum (42 hours). See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/ Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) categories of the University Core Curriculum.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.

#### **Proficiency examinations**

- Piano Proficiency Examination.
- Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

#### Note

Please refer to the Composition Division website for additional information concerning policies and procedures: https://composition.music.unt.edu/composition-handbook

# General, Choral and Instrumental Music (teacher certification), BM

The Division of Music Education at the University of North Texas is dedicated to empowering students through learning opportunities that are contextual and relevant to a career in teaching. To become an effective music educator, each student must commit to excellence in both teaching and musicianship.

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Music with a major in general, choral and instrumental music (teacher certification).

# Hours required and general/college requirements

A minimum of 128 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

A minimum grade of C is required for all courses listed as "major requirements" and "minor requirements" for the Bachelor of Music with a major in General, Choral, and Instrumental Music.

66-72 hours, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUAG 3800 Fundamentals of Conducting
- MUED 2310 Musicianship for Teaching I
- MUED 3100 Musicianship for Teaching II
- MUET 3030 Music Cultures of the World
   (may be used to satisfy the Language, Philosophy and
   Culture requirement of the University Core Curriculum)

# Music history, 3 hours

- MUMH 4050 Symphonic Literature
- MUMH 4070 Operatic Literature
- MUMH 4760 Chamber Music Literature
- MUMH 4770 Choral Literature
- MUMH 4780 American Music
- MUJS 4470 History of Jazz

# Music communication and literature, 3 hours

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Plus the following courses according to specialization

#### Choral-Keyboard or Guitar

- MUAG 1905 English Diction for Singers
- MUAG 1906 French Diction
- MUAG 1907 German Diction
- MUAG 1909 Italian Diction
- MUAG 1102 High Brass Methods or
- MUAG 1202 Low Brass Methods
- MUAG 1117 Percussion Class
- MUAG 1121 Strings Class
   or
- MUAG 1221 Strings Class
- MUAG 1125 Flute and Saxophone Methods or
- MUAG 1225 Clarinet, Oboe and Bassoon Methods
- MUAG 3820 Choral Conducting
- MUED 4203 Secondary Choral Methods
- MUAC 1501 Piano (applied concentration) (8) or
- MUAC 1527 Guitar (applied concentration) (8)
- MUAC 3501 Piano (applied concentration) (4)
- MUAC 3527 Guitar (applied concentration) (4)
- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary. Guitar and keyboard majors are required to complete 2 semesters of secondary applied music in an instrument other than their own. Demonstration of proficiency in secondary area is required.)

#### 7 hours from

- MULB 1801 A Cappella Choir
- MULB 1802 Concert Choir
- MULB 1803 Kalandra
- MULB 1811 Accompanying (2) (two semesters required for keyboard concentration)
- MULB 1815 Chorale
- MULB 1816 University Singers

#### Note

One jazz MULB credit may be substituted for one other MULB credit with permission of division. Lab participation is required each long term/semester.

#### Choral-Vocal

- MUAC 1503 Voice (applied concentration) (8)
- MUAC 3503 Voice (applied concentration) (4)

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary.)
- MUAG 1101 -Introduction to Winds and Percussion Methods
- MUAG 1117 Percussion Class
- MUAG 1121 Strings Class
   or
- MUAG 1221 Strings Class
- MUAG 1905 English Diction for Singers
- MUAG 1906 French Diction
- MUAG 1907 German Diction
- MUAG 1909 Italian Diction
- MUAG 3820 Choral Conducting
- MUED 4203 Secondary Choral Methods

#### 7 hours from

- MULB 1801 A Cappella Choir
- MULB 1802 Concert Choir
- MULB 1803 Kalandra
- MULB 1815 Chorale
- MULB 1816 University Singers

#### Additional requirements

One jazz MULB credit may be substituted for one other MULB credit with permission of division. Lab participation is required each long term/semester.

# Instrumental–Band, Woodwinds, Brass or Percussion

- MUAC (1000-level applied concentration; any one instrument) (8)
- MUAC (3000-level applied concentration) (4)
- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary.)
- MUAG 3870 Instrumental Conducting
- MUED 4209 Music Performance: Instrumental
- MULB 1812 Marching Band (3)

#### Instrumental methods class, 7 hours from

- MUAG 1102 High Brass Methods
- MUAG 1117 Percussion Class
- MUAG 1121 Strings Class
   or
- MUAG 1221 Strings Class
- MUAG 1125 Flute and Saxophone Methods
- MUAG 1202 Low Brass Methods
- MUAG 1224 Voice Class for Music Majors
- MUAG 1225 Clarinet, Oboe and Bassoon Methods

#### 4 hours from

- MULB 1806 Wind Symphony
- MULB 1807 Wind Orchestra
- MULB 1812 Marching Band
- MULB 1813 Concert Band
- MULB 1805 Orchestra

#### Additional requirements

MULB participation on concentration instrument is required each long term/semester.

One jazz MULB credit may be substituted for one other MULB credit (not including marching band) with permission of division. Lab participation is required each long term/semester.

#### Instrumental-Orchestra

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary.)
- MUAG 1102 High Brass Methods or
- MUAG 1202 Low Brass Methods
- MUAG 1117 Percussion Class
- MUAG 1121 Strings Class (restricted section only)
- MUAG 1221 Strings Class (restricted section only)
- MUAG 1125 Flute and Saxophone Methods or
- MUAG 1225 Clarinet, Oboe and Bassoon Methods
- MUAG 1224 Voice Class for Music Majors
- MUAG 3870 Instrumental Conducting
- MUED 4109 Methods and Materials for Teaching Instrumental Music in Elementary Schools
- MUED 4209 Music Performance: Instrumental
- MUAC (1000-level applied concentration) (8)
- MUAC (3000-level applied concentration; any one instrument) (4)
- MULB 1805 Orchestra (minimum of 7)
- Lab participation is required each long term/semester.

#### Additional requirements

One jazz MULB credit may be substituted for one other MULB credit with permission of the division chair. Harp students will take two semesters of MUAG 1121 and/orMUAG 1221 (restricted sections only) on the MUED degree plan. In order to determine the specific number of high and/or low bowed string secondary lessons that will be necessary, the MUED string faculty member in conjunction with a music education faculty committee will complete an internal check of high and low string competence prior to MUED 4000-level course enrollment.

Harp students will take two semesters of MUAG 1121 and/or MUAG 1221 on the MUED degree plan. In order to determine the specific number of high and/or low bowed string secondary lessons that will be necessary, the MUED string faculty member in conjunction with a music education faculty committee will complete an internal check of high and low string competence prior to MUED 4000-level course enrollment.

#### Instrumental-Elementary

- Declaration after MUED 3100.
- Must interview with music education faculty before declaring the instrumental—elementary track
- MUAG 1117 Percussion Class
- MUAG 1224 Voice Class for Music Majors
- MUAG 3870 Instrumental Conducting
- MUED 4103 Advanced Techniques and Materials for Elementary General Music Instruction
- MUAC (1000-level applied concentration; any one instrument) (8)
- MUAC (3000-level applied concentration) (4)
- MUAS 1503 Voice (1000-level secondary) (2)
- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary.)
- MULB 1812 Marching Band (2)

#### 4 hours selected from

Excluding major instrument.

- MUAG 1121 Strings Class
- MUAG 1221 Strings Class
- MUAG 1125 Flute and Saxophone Methods
- MUAG 1225 Clarinet, Oboe and Bassoon Methods
- MUAG 1102 High Brass Methods
- MUAG 1202 Low Brass Methods

#### 2 hours from

- MULB 1801 A Cappella Choir
- MULB 1802 Concert Choir
- MULB 1803 Kalandra
- MULB 1815 Chorale
- MULB 1816 University Singers

#### 5 hours from

- MULB 1805 Orchestra
- MULB 1806 Wind Symphony
- MULB 1807 Wind Orchestra
- MULB 1813 Concert Band

#### Additional requirements

One jazz MULB credit may be substituted for one other MULB credit as long as students have at least 2 marching band and 2 choir credits, with permission of division chair.

Harp students will take both MUAG 1121 and/or MUAG 1221 on the MUED degree plan. In order to determine the specific number of high and/or low bowed string secondary lessons that will be necessary, the MUED string faculty member in conjunction with a music education faculty committee will complete an internal check of high and low string competence prior to MUED 4000-level course enrollment.

#### Instrumental - Band/Orchestra

Must interview with music education faculty before declaring the Instrumental—Band/Orchestra track. Declaration may be made after completion of MUED 3100.

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors

(may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary.)

- MUAG 1117 Percussion Class
- MUAG 1224 Voice Class for Music Majors
- MUAG 3870 Instrumental Conducting
- MUAS 1503 Voice (1000-level secondary) (2)
- MUED 4103 Advanced Techniques and Materials for Elementary General Music Instruction
- MULB 1812 Marching Band
- MUAC (1000-level applied concentration; any one instrument) (8)
- MUAC (3000-level applied concentration) (4)

#### 4 hours selected from

Excluding major instrument.

- MUAG 1117 Percussion Class
- MUAG 1102 High Brass Methods
- MUAG 1121 Strings Class (restricted section only)
- MUAG 1221 Strings Class (restricted section only)
- MUAG 1202 Low Brass Methods
- MUAG 1224 Voice Class for Music Majors

#### Other requirements

One jazz MULB credit may be substituted for one other MULB credit as long as students have at least 2 marching band and 2 choir credits, with permission of division chair.

Harp students will take both MUAG 1121 and/or MUAG 1221 on the MUED degree plan. In addition, harp students will replace one brass class (MUAG 1102 or MUAG 1202) and one woodwinds class (MUAG 1125 or MUAG 1225) with a minimum of 2 semesters of secondary lessons on a bowed string instrument. In order to determine the specific number of high and/or low bowed string secondary lessons that will be necessary, the MUED string faculty member in conjunction with a music education faculty committee will complete an internal check of high and low string competence prior to MUED 4000-level course enrollment.

# Other course requirements

- EDCI 4060 Content Area Reading
- PHYS 1270 Science and Technology of Musical Sound

# Minor requirements

A minimum grade of C is required for all courses listed as "major requirements" and "minor requirements" for the Bachelor of Music with a major in General, Choral, and Instrumental Music.

18 hours in music and education, including:

- MUED 3200 Musicianship for Teaching III
- HDFS 3123 Child Development for Non-Majors
- EDME 4103 Student Teaching in Grades 4–8
- EDCI 3800 Professional Issues in Teaching
- EDCI 4148 Student Teaching for Music Education

### Additional requirements

Choral–Keyboard or Guitar students also take MUED 4103. Instrumental and Instrumental–Elementary students also take MUED 4109. For all other tracks, an additional 3 hours are required in consultation with an advisor.

#### Electives

As many as needed to complete the degree.

# Other requirements

- All non-keyboard majors must enroll in secondary piano each long term/semester until proficiency is passed.
- Those students who choose a keyboard or guitar concentration must take the secondary voice/instrument appropriate to the intended teaching area and qualify for participation in the appropriate music laboratory (see section on "Graduation Requirements").
- Candidates must pass the Concentration Proficiency Exam in the principal instrument or voice.
- Instrumental—Elementary students must pass the Secondary Voice Proficiency.

# Supplemental information

This program is designed to prepare students for entry into the music teaching profession and related career areas. The curriculum emphasizes public school teacher competencies in music performance, literature and pedagogy. This degree program also leads to Texas teacher certification in all-level music.

Students majoring in general, choral and instrumental music must minor in education and complete a minimum of 12 hours of applied music in one concentration and 2 hours in the secondary applied field.

The curriculum is designed to develop teacher knowledge and skills as a public school general music teacher, choral director, band director or orchestra director. It is recommended that the student's applied music concentration be appropriate to the intended teaching specialty (voice for the general music and choral areas, and band/ orchestral instrument for the instrumental areas). Those students who choose a keyboard or guitar concentration must take the secondary voice/instrument appropriate to the intended teaching area and qualify for participation in the appropriate music laboratory (see subsequent section, "Graduation Requirements").

When the student has completed the 12-semester-hour requirement in the applied concentration, the Applied Music Examining Committee in the student's area of concentration decides if any additional hours are required.

#### Admission to teacher education

Students apply formally after completing 60 semester hours with a minimum grade point average of 2.75, including sufficient progress toward degree.

#### Additional requirements

Students must present acceptable admissions scores at the time of application. See the College of Education section for further information about admission to teacher education.

### Student teaching program

The student must meet the following requirements prior to student teaching.

#### College of Music

The student must earn no grade lower than C in each required music course and have an overall 2.75 grade point average. Completion of:

- MUED 3100 Musicianship for Teaching II
- MUED 3200 Musicianship for Teaching III
- MUAG 3800 Fundamentals of Conducting
- MUAG 3820 Choral Conducting
- MUAG 3870 Instrumental Conducting

Two 4000-level MUED courses from the below list, according to specified track (MUED 4103 and MUED 4203 for choral-general, MUED 4109 and MUED 4209 for

instrumental, and MUED 4103 and MUED 4109 for instrumental-elementary)

- MUED 4103 Advanced Techniques and Materials for Elementary General Music Instruction
- MUED 4109 Methods and Materials for Teaching Instrumental Music in Elementary Schools
- MUED 4203 Secondary Choral Methods
- MUED 4209 Music Performance: Instrumental

#### 7 hours selected from

- MUAG 1102 High Brass Methods
- MUAG 1202 Low Brass Methods
- MUAG 1117 Percussion Class
- MUAG 1121 Strings Class
- MUAG 1221 Strings Class
- MUAG 1224 Voice Class for Music Majors
- MUAG 1125 Flute and Saxophone Methods
- MUAG 1225 Clarinet, Oboe and Bassoon Methods
- MUAG 1905 English Diction for Singers
- MUAG 1906 French Diction
- MUAG 1907 German Diction
- MUAG 1909 Italian Diction

#### College of Education

Students must complete the requirements of the State of Texas for teacher certification as listed in the College of Education, including 12 hours of courses and student teaching:

- HDFS 3123 Child Development for Non-Majors
- EDME 4103 Student Teaching in Grades 4–8
- EDCI 3800 Professional Issues in Teaching
- EDCI 4148 Student Teaching for Music Education

#### Additional requirements

- The student must be within 6 semester hours (including only University Core Curriculum requirements) of completing degree course work.
- By midterm of the term/semester prior to student teaching, the student must file student-teaching application forms.
- Before filing student-teaching application forms, the student must have passed the Piano Proficiency Examination, Conducting Proficiency Examination (or equivalent course credit), Instrumental Proficiency Examinations or Voice Proficiency Examination, and Concentration Proficiency Examination

Students should refer to the College of Education section in this catalog for further information regarding student teaching programs

### Graduation requirements

Candidates for graduation must complete all of the following laboratory requirements. Any deviation must be approved by the associate dean for academic affairs.

- All students whose applied music concentration is in a band/orchestral instrument or voice participate in music laboratories appropriate to their intended teaching area each term/semester in residence.
  - 1. Band curriculum:
    - MULB 1806 Wind Symphony
    - MULB 1807 Wind Orchestra
    - MULB 1813 Concert Band
    - MULB 1812 Marching Band (a minimum of three terms/semesters)

- 2. Orchestra curriculum:
  - MULB 1805 Orchestra
- Choral curriculum:
  - MULB 1801 A Cappella Choir
  - MULB 1802 Concert Choir
  - MULB 1803 Kalandra
  - MULB 1815 Chorale
  - MULB 1816 University Singers
- All students whose applied music concentration is in piano
  or organ participate a minimum of two terms/semesters in
  MULB 1811 Accompanying, with remaining laboratories
  to be in their intended teaching area (as shown above in 1)
  each long term/semester.

#### Additional information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - O Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

# Jazz Studies (instrumental, arranging or vocal emphasis), BM

The jazz studies degree's primary purpose is (1) to prepare students for successful careers as jazz performers, composers/ arrangers and educators; (2) to cultivate students' knowledge of and appreciation for the jazz tradition and the broader musical traditions from which it has grown; (3) to encourage students' creative efforts, and to share the results of students' efforts on the university, local, regional, national and international levels by means of performances and recordings; (4) to integrate undergraduate instruction in jazz studies with the rest of the undergraduate curriculum in the College of Music and the university.

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 129 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

Students need to maintain a C (2.75) average in all jazz courses. The GPA in non-music core and elective classes will not be counted toward the 2.75 GPA requirement. Grades of D will be acceptable in jazz classes as long as the overall 2.75 GPA requirement is met.

- 8 hours of MUAC 1000 (applied concentration)
- 6 hours of MUAC 3000 (applied jazz concentration) on any one instrument
- MUJS 1131 Jazz Performance Fundamentals I (percussion concentration students take MUAG 1117 instead)
- MUJS 1132 Jazz Performance Fundamentals II
- MUJS 1360 Jazz Fundamentals
- MUJS 1361 Jazz Aural Fundamentals
- MUJS 1370 Jazz Fundamentals
- MUJS 1371 Jazz Keyboard Fundamentals
- MUJS 1470 Introduction to Jazz Recordings
- MUJS 2360 Jazz Improvisation
- MUJS 2370 Jazz Improvisation
- MUJS 3610 Jazz Arranging
- MUJS 3620 Jazz Arranging
- MUJS 3470 Jazz Lecture Series (2)
- MUJS 4470 History of Jazz
- MUJS 4720 Jazz Senior Recital Capstone

### Music laboratory, each long term/ semester, minimum of 8 hours from

(a maximum of 2 hours of non-jazz lab band or choir may be substituted)

- MULB 1808 Jazz Lab Band
- MULB 1817 Jazz Guitar Laboratory
- MULB 1818 Jazz Repertory Laboratory
- MULB 1819 Jazz Keyboard Laboratory
- MULB 1820 Jazz Singers Laboratory
- MULB 1821 Latin Jazz Lab

# Special requirements for arranging emphasis

- MUJS 4610 Advanced Jazz Arranging
- MUJS 4620 Advanced Jazz Arranging
- MUTH 3420 Eighteenth-Century Counterpoint
- MUCP 3090 Class Composition

# Special requirements for instrumental emphasis

- MUJS 3360 Advanced Jazz Improvisation
- MUJS 3370 Advanced Jazz Improvisation
- MUCM 3550 Jazz Chamber Music (4)

# Special requirements for vocal performance emphasis

- MUCM 3550 Jazz Chamber Music (2)
- MUJS 3120 Vocal Jazz Techniques (4)
- MUJS 3900 Vocal Pedagogy for Non-Classical Styles
- MUJS 3920 Songwriting
- MUJS 4120 Vocal Jazz Styles

### Other required courses

- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)
- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)
- MUAG 3800 Fundamentals of Conducting

#### Minor

None required.

#### **Electives**

**Arranging emphasis:** 6 hours (or as many as needed to complete the requirements for the degree).

**Instrumental emphasis:** 10 hours (or as many as needed to complete the requirements for the degree), 3 hours of which must be advanced.

Vocal emphasis: 6 hours.

# Other requirements

- All non-keyboard majors must enroll in secondary piano each long term/semester until proficiency is passed.
- Students majoring in jazz studies must qualify for admission to the applied concentration program for their instrument.
   They also must qualify by audition for participation in the Jazz Lab every term/semester.
  - MULB 1808 Jazz Lab Band
  - MULB 1817 Jazz Guitar Laboratory
  - MULB 1818 Jazz Repertory Laboratory
  - MULB 1819 Jazz Keyboard Laboratory
  - MULB 1820 Jazz Singers Laboratory
  - MULB 1821 Latin Jazz Lab

• Candidates must pass the Jazz Concentration Proficiency Exam in their principal instrument or voice.

# Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/ Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - O Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

#### Music communication and literature

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

(may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Music with an emphasis in Music History and Literature, BA

The Bachelor of Arts with an emphasis in music history and literature is designed for music majors who are ready to embark upon a rigorous program of study in music history that stresses critical thinking and excellence in verbal expression and writing. Classes cover a variety of musical periods, genres, cultural sources, and the music of representative composers. The primary goal of the Bachelor of Arts with a major in music and an emphasis in music history and literature is to prepare students for graduate study in musicology or other related careers.

Candidates for the Bachelor of Arts with a major in music and an emphasis in music history and literature must meet the following requirements:

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "General university requirements" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

Completion of 49 hours of music, including

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)

### Keyboard skills, 2 hours

(may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors

### Applied music, 8 hours

Concentration level (MUAC)

# Music laboratory (MULB), 6 hours Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Music history and ethnomusicology, 18 hours

- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)

#### Plus 9 hours from

- MUMH 4050 Symphonic Literature
- MUMH 4070 Operatic Literature
- MUMH 4760 Chamber Music Literature
- MUMH 4770 Choral Literature
- MUMH 4780 American Music
- MUJS 4470 History of Jazz
- MUET 4500 Introduction to Ethnomusicology
- MUMH 4900 Special Problems (with consent of music history faculty mentor)
- MUMH 4910 Special Problems (with consent of music history faculty mentor)

#### **Electives**

2 hours (or as many as needed to complete the requirements for the degree).

# Thesis project, 3 hours

MUMH 4920 - Senior Thesis in Music History

# Other course requirements

 PHYS 1270 - Science and Technology of Musical Sound (may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

# Foreign language requirement

Minimum of 12 hours in the same language, including 6 advanced hours

# General studies electives, 15 hours (advanced)

The advanced courses (3000 level or higher) must be from outside the College of Music.

#### Minor

Optional.

# Other requirements

- In order to be accepted to the music history and literature emphasis, students must submit two writing samples to the music history area. This may be done as early as the spring semester (March 1) of the freshman year or at any point thereafter (it is strongly recommended to submit before the completion of the sophomore year). The first sample is a personal statement. The second sample should be a paper that the student has written for any college-level class, with the professor's comment and grade on it. The music history area will assign a professor to serve as mentor to students whom it accepts as majors. Students who are rejected may apply only one more time, in a subsequent semester, to the emphasis.
- Students should choose the general studies elective credits in consultation with their mentor (music history faculty).
   Recommended fields include (but are not limited to) philosophy, history, art, English literature and foreign languages.
- German is the recommended foreign language if the student intends to pursue musicology at the graduate level. Another language may be more appropriate if the student has alternative career goals. The language should be selected in consultation with the student's mentor.
- Students must complete all music history credits with no grade lower than B.

# Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS
     1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.

- American History (6) met by HIST 2610 and HIST 2620.
- Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
- Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
- Social and Behavioral Sciences (3).
- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

### Music, BA

Students completing the Bachelor of Arts with a major in music will have developed a strong understanding of music history, literature and theory. Musicianship skills will have been developed to a level commensurate with a liberal arts degree. The curriculum serves as a basis for advanced degrees in non-performance areas of music.

#### **Degree requirements**

Students pursuing a Bachelor of Arts with a major in music should consult their advisor about core requirements.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

52 hours of music including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)
- 8 hours in applied music, concentration level (MUAC)
- 6 hours of MULB enrollment

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Music history and ethnomusicology, 12 hours

- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)

#### Plus 3 hours from

A 4000-level MUET or MUJS course

- MUET 4500 Introduction to Ethnomusicology or
- MUJS 4470 History of Jazz

# Music electives (9), 6 hours (advanced)

9 advanced credit hours in music (guided electives), 6 of which must be advanced. See specific emphasis requirements.

# Other course requirements

 PHYS 1270 - Science and Technology of Musical Sound (may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

### Foreign language requirement

Minimum of 12 hours in the same language, including 6 advanced hours.

#### Minor

Optional.

### **Electives**

2 hours (or as many as needed to complete the requirements for the degree).

# General studies electives, 18 hours (advanced)

18 advanced credit hours of courses must be from courses outside the College of Music (3000 level or higher). See specific emphasis requirements.

# Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.

- American History (6) met by HIST 2610 and HIST 2620.
- Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
- Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
- Social and Behavioral Sciences (3).
- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

# Performance (specialization: Harpsichord), BM

The purpose of the Bachelor of Music with a major in performance and specialization in harpsichord is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of being a musician/performer; to increase students' preparedness to apply upon graduation for continued study in graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students for professional careers in music through participation in performances, lectures/master classes, national and international competitions, and cultural exchanges.

### **Program requirements**

#### Bachelor of Music

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

# General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)

- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)

# Graduation requirements for majors in Performance

- Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).
- Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area
- Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121–134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 132 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

33 hours, including:

- MUAM 1528 Harpsichord (12)
- MUAM 3528 Harpsichord (12)
- MUAG 4410 Harpsichord Literature and Pedagogy
- MUAG 4420 Harpsichord Literature and Pedagogy
- MUAG 4711 Keyboard Senior Recital Capstone

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Other required courses

- MUAG 3800 Fundamentals of Conducting
- MULB, Music Laboratory (1000 level) (any music laboratory) (each long term/semester, minimum of 8)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)

- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)
- MUCE 4000 Music Business and Entrepreneurship

### Foreign language

- FREN 2040 Intermediate French
- FREN 2050 Intermediate French

or

- GERM 2040 Intermediate German
- GERM 2050 Intermediate German

# Music theory requirements

18 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 3510 Form Analysis

#### Advanced electives in music

Choose 3 hours from the following courses

- MUAG 3230 Keyboard Improvisation
- MUCP 3090 Class Composition
- MUCP 3320 Instrumentation
- MUMH 4050 Symphonic Literature
- MUMH 4760 Chamber Music Literature
- MUMH 4770 Choral Literature
- MUMH 4780 American Music
- MUTH 3410 Sixteenth-Century Counterpoint

#### Electives

12 hours, (or as many as needed to complete the requirements for the degree), 4 of which must be in music, and 1 of which must be advanced.

# Other requirements

- Presentation of a junior recital; content approved in advance by faculty.
- Demonstration of proficiency in continuo playing in a variety of styles by public performance totaling at least one hour.
- Attendance at all area recitals is required. Unexcused absences will result in the final applied major course grade being lowered. For additional information, consult the divisional and area handbooks.

# Supplemental information

Completion of the University Core Curriculum (42 hours).
 See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life

and Physical Sciences, American History, Government/ Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.

- Communication (6) ENGL 1310 and ENGL 1320 recommended.
- Mathematics (3) MATH 1580 or MATH 1581 recommended.
- Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
- Language, Philosophy and Culture (3) met by MUET 3030.
- American History (6) met by HIST 2610 and HIST 2620.
- Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
- Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
- Social and Behavioral Sciences (3).
- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Open Score/Transposition (OS/T) Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

# Performance (specialization: Orchestral Instruments - Multiple Woodwinds), BM

The purpose of the Bachelor of Music with a major in performance and a specialization in orchestral instrumentsmultiple woodwinds is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of the performance profession; to increase students' preparedness to apply upon graduation for continued study in master's graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena as performers and teachers; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students for professional careers in music through student participation in external performances, lectures/master classes and cultural exchanges.

#### **Program requirements**

### Bachelor of Music

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba

- Percussion
- Harr
- Classical Guitar

# General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)
  - MUTH 2410 Aural Skills III (or credit by exam)
  - MUTH 2500 Theory IV (or credit by exam)
  - MUTH 2510 Aural Skills IV (or credit by exam)

# **Graduation requirements for majors in Performance**

- Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).
- Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area
- Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121–134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 123 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

40 hours, including:

- MUAM (1000-level applied major) (8)
- MUAM (3000-level applied major) (6)
- MUAC (1000-level applied concentration) (first auxiliary instrument) (4)
- MUAC (1000-level applied concentration) (second auxiliary instrument) (4)
- MUAC (3000-level applied concentration) (third auxiliary instrument) (4)
- MUAC (3000-level applied concentration) (fourth auxiliary instrument) (4)

- MUAG 4360 Instrumental Pedagogy and Repertoire or
- MUAG 4370 Instrumental Pedagogy and Repertoire
- MUAG 4710 Instrumental Studies Senior Recital Capstone
- MUCM 3520 Woodwind Chamber Music (4)

### Other required courses

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)
- MUAG 3800 Fundamentals of Conducting
- MUET 3030 Music Cultures of the World (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)

### Music laboratory

Required each long term/semester, a minimum of 8 hours from

- MULB 1805 Orchestra
- MULB 1806 Wind Symphony
- MULB 1807 Wind Orchestra
- MULB 1812 Marching Band
- MULB 1813 Concert Band

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

(may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Music Theory

15 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3510 Form Analysis

#### Advanced electives in music

Required course (3 credits):

MUTH 3420 - Eighteenth-Century Counterpoint

Choose 6 hours from the following courses:

- MUMH 4050 Symphonic Literature
- MUMH 4760 Chamber Music Literature
- MUET 4500 Introduction to Ethnomusicology
- MUJS 4470 History of Jazz
- MUCP 3180 Advanced Composition I
- MUCP 3320 Instrumentation
- MUCP 4695 Topics in Contemporary Music
- MUTH 3410 Sixteenth-Century Counterpoint
- MUTH 4370 Schenkerian Analysis
- MUCE 4000 Music Business and Entrepreneurship

### **Electives**

5 hours (or as many as needed to complete the requirements for the degree).

# Other requirements

All non-keyboard majors must enroll in secondary piano each long term/semester until proficiency is passed. Sixteen hours are required in one principal (major) instrument and 4 hours in each of the remaining four (concentration) woodwind instruments for a total of 32 hours.

# Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - O Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - O Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

# Performance (specialization: Orchestral Instruments), BM

The purpose of the Bachelor of Music with a major in performance and a specialization in orchestral instruments is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of the performance profession; to increase students' preparedness to apply upon graduation for continued study in master's graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena as performers and teachers; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students for professional careers in music through student participation in external performances, lectures/master classes and cultural exchanges.

### **Program requirements**

#### **Bachelor of Music**

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

#### General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)
  - MUTH 2410 Aural Skills III (or credit by exam)
  - MUTH 2500 Theory IV (or credit by exam)
  - MUTH 2510 Aural Skills IV (or credit by exam)

#### Graduation requirements for majors in Performance

- Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).

- Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area
- 6. Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121-134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 121 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

# Major requirements

36 hours, including:

- MUAM (1000-level applied major) (12)
- MUAM (3000-level applied major) (12)
- MUAG 4360 Instrumental Pedagogy and Repertoire or
- MUAG 4370 Instrumental Pedagogy and Repertoire (may be offered only in summer)
- MUAG 4710 Instrumental Studies Senior Recital Capstone

#### Chamber music, 6 hours

Note: percussion majors may use MUCM 3617; harp majors may use MUCM 3630; guitar majors may use MUEN 2621; substitutions may result in needing to add additional advanced hours.

- MUCM 3510 String Chamber Music
- MUCM 3520 Woodwind Chamber Music
- MUCM 3530 Brass Chamber Music
- MUCM 3540 Percussion Chamber Music

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics
   (may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

# Other required courses

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)

- MUAG 3800 Fundamentals of Conducting
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)

### Music laboratory, each long term/ semester, minimum of 8 hours from

Note: MULB 1805 is specified for majors in violin, viola, cello and double bass.

- MULB 1805 Orchestra
- MULB 1806 Wind Symphony
- MULB 1807 Wind Orchestra
- MULB 1812 Marching Band
- MULB 1813 Concert Band

# Music theory

15 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3510 Form Analysis

#### Advanced electives in music

Choose 6 hours from the following courses:

- MUCE 4000 Music Business and Entrepreneurship
- MUCP 3090 Class Composition
- MUCP 3320 Instrumentation
- MUCP 4695 Topics in Contemporary Music
- MUET 4500 Introduction to Ethnomusicology
- MUJS 4470 History of Jazz
- MUMH 4050 Symphonic Literature
- MUMH 4760 Chamber Music Literature
- MUTH 3410 Sixteenth-Century Counterpoint
- MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 4370 Schenkerian Analysis

#### **Electives**

10 hours (or as many as needed to complete the requirements for the degree).

# Other requirements

All non-keyboard majors must enroll in secondary piano each long term/semester until proficiency is passed.

#### Woodwind instruments

Students who specialize in woodwinds are required to take MUTH 3420 as one of their two advanced electives in music.

• MUTH 3420 - Eighteenth-Century Counterpoint

# Stringed instruments (violin, viola, cello, double bass)

- A minimum of eight terms/semesters of MULB 1805, Symphony Orchestra, each long term/semester.
- A minimum of 2 hours in a performance versatility requirement chosen from:
  - 1. a secondary stringed instrument,
  - 2. orchestral repertoire,
  - applied lessons on a baroque instrument.
- Preparation of two programs of representative works from classic, romantic and contemporary styles. The equivalent of one-half recital must be given the junior year and a full recital in the senior year.

### Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - O Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

# Performance (specialization: Organ), BM

The purpose of the Bachelor of Music with a major in performance and specialization in organ is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of being a musician/performer; to increase students' preparedness to apply upon graduation for continued study in graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students

for professional careers in music through participation in performances, lectures/master classes, national and international competitions, and cultural exchanges.

#### **Program requirements**

#### **Bachelor of Music**

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

# General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- 1. Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)
  - MUTH 2410 Aural Skills III (or credit by exam)
  - MUTH 2500 Theory IV (or credit by exam)
  - MUTH 2510 Aural Skills IV (or credit by exam)

# **Graduation requirements for majors in Performance**

- 1. Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).
- 3. Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area.
- Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121–134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 130 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

## Major requirements

38 hours, including:

- MUAM 1502 Organ (12)
- MUAM 3502 Organ (12)
- MUAG 4380 Organ Literature and Pedagogy (3)
- MUAG 4711 Keyboard Senior Recital Capstone (3)
- MUAG 4720 Organ Service Playing I
- MUAG 4740 Seminar in Church Music (6)

## Other required courses

MULB, Music Laboratory (1000-level) (choral laboratory recommended) (each long term/semester, minimum of 8)

- MUAG 3800 Fundamentals of Conducting
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

(may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

  (may be used to satisfy the Creative Arts)

(may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

## Music theory requirements

18 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 3510 Form Analysis

## Advanced theory/composition electives

Choose 3 hours from the following courses:

- MUCP 3320 Instrumentation
- MUCP 3090 Class Composition
- MUTH 3410 Sixteenth-Century Counterpoint

## Advanced history electives

Choose 3 hours from the following courses:

- MUMH 4050 Symphonic Literature
- MUMH 4760 Chamber Music Literature
- MUMH 4780 American Music

#### **Electives**

9 hours (3 of which must be advanced) or as many as need to complete the requirements for the degree.

## Other requirements

- Presentation of a junior recital; content approved in advance by faculty.
- Demonstration of proficiency in performance equivalent to the Service Playing Examination of the American Guild of Organists.
- Organ majors must perform one major work from memory on the degree recital.
- Attendance at all area departmental recitals is required.
   Unexcused absences will result in the final applied major course grade being lowered. For additional information, consult the divisional and area handbooks.

## Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - Social and Behavioral Sciences (3).
  - Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Other requirements
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

## Performance (specialization: Organ, Church Music Emphasis), BM

The purpose of the Bachelor of Music with a major in performance and a specialization in organ with an emphasis in church music is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of being a musician/performer; to increase students' preparedness to apply upon graduation for continued study in graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students for professional careers in music through participation in performances, lectures/master classes, national and international competitions, and cultural exchanges.

## **Program requirements**

#### Bachelor of Music

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

## General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)
  - MUTH 2410 Aural Skills III (or credit by exam)
  - MUTH 2500 Theory IV (or credit by exam)
  - MUTH 2510 Aural Skills IV (or credit by exam)

## Graduation requirements for majors in Performance

- Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).

- Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area.
- 6. Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121–134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 129 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

## Major requirements

38 hours, including:

- MUAM 1502 Organ (12)
- MUAM 3502 Organ (6)
- MUAG 3800 Fundamentals of Conducting
- MUAG 3820 Choral Conducting
- MUAG 4380 Organ Literature and Pedagogy
- MUAG 4711 Keyboard Senior Recital Capstone
- MUAG 4720 Organ Service Playing I
- MUAG 4730 Organ Service Playing II (2)
- MUAG 4740 Seminar in Church Music (6)

## Other required courses

MULB, Music Laboratory (1000 level) (choral laboratory recommended) (each long term/semester, minimum of 8)

- MUET 3030 Music Cultures of the World
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy a portion of the Life and Physical Sciences requirement of the University Core Curriculum)

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

## Music theory

15 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)

- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3420 Eighteenth-Century Counterpoint

## Advanced electives in theory/ composition

Choose 3 hours from the following courses

- MUTH 3410 Sixteenth-Century Counterpoint
- MUTH 3510 Form Analysis
- MUCP 3090 Class Composition
- MUCP 3320 Instrumentation
- MUCP 4695 Topics in Contemporary Music

## Advanced electives in music history

Choose 3 hours from the following courses:

- MUMH 4050 Symphonic Literature
- MUMH 4760 Chamber Music Literature
- MUMH 4780 American Music

#### **Electives**

18 hours (or as many as needed to complete the requirements for the degree).

## Other requirements

- Presentation of a junior recital; content approved in advance by faculty.
- This option with church music emphasis is available to students who wish to prepare for careers as church musicians.
- Demonstration of proficiency in performance at a level equivalent to the Service Playing Examination of the American Guild of Organists.
- Attendance at all area recitals is required. Unexcused absences will result in the final applied major course grade being lowered. For additional information, consult the divisional and area handbooks.

## Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.

- Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
- Social and Behavioral Sciences (3).
- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Other requirements:
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

## Performance (specialization: Piano), BM

The purpose of the Bachelor of Music with a major in performance and specialization in piano is: to provide students with the tools necessary to develop their technique and musicianship through the study and performance of music from various periods and genres; to familiarize students with various aspects of being a musician/performer; to increase students' preparedness to apply upon graduation for continued study in graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry upon graduation into the professional arena; to encourage students to investigate an expanded array of professional opportunities in the field of music; and to prepare students for professional careers in music through participation in performances, lectures/master classes, national and international competitions, and cultural exchanges.

## **Program requirements**

#### **Bachelor of Music**

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

#### General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)
  - MUTH 2410 Aural Skills III (or credit by exam)

- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)

## Graduation requirements for majors in Performance

- Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).
- Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area.
- Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121–134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 129 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

## Major requirements

36 hours including:

- MUAM 1501 Piano (12)
- MUAM 3501 Piano (9)
- MUAG 3260 Piano Literature
- MUAG 3270 Piano Literature
- MUAG 4160 Elementary Piano Pedagogy
- MUAG 4170 Intermediate Piano Pedagogy
- MUAG 4711 Keyboard Senior Recital Capstone

#### Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

## Other required courses

- MUAG 3800 Fundamentals of Conducting
- MUCE 4000 Music Business and Entrepreneurship
- MUCM 3510 String Chamber Music (2)
- MULB 1811 Accompanying (each long term/semester, minimum of 8)
- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)

- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)

## Music theory requirements

18 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 3510 Form Analysis

#### Advanced electives in music

Students select 3 hours from the following courses.

- MUAG 3230 Keyboard Improvisation
- MUAG 3240 Techniques of Piano Accompanying
- MUCP 3090 Class Composition
- MUCP 3320 Instrumentation
- MUCP 4695 Topics in Contemporary Music
- MUMH 4760 Chamber Music Literature

#### **Electives**

13 hours (or as many as needed to complete the requirements for the degree), 3 hours of which must be in music and 2 of which must be advanced.

## Other requirements

- Presentation of a junior recital; content approved in advance by faculty.
- Attendance at all area departmental recitals is required.
   Unexcused absences will result in the final applied major course grade being lowered. For additional information, consult the divisional and area handbooks.

## Supplemental information

- Completion of the University Core Curriculum (42 hours).
   See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.

- Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
- Social and Behavioral Sciences (3).
- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - Open Score/Transposition (OS/T) Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

## Performance (specialization: Voice), BM

The purpose of the Bachelor of Music with a major in performance and a specialization in voice is: to provide students with training which will develop their native vocal talent; to develop their musicianship through the study and performance of music from various periods and genres; to prepare students to apply for continued study in master's graduate performance degrees at the highest quality institutions and to help especially gifted students prepare for immediate entry into the professional arena as performers and teachers; to encourage students to investigate an expanded array of professional opportunities in the field of music; to expose students to successful individuals who are working as performers, teachers, coaches, and as professional agents through periodic master classes held on our campus; and to prepare students for professional careers in music through student participation in external performances, lectures/master classes and cultural exchanges.

#### **Program requirements**

#### Bachelor of Music

Click here to view the general "Bachelor of Music" requirements within the "College of Music" section.

#### **Major in Performance**

The following choices are available under performance.

- Piano (performance)
- Organ (performance)
- Organ (church music)
- Harpsichord
- Voice
- Orchestral Instruments
- Strings: violin, viola, cello and double bass
- Winds: flute, oboe, clarinet, bassoon, saxophone, woodwinds (a combination of all five instruments), trumpet, trombone, euphonium, horn and tuba
- Percussion
- Harp
- Classical Guitar

## General requirements for majors in Performance

Students who have not fulfilled the following requirements at the beginning of the fifth term/semester are not allowed to major in applied music.

- Completion of at least 60 semester hours with an average of C or better.
- 2. Completion of
  - MUTH 1400 Theory I (or credit by exam)
  - MUTH 1410 Aural Skills I (or credit by exam)
  - MUTH 1500 Theory II (or credit by exam)
  - MUTH 1510 Aural Skills II (or credit by exam)
  - MUTH 2400 Theory III (or credit by exam)

- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)

#### Graduation requirements for majors in Performance

- 1. Completion of 20–32 hours in the major instrument/voice (the number of hours varies according to the instrument).
- Completion of 6–16 hours supplementing the major instrument (literature, pedagogy, diction, chamber music, advanced conducting).
- 3. Demonstration of proficiency in solo playing in public recitals, and in ensemble and chamber music, as appropriate.
- 4. Presentation of all senior recital capstone requirements, content approved in advance and public performance graded by faculty. All proficiencies (including piano and the Upper Division Examination) must be met the semester before applying for the senior recital capstone.
- Completion of 6–12 hours in upper-level MUTH, MUCP and MUED. Credit hours and courses vary by performance area.
- 6. Other music and general elective hours (see program outlines below for specific recommendations).
- 7. A total of 121-134 hours are required.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 134 hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Music degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Music requirements.

## Major requirements, 36 hours

- MUAM 1503 Voice (8)
- MUAM 3503 Voice (9)
- MUAG 1905 English Diction for Singers
- MUAG 1906 French Diction
- MUAG 1907 German Diction
- MUAG 1909 Italian Diction
- MUAG 3800 Fundamentals of Conducting
- MUAG 3820 Choral Conducting
- MUAG 4210 Vocal Literature
- MUAG 4300 Science and Pedagogy of Singing
- MUAG 4712 Voice Senior Recital Capstone
- MUEN 3040 Opera Theatre (2)

## Music theory

15 hours in music theory, including:

- MUTH 1400 Theory I (or credit by exam)
- MUTH 1410 Aural Skills I (or credit by exam)
- MUTH 1500 Theory II (or credit by exam)
- MUTH 1510 Aural Skills II (or credit by exam)
- MUTH 2400 Theory III (or credit by exam)
- MUTH 2410 Aural Skills III (or credit by exam)
- MUTH 2500 Theory IV (or credit by exam)
- MUTH 2510 Aural Skills IV (or credit by exam)
- MUTH 3410 Sixteenth-Century Counterpoint or
- MUTH 3420 Eighteenth-Century Counterpoint

## Music communication and literature

3 hours from the following courses

- MUMH 1610 Music as Communication
- MUMH 2050 Sounds and Cinema
- MUMH 2060 History of Rock
- MUMH 3100 Music, Gender, Sexuality
- MUMH 3200 Music as Politics

(may be used to satisfy the Creative Arts requirement of the University Core Curriculum)

### Followed by

- MUET 3030 Music Cultures of the World (may be used to satisfy the Language, Philosophy and Culture requirement of the University Core Curriculum)
- MUMH 3500 Music History and Literature to 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 3510 Music History and Literature Since 1750 (may be used to satisfy a portion of the Component Area Options requirement of the University Core Curriculum)
- MUMH 4070 Operatic Literature
   or
- MUMH 4770 Choral Literature

## Other required courses

- MUAG 1013 Keyboard Skills for Music Majors and/or
- MUAG 1014 Keyboard Skills for Music Majors (may be waived by successful completion of the Piano Proficiency Exam upon entrance to UNT, and replaced by 2 credits of MUAS 1000-level applied secondary)
- PHYS 1270 Science and Technology of Musical Sound (may be used to satisfy the Life and Physical Sciences requirement of the University Core Curriculum)
- MUCE 4000 Music Business and Entrepreneurship

### Foreign language

- ITAL 1010 Elementary Italian and
- ITAL 1020 Elementary Italian

#### Followed by

- FREN 1010 Elementary French and
- GERM 1010 Elementary German
   or
- GERM 1010 Elementary German and
- GERM 1020 Elementary German or

FREN 1010 - Elementary French and

• FREN 1020 - Elementary French

#### Music laboratory

Vocal performance majors are required to enroll in a music laboratory each long term/semester, a minimum of 8 hours from

- MULB 1801 A Cappella Choir
- MULB 1802 Concert Choir
- MULB 1803 Kalandra
- MULB 1815 Chorale
- MULB 1816 University Singers

All vocal performance majors must complete a choir placement audition for the academic year and participate in a choir determined by the choral studies faculty through the eighth semester of study. Students will remain in the ensemble into which they placed for the entire academic year, pending the ensemble director's approval or graduation.

Beginning with the ninth semester, assuming the mandated eight semesters of auditioned choral MULB participation has been completed for the degree, vocal performance majors may enroll in one of the following MULB/MUEN to fulfill the MULB requirement, pending approval of the director for each lab or ensemble.

- MULB 1811 Accompanying
- MULB 1820 Jazz Singers Laboratory
- MUEN 2626 Mariachi Aguilas
- MUEN 3040 Opera Theatre
- MUEN 4530 Vox Aquilae
- MUEN 4585 Nova Ensemble
- MUEN 4595 Intermedia Performance Arts

For the purposes of planning, students returning for a ninth semester will be asked, at the end of the eighth semester, to notify the Director of Choral Studies if they do not plan to return to their current auditioned choir.

#### **Electives**

13 hours (or as many as needed to complete the requirements for the degree).

## Other requirements

- All non-keyboard majors must enroll in secondary piano each long term/semester until proficiency is passed.
- Prior to the fifth term/semester, the student must have completed diction courses in English, Italian, German and French, and one year of foreign language (see degree outline, in this section).
- Presentation of a junior recital (one-half length).
- Presentation of a senior recital that includes a group of Italian, French, German and English songs and an aria from opera or oratorio.

## Supplemental information

- Completion of the University Core Curriculum (42 hours). See "University Core Curriculum requirements." Some courses required on degree plans may be used to fulfill requirements under Communication, Mathematics, Life and Physical Sciences, American History, Government/ Political Science, Creative Arts, Language, Philosophy and Culture, Social and Behavioral Sciences and Core Option (Component Area Option) Courses.
  - Communication (6) ENGL 1310 and ENGL 1320 recommended.
  - O Mathematics (3) MATH 1580 or MATH 1581 recommended.
  - Life and Physical Sciences (6) met by PHYS 1270 and an additional laboratory science course.
  - Language, Philosophy and Culture (3) met by MUET 3030.
  - American History (6) met by HIST 2610 and HIST 2620.
  - Government/Political Science (6) met by PSCI 2306 and PSCI 2305.
  - Creative Arts (3) met by MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100 or MUMH 3200.
  - Social and Behavioral Sciences (3).

- Core Option/Component Area Option Courses (6) met by MUMH 3500 and MUMH 3510.
- Proficiency examinations:
  - O Piano Proficiency Examination.
  - Successful completion of the Upper Division Examination in applied lessons (MUAC and MUAM).

#### **Minors**

## Music Business and Entrepreneurship minor

## Required courses, 12 hours

- MUCE 4000 Music Business and Entrepreneurship
- MUCE 4010 Marketing for Musicians
- MUCE 4030 Music Entrepreneurship Practicum/ Internship
- MUCE 4040 Music Law and Finance

## Plus two of the following

- MUCE 4020 Music Leadership and Performing Arts Management
- MUCE 4050 Artist Management and Touring
- MUCE 4060 Beginning Digital Audio Production for Music Entrepreneurs
- MUCE 4070 Business of Music in Media
   Note: Students may take any other related courses in consultation with music entrepreneurship program director.

#### Music minor

For a first minor in music, students must complete a minimum of 18 hours, 6 of which must be advanced, representing theory, piano, music history and music electives.

Minimum hours in each area are as follows: theory, 6 semester hours credit (MUTH 1300 and MUTH 1350); class piano, 2 semester hours credit (MUAG 1001 and MUAG 1002 or placement in the piano sequence by passing appropriate placement tests); 6 semester hours credit in music history (MUMH 3000, MUMH 3010, MUMH 3100, or MUMH 3200); additional music electives, 4 semester hours credit (may include courses with the following UNT course prefixes: MUAG, MUCM, MUET, MUGC, MUJS, MUAC, MUAM, MUAS, MUCP, MUED, MUEN, MUMH, MULB, MUTH).

Students may elect to take credit by exam (CBE) for some or all of the theory credits required on the music minor. With theory area approval, students may substitute 6 credits of music-major theory courses (MUTH 1400, 1410, 1500, 1510, 2400, 2410, 2500, 2510) in place of non-major courses (MUTH 1300, 1350).

## **Music Theory minor**

The Minor in Music Theory is designed for music majors who are interested in further exploring the theoretical and analytical bases of music. The purpose of the minor is to provide students with a solid and well-rounded foundation in understanding, analyzing and comparing the melodic, harmonic and formal structures of the styles of Western music, and to prepare students for advanced study at the master's and doctoral level in music history.

## Eligibility

Undergraduates with the following majors may pursue a Minor in Music Theory:

- Composition, BM
- General, Choral and Instrumental Music (teacher certification), BM
- Jazz Studies (instrumental, arranging or vocal emphasis), BM

- Music, BA
- Performance (specialization: Harpsichord), BM
- Performance (specialization: Orchestral Instruments -Multiple Woodwinds), BM
- Performance (specialization: Orchestral Instruments), BM
- Performance (specialization: Organ), BM
- Performance (specialization: Organ, Church Music Emphasis), BM
- Performance (specialization: Piano), BM
- Performance (specialization: Voice), BM

## Requirements

A successful application to be submitted after the completion of MUTH 2400. See https://mhte.music.unt.edu for submission guidelines.

#### 18 hours from

- MUTH 3410 Sixteenth-Century Counterpoint
- MUTH 3420 Eighteenth-Century Counterpoint
- MUTH 3510 Form Analysis
- MUTH 4370 Schenkerian Analysis
- MUTH 4520 Twentieth-Century Techniques
- MUTH 4920 Advanced Colloquium in Music Theory

## College of Science

Mailing address:

1155 Union Circle #311365

Denton, TX 76203-5017

Web site: cos.unt.edu

Advising Center

Web site: cos.unt.edu/advising

#### Pamela Padilla, Dean

Ed Dzialowski, Associate Dean John Quintanilla, Associate Dean

#### Mission

The mission of the College of Science at the University of North Texas is to provide a supportive, inclusive, and collaborative environment for students, faculty, and staff, integrating a contemporary education in science with the pursuit of research at the forefront of the natural and mathematical sciences.

#### Vision

The College of Science at the University of North Texas will be known for its:

- Internationally recognized excellence in scientific research and discovery;
- Top quality science education for future scientists, teachers, health professionals, and other world citizens;
- Essential role as a pillar of the university's reputation as a top tier research institution; and
- Successful promotion of scientific literacy, innovation, and economic development.

The college consists of the following departments and areas of study:

Biological Sciences

Chemistry

Forensic Science

Interdisciplinary Program in Applied and Computational

Science

Mathematics

Physics

Teach North Texas

#### **College of Science admissions requirements**

Admission into the College of Science is contingent on clear admission to the university.

To be admitted into the College of Science, an applicant (freshman, transfer, international, or post-baccalaureate) must be eligible to enroll in MATH 1650 (Precalculus) or in a higher-level math class that has MATH 1650 as part of its prerequisite chain. Enrollment in mathematics classes for entering freshmen will be determined in accordance with criteria established by the Department of Mathematics. The UNT mathematics department web site lists links to preparation tests for the UNT math placement exam (www.math. unt.edu/academics/mathematics-placement).

Applicants who do not meet the above requirements will be provisionally admitted as pre-College of Science (PCOS). PCOS students are welcome to visit the COS Office for Student Advising for assistance. Full admission in the College of Science will be granted after passing MATH 1100 (Algebra) with a grade of C or higher or else showing proficiency in algebra, as described above.

For PCOS students whose degree plans do not require MATH 1710 (Calculus I), earning a C or higher in MATH 1180 (in lieu of MATH 1100) will be sufficient for admission into the College of Science.

After admission criteria are met by the applicant, the student will be accepted as a major in his or her program of study.

#### **Academic advising**

Academic advisors and counselors are available in the College of Science Advising Center to assist students in the development and pursuit of meaningful educational goals.

The College of Science Advising Center has trained academic advisors who are assigned to specific majors. The academic advisors prepare students' degree audits, assist majors with core curriculum issues and requirements for their chosen major, and process graduation applications. Faculty advisors in the department assist the students in their major.

#### **Degree requirements**

The basic structure of all bachelor's degrees consists of a large set of general education requirements common to all degrees (University Core Curriculum – 42 hours at UNT), a small set of requirements unique to the school or college offering the degree (college requirements), a set of requirements defining a major field of study as determined by a department (major/professional/concentration – a minimum of 24 hours, including 12 advanced hours earned at UNT), and electives chosen freely or in consultation with an advisor to reach the minimum number of hours required for the degree. A lesser field of study, a minor (minimum of 18 hours), is optional unless specified in the degree requirements. All degrees require that 30 hours be earned at UNT and that at least 36 hours are at the advanced level (3000- and 4000-level courses).

#### **Degree audit**

A degree audit is an official document of the university that lists all the courses needed to complete a chosen degree and shows how all of the courses completed are applied toward the degree. Students should file for a degree audit when certain of their major by making an appointment with the faculty advisor in the major department. Transfer students will need to bring:

- copies of transfer transcripts;
- · catalog descriptions of transfer courses; and
- the initial Core Curriculum Transfer Evaluation from orientation.

After the degree audit advising session with the faculty advisor, the degree audit request form is sent to the Advising Center for preparation of the degree audit. Within a few weeks, an official degree audit will be e-mailed to the address provided. Students may view their degree audit online at mydegreeaudit.unt.edu anytime or obtain an updated copy each term/semester from the Advising Center. Academic advisors in the Advising Center are available by appointment to assist students with questions that may arise as they chart their progress.

#### **Programs of study**

The college offers the following undergraduate degrees:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Science in Biochemistry, Biology, Chemistry, Mathematics, Medical Laboratory Sciences and Physics;
- Professional, preprofessional and specialized programs
- Minors in a variety of disciplines see individual departments
- Academic certificates

#### **Multiple Programs of Study**

Students pursuing two or more majors offered by the College of Science must meet the following requirements:

- Selecting two or more majors from the same academic department is prohibited.
- For each major offered by the College of Science, a student must take at least 21 unique hours that do not count toward the other major(s) in the College of Science that the student is pursuing. Of these 21 unique hours, at least 12 hours must be advanced.

Students may not earn a major and a minor from the same academic department unless the minor is specifically included in the requirements of the major.

Students are permitted to earn a major and an academic certificate from the same academic department.

#### **Degree Requirements**

The following requirements are in addition to or a specification of the University Core Curriculum requirements for Bachelor of Arts degrees and some Bachelor of Science degrees.

#### **Bachelor of Arts degree requirements**

Candidates for the Bachelor of Arts must meet the following requirements.

- Hours Required for the Degree: Completion of a minimum of 120 total semester hours; 36 must be advanced.
- General University Requirements: See "General Degree Requirements" in the Academics section of this catalog.
- College of Science Degree Requirements: See "College of Science degree requirements" in this section of the catalog for specific requirements and list of approved courses. See specific degree audit for exact hours.
- Major Requirements: A major as specified by the department with at least 24 semester hours; 12 hours of advanced work in the major must be completed at UNT.
- 5. Minor: See individual major.
- 6. Electives: See individual major.
- 7. Other Course Requirements: See individual major.
- Other Requirements: Completion of all other requirements for a major and a minor as specified by the respective departments.

#### **Bachelor of Science degree requirements**

Candidates for the Bachelor of Science must meet the following requirements.

- Hours Required for the Degree: Completion of a minimum of 120 total semester hours; 36 must be advanced.
- General University Requirements: See "General Degree Requirements" in the Academics section of this catalog.
- Major Requirements: A major as specified by the department with at least 24 semester hours; 12 hours of advanced work in the major must be completed at UNT.
- 4. **Minor:** See individual major.
- 5. **Electives:** See individual major.
- 6. Other Course Requirements: See individual major.
- Other Requirements: Completion of all other requirements for a major and a minor as specified by the respective departments.

#### Core curriculum

Candidates for the Bachelor of Arts and Bachelor of Science degrees in the College of Science must complete the University Core (see the Academics section of this catalog) and the College of Science degree requirements shown below. Students should see the departmental advisor for their major for more information.

## Bachelor of Arts Breadth Requirement, 3–12 hours (or foreign language proficiency)

Students pursuing the Bachelor of Arts must complete four classes (minimum 3 hours each) from classes outside of COS; these classes may not be simultaneously applied to University Core Curriculum requirements. Students are encouraged to use these 12 hours to add value to their degree by applying them to a certificate, minor, or second major that will support their goals, in consultation with the COS Advising Center.

This requirement will be deemed complete for Bachelor of Arts students who attain Intermediate II (2050) level proficiency in a foreign language (for all languages other than American Sign

Language, prerequisites for 2050 are 1010, 1020, and 2040, in sequence). Also, students who graduated from a high school outside the United States at which English was not the primary language should ask the COS Advising Center about eligibility for waiving this requirement.

The Bachelor of Science degree offers candidates the opportunity for greater depth in their field of study, while the Bachelor of Arts degree gives candidates a greater opportunity to take classes from a wider range of classes from across the university. Candidates should see consult their individual majors for specific requirements for the Bachelor of Science.

#### Certificates

## **Data Analytics certificate**

Training and experience in data analytics is becoming increasingly important in nearly any career. This certificate comprises a collection courses that undergraduate students from any major may use to complete an undergraduate certificate in Data Analytics. The certificate provides students an understanding of fundamental concepts of contemporary statistical and data analytics methods, as well as experience in obtaining, wrangling and learning from big data. Certificate courses emphasize applications of methods for solving problems in science, business, and industry with real-world data and case studies. This certificate helps prepare graduates to be highly competitive in the employment marketplace.

## Required courses, 15 hours

This certificate requires the following five (5) courses.

- IPAC 4130 Data Analytics and Computational Statistics 1
- IPAC 4230 Data Analytics and Computational Statistics 2
- IPAC 4240 Principles of Data Structures, Harvesting and Wrangling
- IPAC 4250 Principles of Data Visualization for Large Data
- IPAC 4340 Methods for Discovery and Learning from Data

## **Undergraduate Academic Certificates**

# Health Professions Student Development certificate

The Health Professions Student Development Certificate facilitates the process of preparing for admission to a health professional school. Not only will students strengthen the basic sections of a professional school application, but they will also be challenged to think critically about their future role in healthcare. Since UNT does not offer a pre-health major, this certificate will provide realistic expectations and valuable preparation through four categories: Healthcare Competency Development, Community Service, Healthcare Experience, and Application Awareness & Enhancement.

The Health Professions Student Development Certificate is open to all majors at UNT and will be administered through the College and Schools in collaboration with the Office of Health Professions.

## Requirements

Healthcare Competency Development (academic component)

18 credit hours total; two courses must be taken in one competency area (Oral Communication, Written Communication, Cultural Awareness, Ethical Responsibility, Leadership & Business), and one course in the remaining four competency areas.

9 hours must be taken at the advanced level.

A grade of B or better is required in all coursework required for the certificate.

#### Oral Communication

- COMM 1010 Introduction to Communication
- COMM 2020 Interpersonal Communication
- COMM 2040 Public Speaking
- COMM 3120 Nonverbal Communication
- COMM 3220 Health Communication
- COUN 2610 Principles of Counseling I
- RHAB 3000 Microcounseling

#### Written Communication

- ENGL 3000 Introduction to Literary Analysis and Interpretation Skills
- ENGL 3110 Academic Writing in the Humanities
- ENGL 3210 Studies in Writing
- ENGL 3450 Short Story
- ENGL 4195 Advanced Grammar and Usage
- ENGL 4630 Studies in Literature and Medicine
- ENGL 4640 Studies in Literature and Science

### **Cultural Awareness**

- ANTH 3101 American Culture and Society
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.
- ANTH 4200 Health, Healing and Culture: Medical Anthropology
- ANTH 4210 Culture and Human Sexuality
- ANTH 4220 Anthropology in Public Health
- ANTH 4550 Race, Ethnicity and Identity
- CMHT 4750 Managing a Diverse Workforce
- COUN 2620 Diversity and Cultural Awareness
- PSYC 4030 Multicultural Psychology
- SOCI 3120 Sociology of Health and Illness
- SOCI 3300 Urban Sociology
- SOCI 3700 Sociology of Religion
- SOCI 4250 Gender and Society
- SOCI 4540 Race and Ethnic Minorities
- SOCI 4550 Sociology of Aging
- SOWK 4540 Human Diversity for the Helping Professions
- SPAN 3520 Spanish for Social Services
- SPAN 3550 Spanish for the Medical Professions I

#### Ethical Responsibility

- MGMT 3880 Business Ethics and Social Responsibility
- PHIL 2600 Ethics in Science
- PHIL 3440 Bioethics
- PSCI 4360 International Ethics
- SOWK 4000 Ethics and Professionalism in Practice

#### Leadership and Business

- FINA 2770 Personal Finance
- MGMT 3720 Organizational Behavior
- MGMT 3721 Essentials of Organizational Behavior for Non-Business Majors
- MGMT 3850 Foundations of Entrepreneurship
- MGMT 4470 Leadership
- MGMT 4890 Legal Aspects of Employment Practices
- MKTG 3010 Professional Selling

- MKTG 3650 Foundations of Marketing Practice
- MKTG 3651 Foundations of Marketing Practice for Non-Business Majors
- UCRS 3600 Leadership for a Global Society

## **Community Service**

Students must obtain 100 hours of healthcare volunteerism or general community service. Students will submit a basic log of hours to the Office of Health Professions, along with signatures from the organization(s) where they served.

## Healthcare Experience

Students are required to shadow a professional (or professionals) in their field for at least 50 hours. Students will submit a basic log of hours to the Office of Health Professions, along with signatures from the professional(s).

## Additional Requirements

- Students must attend at least three events or activities hosted by the Office of Health Professions. Examples of appropriate health professions events and activities are:
  - "What Should I Be Doing Now?" Seminars
  - Application Seminar
  - HPAC Seminar
  - Personal Statement Workshop
  - Mock Interview with a counselor in the Office of Health Professions
  - Guest Speakers
  - Health Professions "Spring Swing" Academic Fair

An approval form for each health professions event or activity that the student attended is required. A signature must come from the individual who hosted the event.

- Students must submit a 5000 character essay addressing
  what they learned from all four categories of the certificate
  and how their overall experience will make them a strong
  healthcare professional. 5000 characters includes spaces (as
  emulating most application services).
- Students must have a 3.25 overall GPA at the time of certificate completion.
- In order to formally earn the certificate, students must submit the following documents to the Office of Health Professions:
  - A log of hours for community service and shadowing. Both logs must include signatures from appropriate individuals.

## **Preprofessional studies**

#### Office of Health Professions

Hickory Hall, Room 256

Mailing address: 1155 Union Circle #311365 University of North Texas Denton, TX 76203-5017 940-369-8606 Fax: 940-369-8557

Web site: cos.unt.edu/advising/health-professions

For information on all health professions at UNT: https://

#### Dr. Debrah Beck, Assistant Dean, Office of Health Professions Todd Lang, Senior Academic Counselor

#### Mardreana Reed, Academic Counselor

The Office of Health Professions assists all UNT students preparing for admission to a graduate program in a health profession. Counselors in the Office of Health Professions advise students in medicine, dentistry, veterinary medicine, optometry, physician assistant, physical therapy, occupational therapy, pharmacy, chiropractic and other health professions. The progress of each student is tracked by professionals who provide one-on-one advising, information on entrance requirements, the application process, letters of recommendation and workshops on the interview process.

The goal of the Office of Health Professions is to help students prepare for admission to a professional school through advising, seminars and workshops. Students should meet with a counselor in the Office of Health Professions and also with their major academic advisor once a semester to make certain the student meets their goal for graduation and also their application to professional schools.

For further information, e-mail either Debrah.Beck@unt.edu, Todd. Lang@unt.edu, or Mardreana.Reed@unt.edu. Call 940-369-8606 to schedule an appointment. To schedule an appointment online, please click on the following link (current students only): appointments.unt. edu.

#### **Health professions scholarships**

#### Joint Admission Medical Program (JAMP)

The program was created by Senate Bill 940 of the 77th Texas Legislature in 2001 to provide services to support and encourage highly qualified, economically disadvantaged students pursuing a medical education. The program was created to award undergraduate and medical school scholarships to qualified students. It also provides for the admission of those students who satisfy both academic and non-academic requirements to a participating Texas medical school.

Upon acceptance into the JAMP, scholarship money will be awarded each fall and spring semester beginning in the spring semester of the student's sophomore year of college. Additional funds will be awarded during the summer internships at the Texas medical schools. At UNT, the JAMP Faculty Director serves as a mentor for each JAMP student.

Eligibility criteria include:

- a. Student must be a newly enrolled freshman student;
- Must be eligible for a Pell Grant or have an estimated family contribution of \$8,000 or less;
- must have 27 hours of college credit by the time the application is submitted;
- d. must have completed Chem 1410/1430 (General Chemistry I plus the lab) and Chem 1420/1440 (General Chemistry II plus the lab) before applying;
- e. must have earned a score equal to or higher than the mean score for Texas on the SAT and/or ACT; and
- f. must maintain a 3.25 GPA or higher (overall GPA and in biology, chemistry, physics and mathematics classes).

The JAMP scholarship is for premedical students only. For additional information, see the state JAMP web site: <a href="www.TexasJamp.org">www.TexasJamp.org</a> or contact the JAMP faculty director, Dr. Debrah Beck, in Hickory Hall, Room 256 (Debrah.Beck@unt.edu). This scholarship deadline is usually in September.

#### Dr. Glenn Mitchell Memorial Scholarship

To qualify, a student must be a premedical student, should have completed 60 hours of premedical courses, must demonstrate academic excellence and must be competitive for admission to medical school.

This scholarship application is available February through March of each year. The scholarship is awarded for the following fall or spring terms/semesters.

#### Rafes Premedical Scholarship

To qualify, a student must be a full-time UNT premedical student, should currently be enrolled in freshman biology and/or chemistry, demonstrate scholastic excellence and be competitive for admission to medical school.

This scholarship application is available February through March of each year. The scholarship is awarded for the following fall or spring terms/semesters

#### Dr. Charles and Mabel Saunders Pre-Dental Scholarship

To qualify, a student must be a pre-dental student, must have 60 hours of pre-dental courses and must demonstrate academic excellence

This scholarship application is available February 1 through March 1 of each year. The scholarship is awarded for the following fall or spring terms/semesters.

#### The Frank C. Spencer Rural Student Scholarship

To qualify, a student must come from a "highly rural" Texas county defined by population density. Additional requirements: demonstrate financial need, meet minimum and continuing academic performance standards, and maintain full-time enrollment in a program of the College of Liberal Arts and Social Sciences (unless the applicant has less than twice the number of semester hours required to be full-time remaining in the degree audit).

## 3+4 UNT-UNTHSC TCOM Pathway to Osteopathic Medicine Plan

The 3+4 UNT-UNTHSC TCOM Pathway to Osteopathic Medicine Plan is an accelerated program which allows qualified students to earn the Bachelor of Arts degree from UNT while attending their first year of medical school at the UNT Health Science Center Texas College of Osteopathic Medicine (UNTHSC-TCOM). Three years of designated work must be completed at UNT, an application to UNTHSC TCOM must be completed, and, upon receiving an interview at TCOM, the student may be accepted into the medical school early.

For more information on this program, please visit a UNT Health Professions advisor or visit https://healthcareers.unt.edu/program/osteopathic-medicine-pathway

## **Teach North Texas**

Main Departmental Office Curry Hall, Suite 309

Mailing address: 1155 Union Circle #305028 Denton, TX 76203-5017 940-565-2265

Fax: 940-565-3546

Web site: www.teachnorthtexas.unt.edu

Pamela Harrell, Co-Director Ruthanne Thompson, Co-Director

#### Faculty

Fortney, Harl, Jacobs, Kilday, Leonard, Sherman, Watson

For more information about the UNT faculty, go to the faculty page.

UNT is authorized to recommend secondary and all-level teacher certification for students who have completed a baccalaureate degree in biology, chemistry, biochemistry, computer technology, information technology, mathematics or physics.

Although teacher certification programs share many commonalities, each certificate has unique requirements. What applies to one certificate is not necessarily applicable to another. Also, additions, deletions and revisions to existing teacher standards, content areas and certificate levels continue to be made by the State Board for Educator Certification. Many certificates previously available have been or are scheduled to be replaced or deleted. Although overlap provisions exist for some certificates they are not broadly applicable to all content areas. Special conditions apply to students pursuing certification who already are licensed to teach in Texas and to teachers seeking transfer of their certification from another state or country. Therefore, it is impractical to list requirements for individual content areas in this catalog.

The student is responsible for initiating the degree/certification plan process and should do so as soon as possible after being formally accepted to the university. Advising should be sought in the Teach North Texas Office.

#### **Teacher certification and endorsements**

Teacher certification is a function of the State Board for Educator Certification. Completion of the bachelor's degree and the required education courses does not necessarily result in certification by the agency. In order to receive recommendation for teacher certification through the University of North Texas, the student must have:

- successfully completed the Mathematics and Science Secondary Teaching minor requirements;
- successfully completed student teaching, including attendance at appropriate seminars and passing a comprehensive teacher preparation examination; and
- passed appropriate sections of the Texas Examinations of Educator Standards (TEXES), as applicable. Additional certifications may require satisfactory scores on portions related to those areas.

Access to Texas teacher licensure testing (TExES bar codes) is available only to those students who have successfully completed an initial teacher certification program or who are passing their final education courses and have passed the departmental competency exams. Some content areas also require that the competency exam be passed as part of the requirements for a passing grade in specific courses. (Students should consult the Courses of Instruction section of this catalog for identification of those courses.)

The TEXES is offered at least once each long term/semester and once in the summer. Contact the TEXES Advising Office in Matthews Hall, Room 103 for further information (940-369-8601).

#### **Minors**

## Mathematics and Science Secondary Teaching minor

See the Teach North Texas page for more information regarding this minor.

The minor requires 22 hours:

## Course requirements

- TNTX 1100 Secondary Teacher Preparation I: Inquiry Approaches to Teaching
- TNTX 1200 Secondary Teacher Education Preparation II: Inquiry-Based Lesson Design
- EDCI 3500 Knowing and Learning in Mathematics, Science and Computer Science
- EDCI 4000 Classroom Interactions
- EDCI 4500 Project-Based Instruction in Math, Science and Computer Science
- EDCI 4608 Apprentice Teaching I in Mathematics, Science and Computer Science and
- EDCI 4618 Apprentice Teaching II in Mathematics, Science and Computer Science
- EDCI 4628 Apprentice Teaching Seminar in Science, Math and Computer Science
- EDCI 4060 Content Area Reading

#### Note

- Enrollment in TNTX 1100 and TNTX 1200 is open to all students after consultation with and consent of the Teach North Texas advisor.
- For eligible students, TNTX 1300 may be substituted for both TNTX 1100 and TNTX 1200.
- 3. Students who fail to complete EDCI 4608, EDCI 4618 and/ or EDCI 4628 may petition the Teach North Texas program advisor for substitutions for these classes. Students who elect this option may not apply the minor to either the Bachelor of Arts with a major in mathematics (teacher certification) or the Bachelor of Science in Mathematics (teacher certification). Students who elect this option will not be recommended for state licensure by UNT and should consult a College of Sciences academic advisor for additional information regarding degree completion.
- Certification requirements are subject to change by the State Board for Education Certification. A recommendation for certification must meet the current requirements as set forth by the Texas State Board for Educator Certification advisor.
- 5. TNT candidates must meet requirements (published elsewhere) for overall GPA, GPA for all UNT courses, GPA for all content courses, and (if applicable) any GPA requirement set forth by an individual department. Students who fail to meet any of these requirements are permitted to petition the Admission, Retention and Review Committee of the Department of Teacher Education and Administration.

## Other requirements

- Admission to Teacher Education and Administration at the University of North Texas.
- Meet and continue to meet the TNT program requirements which are subject to change based on changes to the Texas laws related to teacher certification.
- 3. Pass a criminal background check.
- 4. A minimum GPA of 2.75 for all courses in the minor.

# Department of Biological Sciences

Main Departmental Office Life Sciences, Room A210

Mailing address: 1155 Union Circle #305220 Denton, TX 76203-5017 940-565-3591

Web site: www.biology.unt.edu Undergraduate Advising Office Life Sciences Building, Room A128 940-565-3627

Fax: 940-565-3821

#### Jyoti Shah, Interim Chair

Faculty

Modern biology encompasses the study of all aspects of living systems from the molecular basis of genetic inheritance to the interactions between organisms and the environment. The mission of the Department of Biological Sciences is to provide quality education leading to bachelor's, master's and doctoral degrees in biology, environmental biology, biochemistry and medical laboratory sciences. A vital component of that mission is scholarly activity, and faculty in the department conduct relevant basic and applied research and provide professional expertise and service to local, state and national constituencies. Central to our mission is quality teaching, and faculty engage in instructional development to enhance their abilities to train professionals who will have the most up-to-date skills and professional ethics for meeting the demands of a technological society. Our success is measured by the success of our students and the quality of our intellectual contributions to the improvement of society.

#### **Preprofessional programs**

See "Preprofessional studies" in the College of Sciences section of this catalog.

#### **Advanced courses**

The use of the term "advanced" as applied to courses means any upper-division (3000- or 4000-level) course.

#### **Mathematics and Science Secondary Teaching**

Individuals interested in pursuing certification in math or science teaching at the secondary level may wish to pursue a minor through the Teach North Texas program. See "Teach North Texas" in the College of Sciences section of this catalog.

#### **Majors**

## Biochemistry with a concentration in Forensic Science. BSBC

The Bachelor of Science in Biochemistry with a concentration in Forensic Science provides hands-on training for a career in forensic sciences with a focus on biochemistry. This program is accredited by the Forensic Science Education Programs Accreditation Commission.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Science in Biochemistry with a concentration in Forensic Science. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements. Students must be accepted into the Forensic Science program and see the Program Director for their official degree plan.

## Hours required and general/college requirements

A minimum of 125 semester hours and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

### Major requirements

#### Foundation courses requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2.5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I
   or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1750 Introductory Biology Research Laboratory I
- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

- MATH 1680 Elementary Probability and Statistics or
- MATH 1780 Probability Models

#### Chemistry requirements

In addition to the foundation requirements, students must complete the following biochemistry and chemistry courses with a C or higher.

- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II
- BIOC 4560 Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene
- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- CHEM 3520 Physical Chemistry
- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory

#### Other course requirements

These requirements include a replacement of a university core course, and courses in math and physics (take all courses in either physics option 1 or 2).

- TECM 2700 Technical Writing (replaces ENGL 1320 in unversity core)
- MATH 1710 Calculus I
- MATH 1720 Calculus II

#### Physics Option 1

- PHYS 1510 General Physics I with Calculus
- PHYS 1520 General Physics II with Calculus
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1540 General Physics with Calculus Laboratory II

#### Physics Option 2

- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

## Biology minor requirements

Students must complete a minor of 20 hours in biology, which includes the biology foundation courses, BIOL 4240/BIOL 4900 in the forensic science coursework, and the following:

- BIOL 3451 Genetics
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory

#### Forensic science requirements

The following Forensic Science courses are required with a C or higher. Students are also required to complete the FSAT exam.

- BIOL 3331 Biomedical Criminalistics
- BIOL 4590 Forensic Molecular Biology Laboratory
- BIOL 4240 Forensic Microscopy
- BIOL 4900 Special Problems (Forensic Science Internship as approved by Forensic Science Program Director)
- CHEM 3330 Forensic Science Analysis
- CHEM 4351 Forensic Chemistry
- CHEM 4360 Principles of Forensic Science
- CHEM 4631 Instrumental Analysis
- CHEM 4632 Instrumental Analysis Laboratory

### Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, minimum 2.75 grade point average in math and science courses, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## Biochemistry, BA

The Bachelor of Arts with a major in biochemistry prepares you with a strong foundation in biochemistry and molecular biology for careers ranging from industry to teaching.

The Bachelor of Arts with a major in biochemistry allows a less structured curriculum with more elective options than does the Bachelor of Science in Biochemistry. Further, it serves as an excellent degree program for those who wish to teach sciences at the high school level in the areas of biochemistry, chemistry, and biology. Additionally, the program serves well those who wish to go into medicine, dentistry or other biologically related professional programs of study.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Arts with a major in biochemistry. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

### Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2. 5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1750 Introductory Biology Research Laboratory

- BIOL 1760 Biology for Science Majors Laboratory
   or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 1720 Biology for Science Majors II
  or
- BIOL 1722 Honors Biology for Science Majors II or
- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

MATH 1650 - Pre-Calculus

#### Chemistry requirements

Students must complete at least 33 hours in biochemistry, of which 19 must be advanced. In addition to the chemistry foundation courses, required biochemistry courses include:

- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science
- BIOC 3621 Principles of Biochemistry
- BIOC 3622 Principles of Biochemistry Laboratory or
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II
- BIOC 4560 Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene
- BIOC 4580 Molecular Biology and Biotechnology Laboratory

#### Other course requirements

These requirements include a replacement of a university core course, and courses in physics and math.

- TECM 2700 Technical Writing (replaces ENGL 1320 in university core)
- MATH 1710 Calculus I
- PHYS 1510 General Physics I with Calculus
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus
- PHYS 1540 General Physics with Calculus Laboratory II

### Biology requirements

Students must complete a minor of 20 hours in biology, which includes the biology foundation courses and at least 12 hours as follows:

- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory
- Plus at least 8 hours of advanced biology courses (lectures with associated labs)

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

#### Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## **Biochemistry, BSBC**

The Bachelor of Science in Biochemistry provides hands-on training for a research or medical career in biochemistry.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Science in Biochemistry. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

#### Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2.5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I
   or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1750 Introductory Biology Research Laboratory I

- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory

- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II
  or
- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

MATH 1650 - Pre-Calculus

#### Chemistry requirements

Students must complete at least 39 hours in biochemistry, of which 25 must be advanced. In addition to the chemistry foundation courses, required biochemistry courses include:

- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- CHEM 3520 Physical Chemistry
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II
- BIOC 4560 Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene
- BIOC 4580 Molecular Biology and Biotechnology Laboratory

### Other course requirements

These requirements include a replacement of a university core course, and courses in math and physics (take all courses in either physics option 1 or 2).

- TECM 2700 Technical Writing (replaces ENGL 1320 in university core)
- MATH 1710 Calculus I (prerequisite MATH 1610 or MATH 1650, with a grade of C or better)
- MATH 1720 Calculus II

#### Physics Option 1

- PHYS 1510 General Physics I with Calculus
- PHYS 1520 General Physics II with Calculus

- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1540 General Physics with Calculus Laboratory II

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#### Physics Option 2

- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

## Biology requirements

Students must complete a minor of 20 hours in biology, which includes the biology foundation courses and at least 12 hours as follows:

- BIOL 3451 Genetics
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory
- Plus at least 4 hours of advanced biology courses (lecture with associated lab)

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

## Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## Biology with a concentration in Forensic Science, BSBIO

The Bachelor of Science in Biology with a concentration in Forensic Science provides hands-on training for a career in forensic sciences with a focus on biology. This program is accredited by the Forensic Science Education Programs Accreditation Commission.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Science in Biology with a concentration in Forensic Science. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements. Students must be accepted into the Forensic Science program and see the Program Director for their official degree plan.

## Hours required and general/college requirements

A minimum of 120 semester hours and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

## Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2.5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II
  or
- BIOL 1722 Honors Biology for Science Majors II
- BIOL 1750 Introductory Biology Research Laboratory I
   or
- BIOL 1760 Biology for Science Majors Laboratory
  or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors
  or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

- MATH 1680 Elementary Probability and Statistics or
- MATH 1780 Probability Models

### Biology requirements

In addition to the biology foundation courses, students must complete the following biology courses with a C or higher. Additional biology courses included in the forensic science requirements (BIOL 3331/4240/4590/4900) must also be completed with a C or higher.

- BIOL 3451 Genetics
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory
- BIOL 3800 Animal Physiology
- BIOL 4510 Animal Physiology Laboratory
- BIOL 4570 Biochemistry and Molecular Biology of the Gene
- BIOC 3621 Principles of Biochemistry
- BIOC 3622 Principles of Biochemistry Laboratory

### Other course requirements

These requirements include a replacement of a university core course, and courses in physics and math.

- TECM 2700 Technical Writing (replaces ENGL 1320 in the University Core Curriculum)
- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I or
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II or
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II
- MATH 1710 Calculus I

### Chemistry requirements

Students must complete a minor in chemistry with a minimum of 20 hours. This includes the 12 hours of chemistry foundation courses plus 8 hours completed with a grade of C or higher, as follows:

- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory

#### Forensic Science requirements

The following Forensic Science courses are required with a C or higher. Students are also required to complete the FSAT exam.

- BIOL 3331 Biomedical Criminalistics
- BIOL 4240 Forensic Microscopy
- BIOL 4590 Forensic Molecular Biology Laboratory
- BIOL 4900 Special Problems Forensic Science Internship as approved by Forensic Science Program Director
- CHEM 3330 Forensic Science Analysis
- CHEM 4351 Forensic Chemistry
- CHEM 4360 Principles of Forensic Science
- CHEM 4631 Instrumental Analysis
- CHEM 4632 Instrumental Analysis Laboratory

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

#### Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation courses, C or better in all upper-division courses counting towards major requirements, minimum 2.75 grade point average in math and science courses, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## Biology, BA

Earning a Bachelor of Arts with a major in biology develops your knowledge of biology from molecules to organisms in support of careers in industry, teaching, or medicine.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Arts with a major in biology. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

## Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2.5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II
- BIOL 1750 Introductory Biology Research Laboratory

or

- BIOL 1760 Biology for Science Majors Laboratory
  or
- BIOL 1761 Honors Biology for Science Majors Laboratory

One of the following courses (with lab, if indicated):

- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory

BIOL 2140 - Principles of Ecology

- BIOL 2241 Biology of Higher Plants
  or
- BIOL 2251 Biodiversity and Conservation of Animals
   or
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

- MATH 1650 Pre-Calculus
- MATH 1680 Elementary Probability and Statistics
   If MATH 1680 was used to complete the Foundation Course requirements, it also satisfies the below requirements.

#### Biology requirements

In addition to the biology foundation courses, students must complete with a C or higher a second 2000 level biology course option, the advanced biology requirements, one physiology course with laboratory, and 7 additional advanced biology elective hours (each course must be a minimum of 3 hours, except for labs taken with the associated lecture course).

## Options for the second 2000 level course requirement (with lab, if indicated):

- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory
- BIOL 2140 Principles of Ecology or
- BIOL 2241 Biology of Higher Plants
- BIOL 2251 Biodiversity and Conservation of Animals
   or
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory

#### Advanced biology requirements:

- BIOL 3451 Genetics
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory

#### Physiology requirement options (with lab):

- BIOL 4501 Bacterial Diversity and Physiology
- BIOL 4502 Bacterial Diversity and Physiology Laboratory

or

- BIOL 4503 Plant Physiology and Development
- BIOL 4504 Plant Physiology Laboratory
   or
- BIOL 4510 Animal Physiology Laboratory with either
- BIOL 3800 Animal Physiology

  or
- BIOL 4505 Comparative Animal Physiology

#### Advanced biology electives

Any BIOL 3000 or 4000 level 3 hour course (or course with lab) qualifies, **except** the following courses:

- BIOL 3350 Human Heredity
- BIOL 3360 Heredity Lab
- BIOL 3500 Medical Terminology
- BIOL 4160 Advanced Techniques in Microbiology and Molecular Biology
- BIOL 4170 Advanced Techniques in Microbiology and Molecular Biology Laboratory
- BIOL 4180 Techniques in Molecular Biology
- BIOL 4190 Techniques in Molecular Biology Laboratory
- BIOL 4700 Research Methods for Secondary Science Instruction
- BIOL 4800 Biological Sciences Seminar Series
- BIOL 4805 Biological Sciences Capstone Seminar
- BIOL 4900 Special Problems
- BIOL 4910 Special Problems
- BIOL 4920 Cooperative Education in Biological Sciences
- BIOL 4940 Honors Research in Biology
- BIOL 4950 Honors Thesis in Biology
- BIOL 4951 Honors College Capstone Thesis

## Other course requirements

These requirements include a replacement of a university core course, and courses in physics and math (lab required with lecture course, if indicated).

- TECM 2700 Technical Writing (replaces ENGL 1320 in university core)
- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I
   or
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II or
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II
- MATH 1710 Calculus I

or

 MATH 1680 - Elementary Probability and Statistics or equivalent (with a grade of C or better)

## Chemistry requirements

Students must complete a minor in chemistry with a minimum of 20 hours. This includes the 12 hours of chemistry foundation courses plus 8 hours completed with a grade C or higher, as follows:

- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory

#### Plus at least 4 advanced hours chosen from:

- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory or
- CHEM 3530 Physical Chemistry for Life Science or
- BIOC 3621 Principles of Biochemistry
- BIOC 3622 Principles of Biochemistry Laboratory or
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

#### Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## Biology, BSBIO

The university's investment in Institutes of Research Excellence, cross-disciplinary research clusters and our participation in the Howard Hughes Medical Institute's Science Education Alliance gives you hands-on experience in complex research as you earn your Bachelor of Science in Biology.

## Degree requirements

The following requirements must be satisfied for a Bachelor of Science with a major in biology. Foundation Course requirements must be successfully completed prior to advancing to upper-division major requirements.

## Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the University Core Curriculum in the Academics section of this catalog and the College of Science degree requirements.

## Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2.5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II
  or
- BIOL 1722 Honors Biology for Science Majors II
- BIOL 1750 Introductory Biology Research Laboratory I

or

- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory

One of the following courses (with lab, if indicated):

- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
- BIOL 2140 Principles of Ecology
- BIOL 2241 Biology of Higher Plants or
- BIOL 2251 Biodiversity and Conservation of Animals

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors
   or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

or

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

MATH 1650 - Pre-Calculus

## Biology requirements

In addition to the biology foundation courses, students must complete with a C or higher a second 2000 level biology course, the advanced biology requirements, one physiology course with laboratory, and 16 advanced biology elective hours (of which 2 courses must be with laboratory).

## Options for the second 2000 level course requirement (with lab, if indicated):

- BIOL 2041 Microbiology
- BIOL 2042 Microbiology Laboratory

or

- BIOL 2140 Principles of Ecology
  or
- BIOL 2241 Biology of Higher Plants or
- BIOL 2251 Biodiversity and Conservation of Animals

#### Advanced biology requirements:

- BIOL 3451 Genetics
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory

#### Physiology requirement options (with lab):

- BIOL 4501 Bacterial Diversity and Physiology
- BIOL 4502 Bacterial Diversity and Physiology Laboratory

or

- BIOL 4503 Plant Physiology and Development
- BIOL 4504 Plant Physiology Laboratory or
- BIOL 4510 Animal Physiology Laboratory with either
- BIOL 3800 Animal Physiology
- BIOL 4505 Comparative Animal Physiology

#### Advanced biology electives:

Any BIOL 3000 or 4000 level 3 hour course or course with lab, except BIOL 3350/BIOL 3360, BIOL 3500 and BIOL 4700. At least 2 courses must be with laboratory.

By selecting upper-division biology courses from a subdiscipline, it is possible for the BS student to establish, unofficially, an area of study in general biology, microbiology, animal physiology/neuroscience, cell and molecular biology/genetics, or plant sciences in consultation with the undergraduate advisor.

#### Other course requirements

These requirements include a replacement of a university core course, and courses in physics and math.

- TECM 2700 Technical Writing (replaces ENGL 1320 in university core)
- PHYS 1410 General Physics I
- PHYS 1430 General Physics Laboratory I
- PHYS 1510 General Physics I with Calculus

- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1420 General Physics II
- PHYS 1440 General Physics Laboratory II
- PHYS 1520 General Physics II with Calculus
- PHYS 1540 General Physics with Calculus Laboratory II
- MATH 1710 Calculus I

## Chemistry requirements

Students must complete a minor in chemistry with a minimum of 20 hours. This includes the 12 hours of chemistry foundation courses plus 8 hours completed with a grade of C or higher, as follows:

- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory

#### Plus 4 advanced hours chosen from

- CHEM 3451 Quantitative Analysis
- CHEM 3452 Quantitative Analysis Laboratory
  or
- CHEM 3530 Physical Chemistry for Life Science or
- BIOC 3621 Principles of Biochemistry
- BIOC 3622 Principles of Biochemistry Laboratory or
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

#### Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## **Ecology for Environmental Science, BS**

The ecology for environmental science degree program will expose you to a wide range of courses and facilities that focus your understanding from an ecological perspective.

#### **Degree requirements**

The Bachelor of Science with a major in ecology for environmental science requires the following:

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the General university requirements in the Academics section of this catalog and the College of Science degree requirements

## Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2. 5 grade point average in these courses.

#### Biology courses:

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I
- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II
- BIOL 1750 Introductory Biology Research Laboratory
- BIOL 1760 Biology for Science Majors Laboratory
   or
- BIOL 1761 Honors Biology for Science Majors Laboratory

And one of the following:

- BIOL 2140 Principles of Ecology and
- BIOL 2141 Ecology Laboratory or
- BIOL 2251 Biodiversity and Conservation of Animals

#### Chemistry courses:

- CHEM 1410 General Chemistry for Science Majors or
- CHEM 1412 General Chemistry for the Honors College

or

- CHEM 1413 Honors General Chemistry
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors or
- CHEM 1422 General Chemistry for the Honors College

- CHEM 1423 Honors General Chemistry
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory

#### Math courses:

- MATH 1650 Pre-Calculus
   or
- MATH 1680 Elementary Probability and Statistics
   If MATH 1680 was used to complete the Foundation Course requirements, it also satisfies the below requirements.

#### Biology requirements

Students must complete with a C or higher the other 2000-level biology course option from the foundation, and required upper-level biology courses list below (courses with labs, if indicated), as well as 12 hours from the list of upper-level biology electives (including at least two courses with labs).

- BIOL 2140 Principles of Ecology and
- BIOL 2141 Ecology Laboratory

or

BIOL 2251 - Biodiversity and Conservation of Animals

#### Required upper-level biology courses

- BIOL 3451 Genetics and
- BIOL 3452 Genetics Laboratory
- BIOL 4051 Community Ecology and
- BIOL 4052 Community Ecology Laboratory
- BIOL 4260 Principles of Evolution
- BIOL 4503 Plant Physiology and Development and
- BIOL 4504 Plant Physiology Laboratory or
- BIOL 4505 Comparative Animal Physiology and
- BIOL 4510 Animal Physiology Laboratory

## Upper-level biology electives (12 hours, including 2 courses with labs):

- BIOL 3000 Comparative Anatomy of Vertebrates
- BIOL 3150 Conservation Biology Laboratory
- BIOL 3160 Conservation Biology
- BIOL 3170 Plants and Human Society
- BIOL 4000 Plant Ecology
- BIOL 4030 Physiological Ecology
- BIOL 4045 Foundations of Ecological Theory
- BIOL 4053 Introduction to Subantarctic Biocultural Conservation
- BIOL 4054 Tracing Darwin's Path
- BIOL 4055 Ornithology
- BIOL 4056 Ornithology Laboratory
- BIOL 4057 Mammalian Ecology and Evolution
- BIOL 4070 Insect Biology
- BIOL 4085 Fish Diversity and Ecology
- BIOL 4091 Parasitology
- BIOL 4092 Parasitology Laboratory
- BIOL 4100 Introduction to Environmental Impact Assessment
- BIOL 4120 Environmental Chemistry
- BIOL 4261 Principles of Evolution Laboratory
- BIOL 4280 Aquatic Botany

- BIOL 4290 Marine Biology
- BIOL 4370 General Toxicology
- BIOL 4380 Fundamentals of Aquatic Toxicology
- BIOL 4400 Wetland Ecology and Management
- BIOL 4420 Invertebrate Biology
- BIOL 4440 Stream Ecology
- BIOL 4501 Bacterial Diversity and Physiology
- BIOL 4502 Bacterial Diversity and Physiology Laboratory
- BIOL 4506 Biology of Extreme Environments
- BIOL 4560 Aquatic Insects of North America
- BIOL 4580 Molecular Biology and Biotechnology Laboratory
- BIOL 4650 Environmental Science Field Course
- BIOL 4720 Sediment Toxicology
- BIOL 4800 Biological Sciences Seminar Series
- BIOL 4805 Biological Sciences Capstone Seminar
- BIOL 4900 Special Problems
- BIOL 4940 Honors Research in Biology
- BIOL 4950 Honors Thesis in Biology
- BIOL 4951 Honors College Capstone Thesis

## Other course requirements

These requirements include a replacement of a university core course, courses in philosophical and applied environmental issues/techniques, and courses in chemistry (with a C or higher), physics and math (lab required with lecture course, if indicated).

- TECM 2700 Technical Writing (replaces ENGL 1320 in university core)
- PHIL 2500 Environment and Society
- GEOG 3500 Introduction to Geographic Information Systems
- ECON 4440 Economics of Natural Resources and Environment
- CHEM 2380 Organic Chemistry
- CHEM 3220 Organic Chemistry Laboratory
- PHYS 1410 General Physics I
- PHYS 1430 General Physics Laboratory I or
- PHYS 1510 General Physics I with Calculus
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1420 General Physics II
- PHYS 1440 General Physics Laboratory II
- PHYS 1520 General Physics II with Calculus
- PHYS 1540 General Physics with Calculus Laboratory II
- MATH 1680 Elementary Probability and Statistics or
- MATH 1710 Calculus I

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

## Other requirements

Only two attempts will be allowed for each biology course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

## **Medical Laboratory Sciences, BSMLS**

Course work for the Bachelor of Science in Medical Laboratory Sciences teaches you to perform tests on blood, tissue and body fluids to determine proper treatment for illnesses and diseases. These technical skills may be used in operating and repairing laboratory instruments and monitoring quality-control programs.

The Department of Biological Sciences offers a Bachelor of Science in Medical Laboratory Sciences in affiliation with the following schools of clinical laboratory science that are approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

- Comanche County Memorial Hospital (School of Medical Technology) Lawton, OK
- Baylor Scott and White, Temple
- Tarleton State University at All Saints Hospital, Fort Worth
- Houston Methodist Hospital, Houston
- United Regional Medical Health Care System (School of Medical Technology), Wichita Falls
- Parkview School of Medical Laboratory Science, Pueblo, CO

Students complete a minimum of 88 semester hours at UNT (prior to entering clinical training) and a minimum of 12 months of clinical training (for a minimum of 32 semester hours) at any NAACLS-approved school of medical laboratory science to complete the degree.

Upon graduation, students are eligible to take national examinations given by the American Society of Clinical Pathology Board of Certification (ASCPBOC). The ASCPBOC examination is administered by computer several times a year. Upon passing the registry examination the student is considered a certified medical laboratory scientist. The awarding of the degree is not contingent upon students' passing national board examinations.

#### **Degree requirements**

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the General university requirements in the Academics section of this catalog and the College of Science degree requirements.

## Major requirements

#### Foundation course requirements

The Foundation course requirements listed below must be completed before enrollment in 3000 and 4000 level courses required for the major. Successful completion is based on achieving a C or better in each course and an overall 2. 5 grade point average in these courses.

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I

- BIOL 1750 Introductory Biology Research Laboratory I
- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
- CHEM 1410 General Chemistry for Science Majors
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry
- CHEM 3210 Organic Chemistry Laboratory
- MATH 1680 Elementary Probability and Statistics

## Science course requirements

Satisfactory completion of a minimum of 12 months of professional training at an approved medical laboratory sciences school as verified by an official transcript sent to the UNT medical laboratory sciences coordinator. The transcript is evaluated by the director who recommends to the dean of the College of Science and the Registrar that a minimum of 32 hours of credit be granted for the completed professional training. These hours are exempt from the UNT residency requirement.

In addition to the foundation course requirements, the following courses must be completed with a grade of C or better:

#### Biology courses:

- BIOL 3381 Medical Bacteriology
- BIOL 3382 Medical Bacteriology Laboratory
- BIOL 3510 Cell Biology
- BIOL 3520 Cell Biology Laboratory
- BIOL 4201 Immunology
- BIOL 4202 Immunology Laboratory

# Choose either the Human Anatomy and Physiology sequence (courses and labs) or Animal Physiology (with lab):

- BIOL 2301 Human Anatomy and Physiology I
- BIOL 2311 Human Anatomy and Physiology I Laboratory
- BIOL 2302 Human Anatomy and Physiology II
- BIOL 2312 Human Anatomy and Physiology II Laboratory

or

- BIOL 3800 Animal Physiology
- BIOL 4510 Animal Physiology Laboratory

#### Plus two courses (with labs, if indicated) from:

- BIOL 3451 Genetics and
- BIOL 3452 Genetics Laboratory
- BIOL 4091 Parasitology and
- BIOL 4092 Parasitology Laboratory

- BIOL 4300 Histology
- BIOL 4570 Biochemistry and Molecular Biology of the Gene or
- BIOL 3770 Biotechnology

#### Chemistry courses:

- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory

## Other course requirements

- TECM 2700 Technical Writing (replaces ENGL 1320 in University Core Curriculum)
- BCIS 2610 Introduction to Computers in Business
- MGMT 3720 Organizational Behavior or
- MGMT 3721 Essentials of Organizational Behavior for Non-Business Majors
- Completion of a minimum of 12 months of clinical training (for a minimum of 32 semester hours) at any affiliated NAACLS-approved school of medical laboratory science to complete the degree.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

## Other requirements

Only two attempts will be allowed for each biology and biochemistry course in the degree. Grade of C or better and minimum 2.5 grade point average in Foundation Courses, C or better in all upper-division courses counting towards major requirements, and an overall 2.0 grade point average are required for graduation. All students seeking to enter the Department of Biological Sciences, with the exception of beginning freshmen, must meet the minimum grade point averages given above. Students in the department whose Foundation Course or overall grade point average drops below the minimum for two consecutive semesters will be removed from the program.

Submit the following forms to the program coordinator:

- Request for Degree Statement
- Financial Aid,
- Notice of Acceptance to Clinical Training.

#### **Minors**

## **Biological Sciences minor**

The minor requires a minimum of 18 hours with at least 6 advanced BIOL hours. Courses in the minor must be at least 3 hours. A grade of C or better is required for a course to count toward the minor.

## Satisfactory completion of

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I and
- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II and
- BIOL 1750 Introductory Biology Research Laboratory
  Lor

- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory

A 2000-level option from the following:

- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
   or
- BIOL 2140 Principles of Ecology or
- BIOL 2241 Biology of Higher Plants or
- BIOL 2251 Biodiversity and Conservation of Animals
- BIOL 2302 Human Anatomy and Physiology II and
- BIOL 2312 Human Anatomy and Physiology II Laboratory
- and at least two upper-level BIOL courses, one of which must include a laboratory.

#### Notes

- The following courses may not be used toward a minor in biology: BIOL 3030, BIOL 3500, BIOL 4080, BIOL 4160/ BIOL 4170, BIOL 4180/BIOL 4190, BIOL 4800, BIOL 4805, BIOL 4850, BIOL 4900, BIOL 4910, BIOL 4920, BIOL 4940, BIOL 4950 and BIOL 4951.
- Advanced electives in the minor should be selected in consultation with an advisor in the Department of Biological Sciences.
- Students must meet all prerequisites for courses before enrolling, including prerequisites from other departments such as chemistry.

### **Secondary Teacher Certification**

# Chemistry teacher certification (Biochemistry)

The College of Science encourages students to explore teaching at the secondary level as a career option. The advisor in Teach North Texas, in Curry Hall 310F, can assist students with specific requirements for teacher certification.

Teacher certification in chemistry is also available in conjunction with a major in chemistry.

# Requirements utilizing the BA with a major in Biochemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Chemistry.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry

- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

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- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science
- CHEM 4700 Research Methods for Secondary Science Instruction
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene and
- BIOC 4580 Molecular Biology and Biotechnology Laboratory
- MATH 1710 Calculus I
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

# Requirements utilizing the BS in Biochemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Chemistry.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry

- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- CHEM 3520 Physical Chemistry
- CHEM 4700 Research Methods for Secondary Science Instruction
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II
- BIOC 4560 Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene and
- BIOC 4580 Molecular Biology and Biotechnology Laboratory
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

#### Additional information

See major for additional course work and GPA requirements.

Students must also complete the required 22 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.texas.gov.

## Life Science teacher certification (Biology)

The College of Science encourages students to explore teaching at the secondary level as a career option. The advisor in Teach North Texas, in Curry Hall 310F, can assist students with specific requirements for teacher certification.

# Requirements utilizing the BA with a major in Biology

Upon completion of this program, students will be prepared to sit for the certification examinations in Life Science.

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I
  and
- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II
  and
- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 2140 Principles of Ecology
  or
- BIOL 2241 Biology of Higher Plants

  or
- BIOL 2251 Biodiversity and Conservation of Animals
- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
- BIOL 3451 Genetics and
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology and
- BIOL 3520 Cell Biology Laboratory
- BIOL 3800 Animal Physiology (recommended) and
- BIOL 4510 Animal Physiology Laboratory
- BIOL 4501 Bacterial Diversity and Physiology and
- BIOL 4502 Bacterial Diversity and Physiology Laboratory

or

- BIOL 4503 Plant Physiology and Development and
- BIOL 4504 Plant Physiology Laboratory
- BIOL 4505 Comparative Animal Physiology and
- BIOL 4510 Animal Physiology Laboratory
- BIOL 3160 Conservation Biology
- BIOL 4070 Insect Biology
- BIOL 4100 Introduction to Environmental Impact Assessment

or

 BIOL 4380 - Fundamentals of Aquatic Toxicology or

- BIOL 4440 Stream Ecology
- BIOL 4650 Environmental Science Field Course
- BIOL 4700 Research Methods for Secondary Science Instruction
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

Of

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- MATH 1710 Calculus I
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

# Requirements utilizing the BS in Biology

Upon completion of this program, students will be prepared to sit for the certification examinations in Life Science.

- BIOL 1710 Biology for Science Majors I or
- BIOL 1711 Honors Biology for Science Majors I and
- BIOL 1720 Biology for Science Majors II or
- BIOL 1722 Honors Biology for Science Majors II and

- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1761 Honors Biology for Science Majors Laboratory
- BIOL 2140 Principles of Ecology
   or
- BIOL 2241 Biology of Higher Plants
- BIOL 2251 Biodiversity and Conservation of Animals
- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
- BIOL 3451 Genetics and
- BIOL 3452 Genetics Laboratory
- BIOL 3510 Cell Biology and
- BIOL 3520 Cell Biology Laboratory
- BIOL 3800 Animal Physiology (recommended) and
- BIOL 4510 Animal Physiology Laboratory
- BIOL 4501 Bacterial Diversity and Physiology and
- BIOL 4502 Bacterial Diversity and Physiology Laboratory

or

- BIOL 4503 Plant Physiology and Development and
- BIOL 4504 Plant Physiology Laboratory
  or
- BIOL 4505 Comparative Animal Physiology and
- BIOL 4510 Animal Physiology Laboratory
- BIOL 3160 Conservation Biology
- BIOL 4070 Insect Biology
   or
- BIOL 4100 Introduction to Environmental Impact Assessment

or

- BIOL 4380 Fundamentals of Aquatic Toxicology
  or
- BIOL 4440 Stream Ecology
   or
- BIOL 4650 Environmental Science Field Course
- BIOL 4700 Research Methods for Secondary Science Instruction
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- Two advanced biology electives of at least 3 credit hours
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

 CHEM 1412 - General Chemistry for the Honors College and

- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

Of

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- MATH 1710 Calculus I
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

## Additional information

See major for additional course work and GPA requirements.

Students must also complete the required 22 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.texas.gov.

## Physical Science teacher certification (Biochemistry)

The College of Science encourages students to explore teaching at the secondary level as a career option. The advisor in Teach North Texas, in Curry Hall 310F, can assist students with specific requirements for teacher certification.

Teacher certification in physical science is also available in conjunction with majors in chemistry and physics.

# Requirements utilizing the BA with a major in Biochemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- CHEM 1410 General Chemistry for Science Majors
  and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

351

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science
- CHEM 4700 Research Methods for Secondary Science Instruction
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene and
- BIOC 4580 Molecular Biology and Biotechnology Laboratory
- MATH 1710 Calculus I
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

# Requirements utilizing the BS in Biochemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- CHEM 3520 Physical Chemistry
- CHEM 4700 Research Methods for Secondary Science Instruction
- BIOC 4540 Biochemistry I
- BIOC 4550 Biochemistry II
- BIOC 4560 Biochemistry Laboratory
- BIOC 4570 Biochemistry and Molecular Biology of the Gene and
- BIOC 4580 Molecular Biology and Biotechnology Laboratory
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

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- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

#### Additional information

See major for additional course work and GPA requirements.

Students must also complete the required 22 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.texas.gov.

#### **Undergraduate Academic Certificates**

### **Forensic Science certificate**

Advances in technology have created a need for students in basic sciences to apply the tools of technology to a wide variety of criminal investigations.

The forensic science program offers a certificate in forensic science for biology, biochemistry and chemistry students. The certificate is designed to enable students in degree programs in biological sciences and chemistry to begin careers in forensic laboratories.

## Requirements

Students must complete 19 hours of course work, including:

- CJUS 4360 Criminal Investigation
- BIOL 3331 Biomedical Criminalistics
- BIOL 4240 Forensic Microscopy
- BIOL 4590 Forensic Molecular Biology Laboratory
- CHEM 4351 Forensic Chemistry
- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory
- Completion of the Forensic Science Aptitude Test offered by the American Board of Criminalistics

#### Additional information

Contact the forensic science program office or visit the web site for more information (www.forensic.unt.edu).

The Certificate in Forensic Science in conjunction with a Bachelor of Science in Biochemistry, Biology and Chemistry is accredited by the Forensic Science Education Programs Accreditation Commission [410 North 21st Street, Colorado Springs, CO 80904; 719-636-1100].

## **Department of Chemistry**

Main Departmental Office Chemistry Building, Room 101

Mailing Address:

1155 Union Circle #305070 Denton, TX 76203-5017 940-565-2713

Fax: 940-565-4318

E-mail: chem@unt.edu Web site: chemistry.unt.edu

Undergraduate Advising Office Chemistry Building, Room 207

940-565-3554 Fax: 940-369-8474

#### LeGrande M. Slaughter, Interim Chair

#### Facult

Chemistry, the study of matter and its reactions, provides a basic understanding needed to deal with a variety of societal and scientific needs, including energy, food production, health and medicine, biotechnology, new materials, environmental concerns, new processes, and national defense. Chemistry is a science central to the study of medicine, biology and modern physics.

Current frontiers of experimental and theoretical chemical investigation involve the areas of chemical reactions and reactivity, synthesis, analytical methods, catalysis, materials and life processes.

#### **Preprofessional programs**

See "Preprofessional studies" in the College of Science section of this catalog.

#### **Programs of study**

All programs are listed below. The department offers a chemistry minor, a chemical technicians minor and a series of courses designed to prepare students to sit for the certification examinations in chemistry or physical sciences.

Recipients of the BS in Chemistry, and in some cases the BA, are certified by the American Chemical Society (ACS) if all requirements for professional training of chemists are met. Courses required for ACS certification may be obtained from the department's Undergraduate Affairs Committee.

#### **Mathematics and Science Secondary Teaching**

Individuals interested in pursuing certification in math or science teaching at the secondary level may wish to pursue a minor through the Teach North Texas program. See "Teach North Texas" in the College of Science section of this catalog.

#### **Forensic Science certificate**

Students who major in chemistry may wish to complete the Forensic Science certificate.

#### **Majors**

## Chemistry with a concentration in Forensics, BSCHM

The Bachelor of Science in Chemistry qualifies you to be a professional chemist, and the Forensics concentration will allow you to earn a certificate in forensic science.

The B.S. in Chemistry with the Forensic Science concentration is a FEPAC-accredited degree designed to enable students to begin careers in forensic laboratories. Completion of the program requirements while pursuing this concentration will result in a UNT Forensic Science certification.

This degree is only for Chemistry majors that have been accepted into the UNT Forensic Science program.

#### **Degree requirements**

Candidates for the Bachelor of Science in Chemistry with a Forensics concentration must meet the following requirements.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Science degree requirements (excluding foreign language and natural and life sciences). The laboratory science requirement is satisfied only by physical sciences.

## Major requirements

45 hours of Chemistry, including:

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
  - CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and CHEM 1430 - Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
  - CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and CHEM 1440 - Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3520 Physical Chemistry and
- CHEM 3240 Physical Chemistry Laboratory Sequence
- CHEM 4610 Advanced Inorganic Chemistry and
- CHEM 4620 Advanced Inorganic Chemistry Laboratory

- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory

#### Plus 9 additional hours:

- BIOC 4540 Biochemistry I (to satisfy ACS certification requirements)
- CHEM 4351 Forensic Chemistry
- CHEM 4900 Special Problems

  or
- CHEM 4912 Undergraduate Research Capstone Experience

#### Note

CHEM 4940 may not be used to meet degree requirements for the chemistry major.

## Other course requirements

- MATH 2730 Multivariable Calculus
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 1780 Probability Models
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

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- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

#### Minor requirements

A biology minor is required. 22 hours of Biology courses.

- BIOL 1710 Biology for Science Majors I and
- BIOL 1760 Biology for Science Majors Laboratory or
- BIOL 1711 Honors Biology for Science Majors I and
- BIOL 1760 Biology for Science Majors Laboratory
- BIOL 2041 Microbiology and
- BIOL 2042 Microbiology Laboratory
- BIOL 3331 Biomedical Criminalistics
- BIOL 3451 Genetics and
- BIOL 3452 Genetics Laboratory
- BIOL 4240 Forensic Microscopy
- BIOL 4590 Forensic Molecular Biology Laboratory

#### Other requirements

Students must maintain a GPA of 2.75 of better, with a C or better in all forensics science courses and organic chemistry.

## Forensic science requirements

FSAT exam required. Some courses apply towards 2 requirements.

- CHEM 3330 Forensic Science Analysis
- CHEM 4360 Principles of Forensic Science
- CHEM 4351 Forensic Chemistry
- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory
- CHEM 4900 Special Problems or
- CHEM 4912 Undergraduate Research Capstone Experience
- BIOL 3331 Biomedical Criminalistics
- BIOL 4240 Forensic Microscopy
- BIOL 4590 Forensic Molecular Biology Laboratory

## Chemistry, BA

The Bachelor of Arts with a major in chemistry prepares students for careers in chemistry-related areas like business, professional health services, environmental studies and pharmacology. You may also get a teaching certification that equips you for teaching in secondary schools.

#### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in chemistry.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Science degree requirements.

## Major requirements

## Option 1 required courses

Minimum of 31 hours, including:

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3240 Physical Chemistry Laboratory Sequence
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- CHEM 3520 Physical Chemistry
- Plus 3 additional hours of chemistry at the 4000 level (except CHEM 4940)

or

- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
  This option is recommended for those planning to pursue
  advanced studies in chemistry.

## Option 2 required courses

Minimum of 31 hours, including:

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors
  College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory

- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry
- Plus 7 additional hours, which may include BIOC 3621/ BIOC 3622 and any 4000-level chemistry course (except CHEM 4940)

### Option 3 required courses

Minimum of 31 hours, including:

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

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- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry
  or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science
- Plus 7 additional hours, which may include BIOC 3621/ BIOC 3622 and any 4000-level chemistry course (except CHEM 4940)

## Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I

- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II or
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics (required of all students who expect to take further course work in physics)

#### Minor

Optional.

#### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (36) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

## Other requirements

GPA of 2.5 on all advanced courses attempted in science and engineering courses (biochemistry, biology, chemistry, computer science, engineering, mathematics, physics).

### Chemistry, BSCHM

The Bachelor of Science in Chemistry qualifies you to be a professional chemist or to earn a certificate in forensic science. The UNT forensic science program is one of only two undergraduate programs in Texas and one of only 38 programs nationwide.

The BSCHM is a good choice for students planning to pursue graduate study in chemistry.

#### **Degree requirements**

Candidates for the Bachelor of Science in Chemistry must meet the following requirements.

# Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor's degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Science degree requirements (excluding foreign language and natural and life sciences). The laboratory science requirement is satisfied only by physical sciences.

## Major requirements

Minimum of 42 hours, including:

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3520 Physical Chemistry and
- CHEM 3240 Physical Chemistry Laboratory Sequence
- CHEM 4610 Advanced Inorganic Chemistry and
- CHEM 4620 Advanced Inorganic Chemistry Laboratory
- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory
- Plus 6 additional hours at the 4000 level or above (BIOC 4540 to satisfy ACS certification requirements).

#### Note

CHEM 4940 may not be used to meet degree requirements for the chemistry major.

#### Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

## Minor requirements

A minor of at least 18 hours in mathematics, computer science, physics, biology, geology (if taken as a laboratory science) or materials science, of which 6 must be advanced.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (36) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

## Other requirements

GPA of 2.5 on all advanced courses attempted in science and engineering (biochemistry, biology, chemistry, computer science, engineering, mathematics, physics).

#### **Grad Track Options**

## Chemistry, BS with grad track option leading to Chemistry, MS

# Admission requirements and program policies

This program will be open to all qualified UNT chemistry majors in their third year. UNT undergraduate students who are in their second year or four year will only be considered under extraordinary circumstances. Other majors with strong chemistry backgrounds may be considered at the discretion of the UNT Chemistry Department. UNT Undergraduate students must meet the following minimum requirements in order to be considered for admission to the Masters program through the Graduate Track Pathway in the UNT Chemistry Department:

- 1. Completion of at least 75 undergraduate credit hours that are counted for the baccalaureate degree.
- A GPA of 3.5 or higher in undergraduate Chemistry coursework, and an overall GPA of 3.5 or higher in undergraduate coursework.

Undergraduate students who do not meet the above criteria, but have significant research experience, may also apply. In such case, a holistic review of the application will be conducted, and the admission will be at the sole discretion of the UNT Chemistry Department.

Students seeking this pathway must submit the Toulouse Graduate School's "Conditional Admission and Advisor Course Approval

Students are responsible for all applicable tuition and fees during the period leading up to the baccalaureate degree.

Upon completing the baccalaureate degree, a formal application must be submitted to the graduate program of the UNT Chemistry Department, typically during the fall semester of the student's senior year. The student's application fee will be waived, and the student may become eligible for Tuition Benefits.

The following is the step-by-step process:

- 1. Student apply for the Grad Track option in the junior year
- 2. After the application is approved and have completed at least 90 credit hours, the students can start taking the graduate courses that are approved for Grad Track as chemistry electives for the BS degree requirement. For the graduate courses to be counted for the M.S. degree later, the student must meet the minimum grade requirements of the courses in the M.S. program.

3. The students must enroll in graduate school in the long semester after finishing his/her BS degree and should take the remaining graduate courses in the following year(s) to complete his/her M.S. degree. If the student did not enroll in graduate school in the long semester after finishing his/her BS degree, those graduate course credit hours will not be counted anymore for the M.S. degree even if the student comes back for graduate school in the future.

# Standards and procedures for monitoring student progress

The core faculty member for the grad track will be the departmental graduate advisor, who is currently Hong Wang, Professor and Chair of Graduate Affairs Committee. The graduate advisor will handle admission and advising for the program. Participating students will take the same graduate courses taken by our regular MS, and PhD students.

#### Required courses

Core:

- CHEM 5500 Physical Organic Chemistry (Offered Fall only)
- CHEM 5570 Advanced Analytical Chemistry (Offered Fall only)
- CHEM 5210 Advanced Physical Chemistry (Offered Spring only)
- CHEM 5710 Advanced Inorganic Chemistry (Offered Spring only)

Special Topics:

Topics of current interest which vary from year to year

#### **Minors**

## **Chemistry minor**

#### Recommended minor

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory plus
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
   or
- CHEM 3530 Physical Chemistry for Life Science or
- CHEM 4670 Introduction to Medicinal Chemistry (plus 1 advanced hour)

or

- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory

#### Note

CHEM 4940 may not be used to meet degree requirements for the chemistry minor.

# Secondary Teacher Certification Chemistry teacher certification

The College of Science encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification.

Teacher certification in chemistry is also available in conjunction with a major in biochemistry.

# Requirements utilizing the BA with a major in Chemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Chemistry.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 4700 Research Methods for Secondary Science Instruction
- CHEM 4900 Special Problems (Research Experience)

- 3 hours of approved chemistry
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

# Requirements utilizing the BS in Chemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Chemistry.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

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- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3520 Physical Chemistry and
- CHEM 3240 Physical Chemistry Laboratory Sequence
- CHEM 4610 Advanced Inorganic Chemistry and
- CHEM 4620 Advanced Inorganic Chemistry Laboratory

- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory
- CHEM 4700 Research Methods for Secondary Science Instruction
- 3 hours of approved chemistry
- BIOC 4540 Biochemistry I
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

## Additional requirements

See major for additional course work and GPA requirements.

Students must also complete the required 18 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

# Physical Science teacher certification (Chemistry)

The College of Liberal Arts and Social Sciences encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification.

Teacher certification in physical science is also available in conjunction with majors in biochemistry and physics.

# Requirements utilizing the BA with a major in Chemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry
  or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or

- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3530 Physical Chemistry for Life Science or
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3520 Physical Chemistry
- CHEM 4700 Research Methods for Secondary Science Instruction
- CHEM 4900 Special Problems (Research Experience)
- 3 hours of approved chemistry
- BIOC 3621 Principles of Biochemistry and
- BIOC 3622 Principles of Biochemistry Laboratory
- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

# Requirements utilizing the BS in Chemistry

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- CHEM 2370 Organic Chemistry and
- CHEM 3210 Organic Chemistry Laboratory
- CHEM 2380 Organic Chemistry and
- CHEM 3220 Organic Chemistry Laboratory
- CHEM 3451 Quantitative Analysis and
- CHEM 3452 Quantitative Analysis Laboratory
- CHEM 3510 Physical Chemistry and
- CHEM 3230 Physical Chemistry Laboratory Sequence
- CHEM 3520 Physical Chemistry and
- CHEM 3240 Physical Chemistry Laboratory Sequence
- CHEM 4610 Advanced Inorganic Chemistry and
- CHEM 4620 Advanced Inorganic Chemistry Laboratory
- CHEM 4631 Instrumental Analysis and
- CHEM 4632 Instrumental Analysis Laboratory
- CHEM 4700 Research Methods for Secondary Science Instruction
- 3 hours of approved 4000-level chemistry
- BIOC 4540 Biochemistry I
- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

## Additional requirements

See major for additional course work and GPA requirements.

Students must also complete the required 18 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

### **Department of Mathematics**

Main Departmental Office General Academic Building, Room 435

Mailing address: 1155 Union Circle #311430 Denton, TX 76203-5017 940-565-2155 Fax: 940-565-4805

E-mail: mathchair@unt.edu Web site: www.math.unt.edu

Ralf Schmidt, Chair

**Faculty** 

The department offers programs of study leading to the BA, MA, MS and PhD degrees with a major in mathematics, and the BSMTH. It also offers minors in mathematics and statistics, and undergraduate academic certificates in statistics, the mathematics of scientific computation, and actuarial science, the latter in cooperation with the College of Business and the Department of Economics. Its faculty is dedicated to excellence in scholarship and teaching. The faculty supports a strong program of instruction and research, having as its core a solid foundation of mathematical theory that furnishes the tools necessary to address and solve crucial problems in maintaining, improving and protecting the world. The program also promulgates mathematics as a discipline in its own right, a body of pure knowledge with exceptional power, enabling its practitioners and those who diligently study it to be adaptable and effective forces in the workplace.

Students who earn degrees in mathematics readily obtain jobs with high-technology companies and in business, industry, government and teaching. Salaries and working conditions compare with those of engineers and scientists.

Students who plan to major in mathematics, physics, chemistry, biology or computer science should have had four years of mathematics in high school, including pre-calculus. Students who are required to take mathematics as part of their degree program in college should have had at least two years of algebra and one year of geometry in high school.

### Required placement and testing

The Department of Mathematics enforces prerequisites for MATH 1100, MATH 1190, MATH 1350, MATH 1600, MATH 1610, MATH 1650 and MATH 1710. Students not meeting prerequisites for courses in which they enroll are required to drop the course or face academic penalty.

New students will receive notification of placement in mathematics from the Office of Admissions. Placement is based on materials submitted for admission to UNT including SAT/ACT scores and class rank. Enrollment in mathematics courses beyond the initial placement will depend upon the score on the ACCUPLACER College-Level Mathematics Test.

For more information about placement procedures, please contact the mathematics advising office at 940-565-4045.

### Prerequisites

MATH 1190, MATH 1350, MATH 1600, MATH 1650: MATH 1100 or equivalent with a grade of C or better, or UNT mathematics department approval. MATH 1190 may also be taken after completing MATH 1180 with a grade of C or better.

### Preparing for graduate school

The degree requirements specified in this catalog are the minimal requirements for an undergraduate degree in mathematics. For students who plan to go to graduate school in mathematics, the department strongly recommends the following courses: MATH 3410, MATH 3510, MATH 3610 and MATH 4500. Other advanced courses should be selected in consultation with the faculty and the undergraduate advisor in the Department of Mathematics.

### **Mathematics and Science Secondary Teaching**

Individuals interested in pursuing certification in math or science teaching at the secondary level may wish to pursue a minor through the Teach North Texas program. See "Teach North Texas" in the College of Science section of this catalog.

### Scholarships and financial assistance

The department administers five scholarship funds: the E. H. Hanson Scholarship, the Roger L. Perry Memorial Scholarship, the Mildred Masters McCarty Scholarship, the John Ed Allen Scholarship, the John W. Neuberger Scholarship and the David F. Dawson Endowment for Student Excellence. Jobs as tutors and graders also are available for mathematics majors. Contact the mathematics department office for information and application forms.

### **Majors**

### Mathematics, BA (non-teacher certification)

A Bachelor of Arts with a major in mathematics provides you the skills needed to work on important, challenging, real-world problems in business, industry, medicine, government, and scientific research.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in mathematics (non-teacher certification).

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

### Communication (English Composition and Rhetoric) core requirement

For satisfying the Communication (English Composition and Rhetoric) core requirements, the department suggests:

- ENGL 1310 First-Year Writing I
- TECM 2700 Technical Writing

### Major requirements

40 hours of mathematics courses, which must include:

### Mathematics core, 19 hours

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2000 Discrete Mathematics
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I
  - \* Incoming students who have already received an introduction to mathematical proofs may request substitution of MATH 2000 for an upper-level mathematics course numbered 3350 or higher. Please see an advisor for more information.

### At least one of the following

At least one of the following must be taken in satisfying other requirements:

- MATH 3510 Abstract Algebra I
- MATH 3610 Real Analysis II

### Depth Requirement, 6 hours

Two courses from one of the following areas:

### Analysis

Two of the following:

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3610 Real Analysis II
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- MATH 4520 Introduction to Functions of a Complex Variable

### Algebra

Two of the following:

- MATH 3400 Number Theory
- MATH 3510 Abstract Algebra I
- MATH 4010 Introduction to Metamathematics
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4510 Abstract Algebra II

### Probability/statistics

Two of the following:

- MATH 3680 Applied Statistics
- MATH 4610 Probability
- MATH 4650 Statistics

### Geometry/topology

Two of the following:

- MATH 3740 Vector Calculus
- MATH 4060 Foundations of Geometry
- MATH 4500 Introduction to Topology

### Breadth requirement, 9 hours

One course in each of the three areas not used to satisfy the depth requirement.

### Mathematics elective, 3 hours

One additional upper-level mathematics courses chosen from mathematics courses numbered 3350 or above.

### Other course requirements

#### Science

Three laboratory science courses are required, as follows:

#### Option 1

Group I, Biology for science majors with laboratory

- BIOL 1710 Biology for Science Majors I and
- BIOL 1760 Biology for Science Majors Laboratory

Group II, One physical science for science majors, with laboratory, chosen from

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

### Group III, One additional course

One additional course that meets the University Core Curriculum requirement for the life and physical sciences.

**Note:** Equivalent honors courses can also be used to satisfy this requirement.

### Mathematics majors with a minor in geography or geology may also choose from the following

Mathematics majors with a minor in geography or geology may also choose from the following in Group I above.

- GEOL 1610 Introduction to Geology
- GEOG 1710 Earth Science

### Option 2

### Group I, Two physical science courses for science majors, with laboratories, chosen from

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

#### Group II, One additional laboratory science course

One laboratory science chosen from any course meeting the natural and life sciences component of the laboratory science requirement of the College of Science.

**Note:** Equivalent honors courses can also be used to satisfy this requirement.

### Option 3

Students double majoring in mathematics and another discipline (typically biology, chemistry, physics or engineering) that requires at least 12 hours of laboratory science intended for science and engineering majors may use the same laboratory science courses that satisfy the requirements for the other major to satisfy the laboratory science requirement for the mathematics major.

### Foreign language

Students may complete either of two options to satisfy the foreign language requirement:

### Option 1

Proficiency in a foreign language equivalent to 1020 is required. Students intending to pursue a graduate degree in mathematics are encouraged to study French, German or Russian. Students may take SPAN 1030 in place of SPAN 1010 and SPAN 1020.

### Option 2

Complete 6 hours of technical writing courses from the following:

- TECM 2700 Technical Writing
- TECM 4180 Advanced Technical Communication
- TECM 4190 Technical Editing
- TECM 4250 Writing Technical Procedures and Manuals
- TECM 4700 Writing in the Sciences

### Breadth requirement

Students should meet with an advisor to ensure compliance with the College of Science breadth requirement.

### Computer programming

- CSCE 1010 Discovering Computer Science
  or
- CSCE 1020 Program Development
   or
- CSCE 1030 Computer Science I

#### Additional information

Students taking mathematics courses at the 2000-level or above are expected to be competent in computer programming, using languages such as BASIC, C, C++, Fortran, PASCAL or Java. Students are encouraged to complete the programming requirement during their freshman or sophomore year. Students who have acquired a solid programming competency in a non-academic setting, such as through work experience, may demonstrate their programming competency by passing a departmental exam in place of the CSCE 1010, CSCE 1020 or CSCE 1030 course requirement.

### Minor requirements

One of the following is required:

### Minor of at least 18 hours

A minor of 18 hours (6 advanced). A minor in statistics does not fulfill this requirement.

### Second major

Completion of a second major in addition to mathematics.

### Certificate in actuarial science

Completion of the Actuarial Science certificate. Students must take MATH 3680, MATH 4610 and MATH 4650 for fulfilling degree requirements; students are also encouraged to take MATH 3350 and MATH 3740. No mathematics courses may be chosen for fulfilling the elective requirements of the certificate program.

### Other requirements

Students must achieve at least a 2.0 GPA in all mathematics courses which are applied toward a mathematics major and are numbered 3350 or above.

### Mathematics, BA (teacher certification)

A Bachelor of Arts with a major in mathematics (teacher certification) provides you the math foundation and analytical skills for a successful career in education.

Completion of these course requirements does not guarantee the student's certification. For information about additional certification requirements, consult the Teach North Texas academic advisor.

### **Degree requirements**

The following requirements must be satisfied for a Bachelor of Arts with a major in mathematics (teacher certification).

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

### Communication (English Composition and Rhetoric) core requirement

For satisfying the Communication (English Composition and Rhetoric) core requirements the department suggests:

- ENGL 1310 First-Year Writing I
- TECM 2700 Technical Writing

### Major requirements

40 hours of mathematics courses, which must include:

### Mathematics core, 19 hours

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2000 Discrete Mathematics
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I

### Secondary teacher preparation, 15 hours

- MATH 2100 Functions and Modeling for Secondary Mathematics Instruction
- MATH 3680 Applied Statistics
- MATH 3850 Mathematical Modeling
- MATH 4050 Advanced Study of the Secondary Mathematics Curriculum
- MATH 4060 Foundations of Geometry

### Analysis, 3 hours

One of the following:

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3610 Real Analysis II
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- MATH 4520 Introduction to Functions of a Complex Variable

### Algebra, 3 hours

One of the following:

- MATH 3400 Number Theory
- MATH 3510 Abstract Algebra I
- MATH 4010 Introduction to Metamathematics
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4510 Abstract Algebra II

### At least one of the following

At least one of the following must be taken in satisfying other requirements:

- MATH 3510 Abstract Algebra I
- MATH 3610 Real Analysis II

### Other course requirements

#### Mathematics education

TNTX 3100 - Conceptual Algebra

### Science

Three laboratory science courses are required, as follows:

### Option 1

Group I, Biology for science majors with laboratory

- BIOL 1710 Biology for Science Majors I and
- BIOL 1760 Biology for Science Majors Laboratory

Group II, Physical science for science majors with laboratory chosen from

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

### Group III, One additional course

One additional course that meets the University Core Curriculum requirement for the life and physical sciences.

**Note:** Equivalent honors courses can also be used to satisfy this requirement.

Mathematics majors with a minor in geography or geology may also choose from the following in Group I above

- GEOL 1610 Introduction to Geology
- GEOG 1710 Earth Science

#### Option 2

Group I, Two physical sciences for science majors, with laboratories, chosen from

 CHEM 1410 - General Chemistry for Science Majors and  CHEM 1430 - Laboratory Sequence for General Chemistry

or

- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

### Group II, One additional laboratory science course

One laboratory science chosen from any course meeting the natural and life sciences component of the laboratory science requirement of the College of Liberal Arts and Social Sciences.

**Note:** Equivalent honors courses can also be used to satisfy this requirement.

### Option 3

Students double majoring in mathematics and another discipline (typically biology, chemistry, physics or engineering) that requires at least 12 hours of laboratory science intended for science and engineering majors may use the same laboratory science courses that satisfy the requirements for the other major to satisfy the laboratory science requirement for the mathematics major.

### Additional requirements

Students seeking certification in both math and physics are required to take all of the following:

- PHYS 1710 Mechanics
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics
- PHYS 3030 Laboratory in Modern Physics

### Foreign language

Students may complete either of two options to satisfy the foreign language requirement:

### Option 1

Proficiency in a foreign language equivalent to 1020 is required. Students intending to pursue a graduate degree in mathematics are encouraged to study French, German or Russian. Students may take SPAN 1030 in place of SPAN 1010 and SPAN 1020.

### Option 2

Complete 6 hours of technical writing courses from the following:

- TECM 2700 Technical Writing
- TECM 4180 Advanced Technical Communication
- TECM 4190 Technical Editing

- TECM 4250 Writing Technical Procedures and Manuals
- TECM 4700 Writing in the Sciences

### Computer programming

Students taking mathematics courses at the 2000-level or above are expected to be competent in computer programming, using languages such as BASIC, C, C++, Fortran, PASCAL or Java. Students are encouraged to complete the programming requirement during their freshman or sophomore year. Students who have acquired a solid programming competency in a non-academic setting, such as through work experience, may demonstrate their programming competency by passing a departmental exam in place of the CSCE 1010, CSCE 1020 or CSCE 1030 course requirement. Required courses:

- CSCE 1010 Discovering Computer Science or
- CSCE 1020 Program Development or
- CSCE 1030 Computer Science I

### Minor requirements

A minor in mathematics and science secondary teaching, administered by Teach North Texas, is required.

### Other requirements

Students must achieve at least a 2.0 GPA in all mathematics courses which are applied toward a mathematics major and are numbered 3350 or above.

### Mathematics, BSMTH (non-teacher certification)

A Bachelor of Science in Mathematics provides you the skills needed to work on important, challenging, real-world problems in business, industry, medicine, government, and scientific research.

### **Degree requirements**

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "General University Requirements" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

### Communication (English Composition and Rhetoric) core requirement

For satisfying the Communication (English Composition and Rhetoric) core requirements, the department suggests:

- ENGL 1310 First-Year Writing I
- TECM 2700 Technical Writing

### Major requirements

43 hours of mathematics courses, which must include:

### Mathematics core, 19 hours

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2000 Discrete Mathematics
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I

\* Incoming students who have already taken an introduction to mathematical proofs may request substitution of MATH 2000 by an upper-level mathematics course numbered 3350 or higher. Please see an advisor for more information.

### At least one of the following

At least one of the following must be taken in satisfying other requirements:

- MATH 3510 Abstract Algebra I
- MATH 3610 Real Analysis II

### Depth requirement, 9 hours

9 hours from one of the following areas

### Analysis

MATH 3610 - Real Analysis II

### Plus two of the following:

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- MATH 4520 Introduction to Functions of a Complex Variable

### Algebra

MATH 3510 - Abstract Algebra I

### Plus two of the following

- MATH 3400 Number Theory
- MATH 4010 Introduction to Metamathematics
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4510 Abstract Algebra II

### Probability/statistics

- MATH 3680 Applied Statistics
- MATH 4610 Probability
- MATH 4650 Statistics

### Geometry/topology

- MATH 3740 Vector Calculus
- MATH 4060 Foundations of Geometry
- MATH 4500 Introduction to Topology

### Breadth requirement, 9 hours

One course in each of the three areas not used to satisfy the depth requirement.

### Mathematics electives, 6 hours

Two additional upper-level mathematics courses chosen from mathematics course numbered 3350 or above.

### Other course requirements

### Laboratory science

Three laboratory science courses intended for science majors are required as follows:

### Option 1, Biology emphasis

(must be biology intended for science majors)

- BIOL 1710 Biology for Science Majors I and
- BIOL 1720 Biology for Science Majors II and
- BIOL 1760 Biology for Science Majors Laboratory

#### Plus one of the following

(must be physical science intended for science majors)

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
   or
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

### Option 2, Chemistry emphasis

(must be chemistry intended for science majors)

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry
- One additional course that meets the University Core Curriculum requirements for the natural sciences, or any 3 hours from CHEM numbered at least 2000.

### Option 3, Physics emphasis

(must be calculus-based physics intended for science majors)

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- One additional course that meets the University Core Curriculum requirement for the natural sciences, or any 3 hours from PHYS numbered at least 2000.

### Option 4

Students double majoring in mathematics and another discipline (typically biology, chemistry, physics or engineering) that requires at least 12 hours of laboratory science intended for science and engineering majors may use the same laboratory science courses that satisfy the requirements for the other major to satisfy the laboratory science requirement for the mathematics major.

#### Option 5

To satisfy the laboratory science requirement for the mathematics major, students with a minor in geography or geology may use:

- GEOL 1610 Introduction to Geology
- GEOG 1710 Earth Science

### Plus one of the following lecture and laboratory combinations

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

### Foreign language

Students may complete either of two options to satisfy the College of Science foreign language requirement:

### Option 1

Proficiency in a foreign language equivalent to 1020 is required. Students intending to pursue a graduate degree in mathematics are encouraged to study French, German or Russian.

### Option 2

Complete 6 hours of technical writing courses from the following:

- TECM 2700 Technical Writing
- TECM 4180 Advanced Technical Communication
- TECM 4190 Technical Editing
- TECM 4250 Writing Technical Procedures and Manuals
- TECM 4700 Writing in the Sciences

### Computer programming

Students taking mathematics courses at the 2000-level or above are expected to be competent in computer programming, using languages such as BASIC, C, C++, Fortran, PASCAL or Java. Students are encouraged to complete the programming requirement during their freshman or sophomore year. Students who have acquired a solid programming competency in a non-academic setting, such as through work experience, may demonstrate their programming competency by passing a departmental exam in place of the CSCE 1010, CSCE 1020 or CSCE 1030 course requirement. Required courses:

- CSCE 1010 Discovering Computer Science or
- CSCE 1020 Program Development
  or.
- CSCE 1030 Computer Science I

### Minor requirements

One of the following is required:

- A minor of at least 18 hours (6 advanced). A minor in statistics does not fulfill this requirement.
- b. Completion of a second major in addition to mathematics.
- c. Completion of the certificate program in actuarial science. Students must take MATH 3680, MATH 4610 and MATH 4650 for fulfilling degree requirements; students are also encouraged to take MATH 3350 and MATH 3740. Also, no mathematics courses may be chosen for fulfilling the elective requirements of the certificate program.

### Other requirements

Students must achieve a grade point average of at least 2.0 in all mathematics courses which are applied toward a mathematics major and are numbered 3350 or above.

### Mathematics, BSMTH (teacher certification)

A Bachelor of Science in Mathematics with teacher certification provides you the math foundation and analytical skills for a successful career in education.

Completion of these course requirements does not guarantee the student's certification. For information about additional certification requirements, consult the Teach North Texas academic advisor.

### **Degree requirements**

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

### Communication (English Composition and Rhetoric) core requirement

For satisfying the Communication (English Composition and Rhetoric) core requirements, the department suggests:

- ENGL 1310 First-Year Writing I
- TECM 2700 Technical Writing

### Major requirements

46 hours of mathematics courses, which must include:

### Mathematics core, 19 hours

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2000 Discrete Mathematics
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I

### Secondary teacher preparation, 15 hours

- MATH 2100 Functions and Modeling for Secondary Mathematics Instruction
- MATH 3680 Applied Statistics
- MATH 3850 Mathematical Modeling
- MATH 4050 Advanced Study of the Secondary Mathematics Curriculum
- MATH 4060 Foundations of Geometry

### Analysis, 3 hours

One of the following:

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3610 Real Analysis II
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- MATH 4520 Introduction to Functions of a Complex Variable

### Algebra, 3 hours

One of the following:

- MATH 3400 Number Theory
- MATH 3510 Abstract Algebra I
- MATH 4010 Introduction to Metamathematics
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4510 Abstract Algebra II

### Mathematics electives, 6 hours

Two additional upper-level mathematics courses numbered 3350 or higher. Recommended courses are:

- MATH 3400 Number Theory
- MATH 3410 Differential Equations I
- MATH 3740 Vector Calculus
- MATH 4450 Introduction to the Theory of Matrices
- MATH 4610 Probability
- MATH 4650 Statistics

### At least one of the following

At least one of the following must be taken in satisfying other requirements:

- MATH 3510 Abstract Algebra I
- MATH 3610 Real Analysis II

### Other course requirements

### Mathematics education

• TNTX 3100 - Conceptual Algebra

### Laboratory science

Three laboratory science courses are required, as follows (equivalent honors courses may also be used):

### Option 1, Biology emphasis

(must be biology intended for science majors)

- BIOL 1710 Biology for Science Majors I and
- BIOL 1720 Biology for Science Majors II and
- BIOL 1760 Biology for Science Majors Laboratory

### Plus one of the following physical sciences, with laboratory, chosen from

(must be physical science intended for science majors)

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics or
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

### Option 2, Chemistry emphasis

(must be chemistry intended for science majors)

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and

- CHEM 1440 Laboratory Sequence for General Chemistry
- One additional course that meets the University Core Curriculum requirement for the natural sciences, or any 3 hours from CHEM numbered at least 2000.

### Option 3, Physics emphasis

(must be calculus-based physics intended for science majors)

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- One additional course that meets the University Core Curriculum requirement for the natural sciences, or any 3 hours from PHYS numbered at least 2000.

### Option 4

Students double majoring in mathematics and another discipline (typically biology, chemistry, physics or engineering) that requires at least 12 hours of laboratory science intended for science and engineering majors may use the same laboratory science courses that satisfy the requirements for the other major to satisfy the laboratory science requirement for the mathematics major.

### Option 5

To satisfy the laboratory science requirement for the mathematics major, students with a minor in geography or geology may use:

- GEOL 1610 Introduction to Geology
- GEOG 1710 Earth Science

### Plus one of the following lecture and laboratory combinations

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

#### Additional requirements

Students seeking certification in both math and physics are required to take:

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

### Foreign language

Students may complete either of two options to satisfy the College of Science foreign language requirement:

### Option 1

Proficiency in a foreign language equivalent to 1020 is required. Students are encouraged to choose Spanish for the foreign language requirement.

### Option 2

Complete 6 hours of technical writing courses from the following:

- TECM 2700 Technical Writing
- TECM 4180 Advanced Technical Communication
- TECM 4190 Technical Editing
- TECM 4250 Writing Technical Procedures and Manuals
- TECM 4700 Writing in the Sciences

### Computer programming

Students taking mathematics courses at the 2000 level or above are expected to be competent in computer programming, using languages such as BASIC, C, C++, Fortran, PASCAL or Java. Students are encouraged to complete the programming requirement during their freshman or sophomore year. Students who have acquired a solid programming competency in a non-academic setting, such as through work experience, may demonstrate their programming competency by passing a departmental exam in place of the CSCE 1010, CSCE 1020 or CSCE 1030 course requirement. Required courses:

- CSCE 1010 Discovering Computer Science or
- CSCE 1020 Program Development or
- CSCE 1030 Computer Science I

### Minor requirements

A minor in mathematics and science secondary teaching, administered by Teach North Texas, is required.

### Other requirements

Students must achieve a grade point average of at least 2.0 in all mathematics courses which are applied toward a mathematics major and are numbered 3350 or above.

### **Grad Track Options**

### Mathematics, BS with Grad Track option leading to mathematics, MS

### Admission requirements

This Grad Track option is an accelerated program for undergraduate students seeking a BS/MS. Qualified students may take a maximum of 12 graduate credit hours while completing the BS. These credits will be counted towards both the BS and the MS.

The student will apply for the Grad Track option during their junior year. The following criteria must be met:

- At least 75 credit hours must have been completed, with a GPA of 3.5 or higher.
- MATH 3510, MATH 3610, and MATH 4500 must have been completed prior to admission to the Grad Track program, all with a grade of A.
- Applicants must be projected to complete the B.S. during the academic year following the academic year in which they apply.

After the B.S. is earned, the graduate credits will be transferred to the M.S. program.

### Program requirements

The MS Grad Track program is designed to encourage talented undergraduates to consider remaining at UNT for an advanced degree, with a view to attracting them to the PhD program.

After the application is approved and at least 90 credit hours have been completed, the student may begin enrolling in graduate courses approved for the Grad Track.

Any four 5000-level math graduate courses other than Math 5000 or Math 5600 may appear on the undergraduate degree plan.

In order for the courses to be applicable to the MS degree, the minimum grade requirements for graduate program course work must be met.

#### NOTES:

- Students should discuss with the graduate advisor the possibility of taking preparatory courses before taking core courses:
  - O Math 5110-5120 is preparatory for Math 5310-5320
  - O Math 5400 is preparatory for Math 5410-5420
  - O Math 5500 is preparatory for Math 5520-5530
- Students should verify with the departmental undergraduate advisors that all requirements for the BSMTH are met. Graduate courses appearing on the undergraduate degree plan apply to the different BSMTH concentrations as follows:
  - O Analysis: 5110-5120, 5310-5320, 5400, 5410-5420
  - O Algebra: 5500, 5520-5530
  - O Geometry/Topology: 5010-5020, 5610-5620
  - O Probability/Statistics: 5810-5820
  - For other graduate courses, consult with the graduate advisor.

All remaining courses for Mathematics, BS must be completed.

### Preparing for full-time graduate study

To eventually earn the MS in mathematics:

- The student will apply to Toulouse Graduate School within the first semester of the senior year. The online application and all required documents for admission to the MS program in Mathematics must be submitted.
- The student must enroll in graduate school in the long semester after finishing the BS. In the following 4 semesters (including summer terms), the remaining 24 hours required for the MS degree must be completed.
  - If the student does not enroll in graduate school in the long semester after finishing the BS, graduate hours earned under this program will not count toward any future UNT MS degree.
- Students are encouraged to discuss eventual M.S. degree requirements with the departmental graduate advisor.

#### **Minors**

### **Mathematics** minor

Students planning to minor in mathematics should consult the undergraduate advisor of the Department of Mathematics. The minor requires at least 18 hours of math courses, 6 of which must be advanced.

### Requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- At least 12 hours of mathematics courses (6 advanced) above MATH 1720

### Interdisciplinary studies majors may substitute 3 hours

In place of 3 of the 12 hours required above MATH 1720, interdisciplinary studies majors seeking certification in elementary education may substitute 3 hours from:

 MATH 1350 - Mathematics for Elementary Education Majors I

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 MATH 1351 - Mathematics for Elementary Education Majors II

### Note

Generally, transfer credit may be applied toward a mathematics minor only if it is a mathematics (or statistics) course at the level of calculus or above and taught by mathematics (or statistics) faculty under a MATH (or STAT) course number. Students with questions about the applicability of transfer credit toward a mathematics minor should consult an advisor in the Department of Mathematics.

### Recommended advanced course selections to complement various majors

### Computer science majors

- MATH 3350 Introduction to Numerical Analysis
- MATH 3400 Number Theory
- MATH 3410 Differential Equations I
- MATH 3680 Applied Statistics
- MATH 4100 Fourier Analysis
- MATH 4430 Introduction to Graph Theory
- MATH 4450 Introduction to the Theory of Matrices

### Engineering majors

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3680 Applied Statistics
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4520 Introduction to Functions of a Complex Variable

### Biology and chemistry majors

- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I
- MATH 3680 Applied Statistics

#### Business and economics majors

- MATH 3000 Real Analysis I (if interested in economics doctoral programs or theoretical graduate programs in finance)
- MATH 3350 Introduction to Numerical Analysis
- MATH 3680 Applied Statistics
- MATH 3740 Vector Calculus
- MATH 4610 Probability

### Physics majors

- MATH 3410 Differential Equations I
- MATH 3420 Differential Equations II
- MATH 3740 Vector Calculus
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems

- MATH 4450 Introduction to the Theory of Matrices
- MATH 4520 Introduction to Functions of a Complex Variable
- MATH 4610 Probability

### Interdisciplinary studies (elementary education) majors

- MATH 3000 Real Analysis I (Math specialist)
- MATH 3400 Number Theory
- MATH 3410 Differential Equations I
- MATH 3680 Applied Statistics

### **Statistics minor**

A minor in statistics requires 22 hours.

### Requirements

### Mathematics, 19 hours

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2730 Multivariable Calculus
- MATH 3680 Applied Statistics
- MATH 4610 Probability
- MATH 4650 Statistics

### Application of statistical methods to another discipline, 3 hours

In addition, one additional course concerning the application of statistical methods to another discipline must be taken from the following.

If this course may ordinarily be applied toward the student's major, the student will be permitted to apply the course both toward the major and toward the statistics minor.

- CHEM 3451 Quantitative Analysis
- DSCI 3870 Management Science
- ECON 4870 Introduction to Econometrics
- ECON 4875 Empirical Linear Modeling
- GEOG 4185 Statistical Research Methods in Geography
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4310 Quantum Mechanics
- PSCI 3300 Political Science Research Methods
- PSYC 3630 Introduction to Psychological Measurement

#### Additional information

Other courses may be permissible if approved in advance by an undergraduate advisor in the Department of Mathematics.

### Undergraduate Academic Certificates Actuarial Science certificate

Students interested in this interdisciplinary certificate program should contact the undergraduate advisor of the mathematics department.

### Requirements for admission to program

- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus

- MATH 3680 Applied Statistics
- ECON 4630 Research Methods for Economists or
- DSCI 3710 Business Statistics with Spreadsheets
- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics
- CSCE 1010 Discovering Computer Science
  or
- CSCE 1020 Program Development
- CSCE 1030 Computer Science I (CSCE 1040 is encouraged but not required)
- FINA 3770 Finance

### Certificate requirements

This certificate requires 18 hours of courses in one of the following two tracks:

### Math major track

Students whose only major is mathematics and who wish to earn a certificate in actuarial science must complete:

- ECON 4870 Introduction to Econometrics
- FINA 4200 Investments
- MATH 3860 Financial Mathematics

### Plus three courses selected from

- FINA 4210, FINA 4300, FINA 4310 and FINA 4400. FINA 4310 is recommended.
- RMIN 2500 or any 4000-level RMIN course.
   Recommended courses are RMIN 2500, RMIN 4200 and RMIN 4310. Students are also encouraged to seek internships that may be pursued in conjunction with RMIN 4800.
- ECON 4030, ECON 4180 and ECON 4875.
- Any other course must receive approval from an undergraduate advisor in the Department of Mathematics.

Note: Students whose only major is mathematics may not apply mathematics courses toward this certificate. Actuarial certificate students who are math majors should take MATH 3350, MATH 3410, MATH 3740, MATH 4610 and MATH 4650 as part of the requirements for the math major.

### Non-math major track

Students whose degree program includes a major other than mathematics and who wish to earn a certificate in actuarial science must complete:

- ECON 4870 Introduction to Econometrics
- FINA 4200 Investments
- MATH 3860 Financial Mathematics
- MATH 4610 Probability

### Plus two courses selected from

- MATH 3350, MATH 3410, MATH 3740, MATH 3860 and MATH 4650. MATH 4600 is recommended.
- FINA 4210, FINA 4300, FINA 4310 and FINA 4400. FINA 4310 is recommended.
- RMIN 2500 or any 4000-level RMIN course.
  Recommended courses are RMIN 2500, RMIN 4200 and RMIN 4310. Students are also encouraged to seek

internships that may be pursued in conjunction with RMIN 4800.

- ECON 4030, ECON 4180 and ECON 4875.
- Any other course must receive approval from an undergraduate advisor in the Department of Mathematics.

### Preparation for actuarial exams

This program should prepare students for the preliminary actuarial exams, as follows:

#### a. Actuarial Exam 1/P

Students are encouraged to take MATH 4610 and attempt Exam 1/P before the end of the junior year.

• MATH 4610 - Probability

#### b. Actuarial Exam 2/FM

- FINA 3770 Finance
- FINA 4210 Introduction to Derivatives
- MATH 3860 Financial Mathematics

### c. VEE (Validation by Educational Experience)–Economics

- ECON 1100 Principles of Microeconomics
- ECON 1110 Principles of Macroeconomics

### d. VEE-Applied Statistical Methods

- ECON 4030 Economic Cycles and Forecasting
- ECON 4870 Introduction to Econometrics

### e. VEE-Corporate Finance

- FINA 3770 Finance
- FINA 4200 Investments

### Additional information

More information about the actuarial exams, the VEE requirements, careers in actuarial science and internship opportunities may be found at www.beanactuary.org, www.soa.org and www.casact.org.

### Mathematics of Scientific Computation certificate

A certificate in the mathematics of scientific computation consists of 18 hours of course work as follows:

### Required courses

- CSCE 1030 Computer Science I
- MATH 3350 Introduction to Numerical Analysis
- MATH 3410 Differential Equations I

### Plus 9 hours selected from

9 hours of advanced courses with at least one math class and one non-math class selected from:

- MATH 3420 Differential Equations II
- MATH 3740 Vector Calculus
- MATH 3850 Mathematical Modeling
- MATH 4100 Fourier Analysis
- MATH 4200 Dynamical Systems
- BIOL 4810 Biocomputing
- BIOL 4820 Computational Epidemiology
- CHEM 4660 Introduction to Computational Chemistry
- CSCE 3010 Signals and Systems

- CSCE 3850 Introduction to Computational Life Science
- CSCE 4240 Introduction to Digital Image Processing
- CSCE 4810 Biocomputing
- CSCE 4820 Computational Epidemiology
- EENG 2620 Signals and Systems
- MEET 3940 Fluid Mechanics Applications
- MEET 3990 Applied Thermodynamics
- MEET 4350 Heat Transfer Applications
- MTSE 4040 Computational Materials Science
- MTSE 4070 Electronic Materials
- MEEN 2210 Thermodynamics I
- MEEN 3110 Thermodynamics II
- MEEN 3120 Fluid Mechanics
- MEEN 3230 System Dynamics and Control
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4600 Computer Based Physics

#### Additional Information:

Other courses may be allowed if approved in advance by an undergraduate advisor in the Department of Mathematics. Although not required, students completing this certificate are also strongly encouraged to complete CSCE 1040.

### Statistics certificate

A certificate in statistics consists of:

### Requirements, 12 hours

### Mathematics, 9 hours

- MATH 3680 Applied Statistics
- MATH 4610 Probability
- MATH 4650 Statistics

### One course chosen from

One additional course concerning the application of statistical methods to another discipline chosen from the following:

- CHEM 3451 Quantitative Analysis
- DSCI 3870 Management Science
- ECON 4870 Introduction to Econometrics
- ECON 4875 Empirical Linear Modeling
- GEOG 4185 Statistical Research Methods in Geography
- GEOG 4410 Location-Allocation Modeling
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4310 Quantum Mechanics
- PSCI 3300 Political Science Research Methods
- PSYC 3630 Introduction to Psychological Measurement

#### Additional information

Other courses may be permissible if approved in advance by an undergraduate advisor in the Department of Mathematics.

### **Department of Physics**

Main Departmental Office Physics Building, Room 110

Mailing address: 1155 Union Circle #311427 Denton, TX 76203-5017 940-565-2626 Fax: 940-565-2515

E-mail: physics@unt.edu Web site: www.phys.unt.edu

Jingbiao, Cui, Chair

Duncan Weathers, Associate Chair

Faculty

From advancing state-of-the-art processes in the semiconductor industry to developing computer software for simulating exotic phenomena, physicists are helping to expand the frontiers of both basic science and advanced technology. The diversity of work conducted by physicists occurs because physical science and engineering disciplines are based, to a large extent, on physics principles. A bachelor's degree in physics also prepares students for graduate work in acoustics, astrophysics, biophysics, computational physics, medical physics and other subfields and interdisciplinary fields in physics.

### **Undergraduate research**

Undergraduate research opportunities are available for undergraduate students interested in physics. Students should consult the undergraduate advisor.

### **Mathematics requirements**

Students who must schedule physics courses with mathematics prerequisites must plan their mathematics programs carefully. Freshmen should note mathematics placement procedures described in the Department of Mathematics section of this catalog. Physics majors who are advised to take MATH 1650 prior to MATH 1710 may count MATH 1650 as an elective credit.

### **Mathematics and Science Secondary Teaching**

Individuals interested in pursuing certification in math or science teaching at the secondary level may wish to pursue a minor through the Teach North Texas program. See "Teach North Texas" in the College of Science section of this catalog.

### **Majors**

### Physics with a concentration in Engineering Physics, BSPHY

A Bachelor of Science in Physics gives you the strong math, problem solving and analytical skills needed to study the structure and interaction of matter and energy — the way things work.

### **Degree requirements**

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Science requirements (excluding foreign language and natural and life sciences).

### Required courses

Minimum of 49 hours in physics, including:

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I and
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II

or

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- PHYS 3210 Mechanics
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 3420 Electronics
- PHYS 3510 Physics, Computation and Software Applications
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4310 Quantum Mechanics
- PHYS 4950 Senior Thesis (3 hours)
- PHYS 4955 Senior Thesis Capstone (3 hours)

### Courses that may not count towards the degree

- PHYS 2900 Special Problems
- PHYS 2910 Special Problems
- PHYS 4900 Special Problems
- PHYS 4910 Special Problems

### **Engineering Physics Concentration**

At least 9 hours chosen from the following courses:

- EENG 2620 Signals and Systems and
- EENG 2621 Signals and Systems Lab
- EENG 2710 Digital Logic Design and
- EENG 2711 Digital Logic Design Lab
- EENG 3710 Computer Organization

- PHYS 4150 Experimental Physics I
- PHYS 4220 Electromagnetic Waves
- PHYS 4250 Advanced Photonics for Microscopy and Spectroscopy
- PHYS 4500 Introduction to Solid-State Physics
- PHYS 4520 Physics of Nanoscale Materials
- PHYS 4600 Computer Based Physics

### Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

### Minor requirements

Students seeking secondary teacher certification should see requirements listed under "Teacher Certification."

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

### Other requirements

Substitutions in the BA or BS degree programs may be made only with the written consent of the department chair. A minimum grade point average of 2.5 in all advanced-level science and mathematics courses is required for graduation with a degree in physics.

### Physics, BA

A Bachelor of Arts with a major in physics gives you the strong math, problem solving and analytical skills needed to study the structure and interaction of matter and energy — the way things work.

The BA with a major in physics is designed for students planning to teach physics in public school, taking a double major or desiring a liberal arts education with a science concentration.

### **Degree requirements**

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements.

### Major requirements

27 hours in physics to include:

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I and
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II

or

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

or

- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- Plus 15 more hours of advanced level physics courses.

### Courses that may not count toward the degree

- PHYS 2900 Special Problems
- PHYS 2910 Special Problems
- PHYS 4900 Special Problems
- PHYS 4910 Special Problems

### Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2730 Multivariable Calculus
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

### Minor

Optional.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (36) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

### Other requirements

Substitutions in the BA or BS degree programs may be made only with the written consent of the department chair. A minimum grade point average of 2.5 in all advanced-level science and mathematics courses is required for graduation with a degree in physics.

### Physics, BSPHY

A Bachelor of Science in Physics gives you the strong math, problem solving and analytical skills needed to study the structure and interaction of matter and energy — the way things work.

### **Degree requirements**

### Hours required and general/college requirements

A minimum of 120 semester hours, of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Science degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Liberal Arts and Social Sciences requirements (excluding foreign language and natural and life sciences).

### Major requirements

### Option I required courses

Minimum of 49 hours in physics, including:

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I
  and
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II

or

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics

- PHYS 3210 Mechanics
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 3420 Electronics
- PHYS 3510 Physics, Computation and Software Applications
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4310 Quantum Mechanics
- PHYS 4950 Senior Thesis (3 hours)
- PHYS 4955 Senior Thesis Capstone (3 hours)
- Plus 9 additional hours of advanced-level physics courses

### Courses that may not count toward the degree

- PHYS 2900 Special Problems
- PHYS 2910 Special Problems
- PHYS 4900 Special Problems
- PHYS 4910 Special Problems

### Option II required courses

Minimum of 36 hours in physics, including:

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

or

- PHYS 1410 General Physics I and
- PHYS 1430 General Physics Laboratory I
- PHYS 1420 General Physics II and
- PHYS 1440 General Physics Laboratory II

or

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- PHYS 3210 Mechanics
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 3510 Physics, Computation and Software Applications
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4310 Quantum Mechanics
- PHYS 4950 Senior Thesis (3 hours)

- PHYS 4955 Senior Thesis Capstone (3 hours)
- Plus 3 additional hours of advanced-level physics courses

### Courses that may not count toward the degree

- PHYS 2900 Special Problems
- PHYS 2910 Special Problems
- PHYS 4900 Special Problems
- PHYS 4910 Special Problems

### Other course requirements

- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

### Minor requirements

Option II requires a minor in mathematics and science secondary teaching or a minor in physical science secondary teaching or a minor in general engineering technology. Students seeking secondary teacher certification should see requirements listed under "Teacher Certification."

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Science.

### Other requirements

Substitutions in the BA or BS degree programs may be made only with the written consent of the department chair. A minimum grade point average of 2.5 in all advanced-level science and mathematics courses is required for graduation with a degree in physics.

### **Grad Track Options**

### Physics, BSPHY with grad track option leading to Physics, MS

### Admission criteria:

- 1. Student must be a pursing a BA or BS degree in Physics.
- 2. Student must have a 3.5 GPA
- Student must be identified as an "Exceptional Undergraduate Student" by evidence of strong interest in and aptitude for research, which could be in the form of participation in a summer REU program, enrollment in a special problems research course with a faculty member, or volunteer work with a research group. A recommendation letter from the research supervisor will be considered in the evaluation.

- Student must have completed 75 SCH before being "conditionally" admitted to the Grad Track Program.
- 5. Student will seek admission to the program through assistance with the Physics student advisor and the Undergraduate Coordinator; along with at least two letters of faculty endorsement; supporting the student's exceptional qualities and aptitude for success in the GTP. The student will need to submit a Toulouse Graduate School "Conditional Admission and Advisor Course Approval form" to ensure the GTP courses will satisfy degree requirements for the student's bachelor degree.

### Program requirements

Any or all of the following four courses may appear on the undergraduate degree plan. These classes will be used for the Undergraduate Physics electives.

- PHYS 5700 Computational Physics,
- PHYS 5450 Survey of Solid State Physics
- PHYS 5710 Advanced Classical Mechanics I, and
- PHYS 5750 Selected Topics in Materials Physics.

#### **Minors**

### **Physics minor**

A minor in physics consists of a minimum of 18 hours of physics courses, including 10 advanced hours. PHYS 2900, PHYS 2910, PHYS 4900 and PHYS 4910 may not count toward a minor in physics.

# Secondary Teacher Certification Physical Science teacher certification (Physics)

The College Science encourages students to explore teaching at the secondary level as a career option. The student's academic advisor in the Dean's Office for Undergraduates and Student Advising in GAB, Room 220, can assist students with specific requirements for teacher certification

Teacher certification in physical science is also available in conjunction with majors in biochemistry and chemistry.

### Requirements utilizing the BA with a major in Physics

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- 15 hours any upper-division PHYS courses (except PHYS 4900, PHYS 4910)

- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2730 Multivariable Calculus

### Requirements utilizing the BS in Physics, Option II

Upon completion of this program, students will be prepared to sit for the certification examinations in Physical Science.

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- PHYS 3210 Mechanics
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 3510 Physics, Computation and Software Applications
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4310 Quantum Mechanics
- PHYS 4950 Senior Thesis (3 hours)
- PHYS 4955 Senior Thesis Capstone (3 hours)

- Physics elective (3 hours advanced)
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I

### Additional information

See major for additional course work and GPA requirements.

Students must also complete the required 22 hours for the mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

### Physics/Mathematics teacher certification

The College Science encourages students to explore teaching at the secondary level as a career option. The Teach North Texas program advisor can assist students with specific requirements for teacher certification.

### Requirements utilizing the BA with a major in Physics

Upon completion of this program, students will be prepared to sit for the certification examinations in Physics/Mathematics.

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics

- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics
- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- 15 hours of any upper-division PHYS courses (except PHYS 4900, PHYS 4910)
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2730 Multivariable Calculus
- MATH 3000 Real Analysis I
- MATH 4060 Foundations of Geometry
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and CHEM 1430 - Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

or

- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry

### Requirements utilizing the BS in Physics, Option II

Upon completion of this program, students will be prepared to sit for the certification examinations in Physics/Mathematics.

- PHYS 1510 General Physics I with Calculus and
- PHYS 1530 General Physics with Calculus Laboratory I

or

- PHYS 1710 Mechanics and
- PHYS 1730 Laboratory in Mechanics
- PHYS 1520 General Physics II with Calculus and
- PHYS 1540 General Physics with Calculus Laboratory II

or

- PHYS 2220 Electricity and Magnetism and
- PHYS 2240 Laboratory in Wave Motion, Electricity, Magnetism and Optics

- PHYS 3010 Modern Physics and
- PHYS 3030 Laboratory in Modern Physics
- PHYS 3210 Mechanics
- PHYS 3310 Mathematical Methods in the Physical Sciences
- PHYS 3510 Physics, Computation and Software Applications
- PHYS 4110 Statistical and Thermal Physics
- PHYS 4210 Electricity and Magnetism
- PHYS 4310 Quantum Mechanics
- PHYS 4950 Senior Thesis (3 hours)
- PHYS 4955 Senior Thesis Capstone (3 hours)
- Physics elective (3 hours advanced)
- CHEM 1410 General Chemistry for Science Majors and
- CHEM 1430 Laboratory Sequence for General Chemistry

or

- CHEM 1412 General Chemistry for the Honors College and
- CHEM 1430 Laboratory Sequence for General Chemistry or
- CHEM 1413 Honors General Chemistry and
- CHEM 1430 Laboratory Sequence for General Chemistry
- CHEM 1420 General Chemistry for Science Majors and
- CHEM 1440 Laboratory Sequence for General Chemistry

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- CHEM 1422 General Chemistry for the Honors College and
- CHEM 1440 Laboratory Sequence for General Chemistry or
- CHEM 1423 Honors General Chemistry and
- CHEM 1440 Laboratory Sequence for General Chemistry
- MATH 1710 Calculus I
- MATH 1720 Calculus II
- MATH 2700 Linear Algebra and Vector Geometry
- MATH 2730 Multivariable Calculus
- MATH 3410 Differential Equations I
- MATH 4060 Foundations of Geometry

### Additional Information:

See major for additional course work and GPA requirements.

Students must also complete the required 22 hours for the minor in mathematics and science secondary teaching and meet all GPA requirements to apply for state certification. Students should contact the Teach North Texas program office for more information on enrolling in the certification courses.

All state certification requirements and information on required examinations is available on the web site of the State Board for Educator Certification (SBEC), www.tea.state.tx.us.

# College of Visual Arts and Design

Main Office Art Building, Room 107

Mailing address: 1155 Union Circle #305100 Denton, TX 76203-5017 940-565-4001

Web site: www.cvad.unt.edu Student Services Office Art Building, Room 232 940-565-2216

#### Karen Hutzel, Dean

Eric Ligon, Associate Dean for Administrative Affairs Denise Amy Baxter, Associate Dean for Academic and Student Affairs

The College of Visual Arts and Design fosters creative futures for its diverse student population and the region through rigorous arts-based education, arts-and client-based studio practice, scholarship and research. Together, students, faculty, staff, administrators, the college advisory board and alumni comprise the UNT College of Visual Arts and Design. The college is home to an abundant plurality of voices, visions and aspirations. Nonetheless, we share common values and sense of purpose.

The University of North Texas is accredited by the National Association of Schools of Art and Design (11250 Roger Bacon Drive, Suite 21, Reston, VA, 20190; 703-437-0700).

### **Academic advising**

CVAD Academic Advisors assist continuing, freshman and transfer students pursuing majors or minors in the College of Visual Arts and Design Milnes Advising Center, Art Building, Room 232. Advisors consult with students in the selection of courses and answer questions about selecting a major, degree audits, application of transfer credit, and general academic requirements, policies and procedures. New students and continuing CVAD majors who are on probation must meet with an advisor prior to registration.

### **Academic requirements**

Students pursuing majors and minors within the College of Visual Arts and Design must maintain at least a 2.5 grade point average in all art courses. Only grades of C (2.0) or better in art courses will count toward a student's degree requirements. A grade of C or better is required in any art course to count as a prerequisite. The teacher certification program for ARTE majors requires a 2.75 cumulative GPA on all UNT and transfer work.

### **Advanced Placement**

Students who have completed Advanced Placement art courses in high school, earning scores of 4 or 5, may receive the following credit toward UNT degrees in art: Advanced Placement

AP Art Examination	UNT Equivalent Credit
Art History	ART 2350 or ART 2360 or ART 2370
	3 hours
Art: Studio Art, Drawing Portfolio	ART 1600
	3 hours
Art: Studio Art, 2D	

Design Portfolio

Art: Studio Art, 3D

Design Portfolio

ART 1800

ART 1700 3 hours

3 hours

#### **International Baccalaureate**

Students who have completed the International Baccalaureate ART/DESIGN higher level examinations with a score of 5 or higher should consult the College of Visual Arts and Design Advising Director regarding the application of IB credit toward courses or degree programs in the College of Visual Arts and Design.

### Degree requirements and the University Core Curriculum

Occasionally a course required for a degree may also satisfy a requirement of the University Core Curriculum. In addition to taking the required course, a student may elect to take a different course from among those available to fulfill that core requirement; doing so, however, may add to the total number of hours required for the degree. Students who have questions regarding degree and core requirements should consult a college degree program advisor.

### **Programs of study**

The college offers programs leading to the Bachelor of Arts (BA) and Bachelor of Fine Arts (BFA). BA and BFA degree programs are offered through the following departments:

 BA—Interdisciplinary Art and Design Studies, with concentrations in arts management and design management

#### **Department of Art Education**

BFA—Art Education

### Department of Art History

BA—Art History

#### Department of Design

- BFA—Communication Design
- BFA—Fashion Design
- BFA—Interior Design

#### Department of Studio Art

 BFA—Studio Art, with concentrations in ceramics, drawing and painting, metalsmithing and jewelry, new media art, photography, printmaking, and sculpture.

#### Four-year plans

Suggested four-year plans that detail all requirements for each undergraduate degree offered by the College of Visual Arts and Design are available on request from the CVAD Advising Office. These suggested plans may also be accessed through the College of Visual Arts and Design web site (www.cvad.unt.edu).

#### **Degree audit**

A degree audit is an official document of the university that lists all the courses needed to complete a chosen degree and shows how all of the courses completed are applied toward the degree. Students should file a degree audit when they reach the sophomore level of their chosen major. Some majors do their audits in classroom groups (defer to department chair for more specific information). Once the department submits the degree audit to the CVAD Advising Office (Art Building, Room 232), the form will be processed, and the student will be notified via e-mail when it is available for pick up. Students may obtain an updated copy each term/semester from Student Services, Art Building, Room 232. Academic advisors are available by appointment to assist students with questions that may arise as they chart their progress.

### **Majors**

### Interdisciplinary Art and Design Studies with a concentration in Arts Management, BA

### Hours required and general/college requirements

A minimum of 120 total semester hours, 42 of which must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 48 hours of art to include:

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ART 4899 Topics in Interdisciplinary Arts and Design Studies

### Arts Management concentration

- ART 2020 Digital Tools and Technologies for Creative Practice
- ART 3030 Digital Communication for Art and Creative Entrepreneurship
- ART 4614 Art and Business
- ARTH 4812 Modernism and the Visual Arts 1890-1945
- ARTH 4813 Postmodernism and the Visual Arts 1945–Present
- ARTH 4814 Theories of Contemporary Art
- ART 4940 Understanding Art Museums
- ASTU 4010 Professional Practices for the Studio Artist
- an advanced art elective

### Plus 3 hours from

- ANTH 1150 World Cultures Through Film
- or any 1000- or 2000-level ART, ADES or ASTU course

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. Internships are strongly recommended for all IADS majors. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 111.

### Minor requirements

Students must choose from management or leadership of community and non-profit organizations.

#### Note:

A grade of C or above must be earned in the "major requirements" in the IADS degree as listed in the UNT Catalog to be considered for credit toward the CVAD degree. This grade requirement also includes courses completed in residence or transferred to UNT.

### Interdisciplinary Art and Design Studies with a concentration in Design Management, BA

### Hours required and general/college requirements

A minimum of 120 total semester hours, 42 of which must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III

### Design Management concentration

- ADES 4660 Seminar in Design Management
- ADES 4662 Design Management Integrative Capstone
- ART 2020 Digital Tools and Technologies for Creative Practice
- ART 3030 Digital Communication for Art and Creative Entrepreneurship
- 3 hours advanced Art History
- MGMT 3720 Organizational Behavior
- MKTG 3650 Foundations of Marketing Practice

### 3 hours from

- ADES 1500 Introduction to Communication Design
- ADES 1550 Introduction to Fashion Design
- ADES 1625 Introduction to Interior Design

### Menu hours requirement

### Menu 1, 3 hours selected from

- ADES 1500 Introduction to Communication Design
- ADES 1510 Typography I
- ADES 1513 Contextual Research Methods
- ADES 1540 Foundations for Communication Design
- ADES 1543 Foundations of User-Centered Design
- ADES 1550 Introduction to Fashion Design
- ADES 1560 Fashion Design: Introduction to Industrial Sewing Techniques
- ADES 1625 Introduction to Interior Design

- ADES 2513 Typographic Systems
- ADES 2515 Image Making and Color Theory
- ADES 2518 Design Prototyping and User Testing
- ADES 2550 Fashion: Patternmaking I
- ADES 2630 Drawing for Interior Design
- HFMD 2400 Introduction to the Furniture Industry
- MDSE 2490 Introduction to Retail Merchandising

### Menu 2, 9 hours selected from

(3 hours must be advanced)

- BCIS 3615 Visual Display of Business Information
- ANTH 3101 American Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.
- ANTH 4110 Design Anthropology
- ANTH 4500 Language and Culture
- ANTH 4701 Topics in Sociocultural Anthropology
- ADES 4615 Topics in Interior Design
- ADES 4700 Professional Internship
- ART 4570 Interdisciplinary Topics in Art
- ART 4120 Art on Location
- ART 4450 Professional Internship
- ART 4614 Art and Business
- ART 4899 Topics in Interdisciplinary Arts and Design Studies
- COMM 3120 Nonverbal Communication
- GEOG 3050 Introduction to Cartography
- HFMD 3380 Global Home Furnishings Industry
- JOUR 3055 Advertising Art Direction
- JOUR 3200 Mass Communication Research Methods
- JOUR 3410 Public Relations for Non-Profits
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4270 Strategic Social Media
- JOUR 4730 Advanced Photojournalism Portfolio
- LTEC 4510 Communications in Business, Education and Industry
- MDSE 3370 Social Psychology of Dress and Appearance
- MDSE 3650 Advanced Textiles
- MDSE 3750 Consumer Studies
- PHIL 4740 Environmental Justice
- SOCI 4600 Internet and Society
- SPAN 4385 Hispanic Culture in the United States
- RETL 4330 Consumer Analytics and Data Visualization

### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. Internships are strongly recommended for all IADS majors. For specific information, see an academic advisor in the College of Visual Arts and Design Student Services Office.

#### Note:

A grade of C or above must be earned in the "major requirements" in the IADS degree as listed in the UNT Catalog to be considered for credit toward the CVAD degree. This grade requirement also includes courses completed in residence or transferred to UNT.

#### Minor

Students must choose either a minor in management or a minor in marketing.

### Interdisciplinary Art and Design Studies, BA

### Hours required and general/college requirements

A minimum of 120 total semester hours, 42 of which must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 48 hours of art to include:

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ART 4899 Topics in Interdisciplinary Arts and Design Studies

### Other course requirements

- ART 4614 Art and Business
- ART 2020 Digital Tools and Technologies for Creative Practice
- ART 3030 Digital Communication for Art and Creative Entrepreneurship

### Menu 1, 3 hours from

- ANTH 1150 World Cultures Through Film
- AGER 2250 Images of Aging in Film and Literature
- MDSE 2350 Trend Analysis and Forecasting
- MDSE 2650 Textiles for Apparel
- Any 1000- or 2000-level ART, ADES or ASTU course

### Menu 2, 9 hours from

- ANTH 3101 American Culture and Society
- ANTH 3110 Indigenous Peoples of North America
- ANTH 3120 Indigenous Cultures of the Southwest
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.
- ANTH 3200 Latin America
- ANTH 3220 Mayan Culture
- ANTH 3300 Peoples and Cultures of the Pacific
- ANTH 3400 Peoples and Cultures of Africa

- ANTH 3500 Cultures and Civilizations of the Middle Fast
- ANTH 3600 Peoples and Cultures of Europe
- ANTH 3700 Peoples and Cultures of South Asia
- ANTH 3710 Peoples and Cultures of East Asia
- ANTH 4110 Design Anthropology
- ARCH 3650 Origins of Civilization
- BCIS 3615 Visual Display of Business Information
- CMHT 4000 Global Discovery in Merchandising and Hospitality Management
- COMM 3120 Nonverbal Communication
- COMM 3865 Adaptation and Staging
- COMM 4260 Performance and Culture
- COMM 4460 Performance Art
- FREN 4070 French Culture and Literature through Film
- GEOG 3500 Introduction to Geographic Information Systems
- GEOG 3050 Introduction to Cartography
- GEOG 4060 Applied GIS: MapInfo Professional®
- GEOG 4170 Field Methods and Mapping
- HFMD 3355 Historic and Contemporary Styles of Home Furnishings
- HFMD 3380 Global Home Furnishings Industry
- HFMD 3570 Decorative Accessories Merchandising
- HIST 3762 Rome: The Biography of a City
- ITAL 3050 Contemporary Italian Culture Through Film
- JOUR 3020 Advertising Account Planning
- JOUR 3040 Advertising Media Strategy
- JOUR 3050 Advertising Copywriting
- JOUR 3055 Advertising Art Direction
- JOUR 3200 Mass Communication Research Methods
- JOUR 3700 Fundamentals of Photojournalism
- JOUR 4020 Advertising Industry in New York
- JOUR 4052 Advertising Portfolio
- JOUR 4250 Race, Gender and the Media: A Methods Approach
- JOUR 4270 Strategic Social Media
- JOUR 4720 Multimedia Storytelling for News
- JOUR 4730 Advanced Photojournalism Portfolio
- LTEC 3220 Computer Graphics in Education and Training
- LTEC 4210 Digital Multimedia in Education and Training
- MUAG 4200 Video Games: Behind the Screens
- MDSE 3350 Historic Costume
- MDSE 3370 Social Psychology of Dress and Appearance
- MDSE 3650 Advanced Textiles
- MDSE 3750 Consumer Studies
- MDSE 4001 New York Study Tour for Merchandising and Digital Retailing
- MDSE 4002 Dallas Study Tour for Merchandising and Digital Retailing
- MDSE 4010 Global Sourcing
- MDSE 4560 Sustainable Strategies in Merchandising
- MKTG 3660 Advertising Management
- MKTG 4330 Strategic Brand Management

- PHIL 3100 Aesthetics
- RESM 4180 Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas
- RETL 3950 Visual Merchandising and Promotion
- RETL 4080 Retail Start-Up
- RETL 4330 Consumer Analytics and Data Visualization
- MDSE 4850 Brand Development
- SPAN 3140 Mexican Civilization
- SPAN 3150 Spanish Culture and Civilization
- SPAN 3160 Latin American Culture and Civilization
- SPAN 3180 Latin American Culture Through Film
- SPAN 4385 Hispanic Culture in the United States
- SPAN 4430 Sexualities in Contemporary Spanish Cinema
- SPAN 4450 Contemporary Spanish Culture Through Cinema
- TECM 3200 Information Design for Electronic Media
- THEA 3070 History of Theatrical Costume and Décor
- THEA 3095 Stage Production II
- THEA 3143 Costume II
- THEA 3146 Stagecraft II
- THEA 4130 Lighting III: Design
- THEA 4146 Stagecraft III: Design

#### Note

Most external courses have prerequisites and/or are open only to students minoring in those disciplines. Consult current course descriptions for more information.

### Menu 3, 9 hours from

9 hours of advanced courses in ART, AEAH, ASTU, or ADES. Note: many ASTU and ADES classes are only open to majors; prerequisites may apply. Check current course catalog for description.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. Internships are strongly recommended for all IADS majors. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Minor requirements

Students must pursue a minor outside of the College of Visual Arts and Design. Students should select a minor that corresponds to their ultimate career goal, such as marketing, merchandising (fashion emphasis), business, archaeology, anthropology, computer education, management, history, or journalism.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 18 hours of art (including 12 advanced) must be completed at UNT.
- Transfer course work to be substituted for required art courses must be approved by a student's faculty advisor during the degree plan process.
- A 2.5 grade point average must be maintained in all art courses; only grades of C or better in art courses will count toward degree requirements.

### **Department of Art Education**

Main Office Art Building, Room 230

Mailing address:

1155 Union Circle #305100 Denton, TX 76203-5017 940-369-7559

Fax: 940-369-7559

E-mail: cvad.arteducation@unt.edu

Web site: cvad.unt.edu

#### Manisha Sharma, Chair

The Department of Art Education offers the BFA, MA, and PhD degrees in art education and the graduate academic certificate in art museum education. Students interested in these degrees and programs may contact the department chair.

### **Pre-majors**

### **Art Education pre-major**

### Art Education admission and premajor requirements

Entering students interested in majoring in Art Education in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the art education major (and to be eligible to enroll in advanced art education courses), a pre-major must meet all of the following requirements.

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 2101 Beginning Ceramics: Handbuilding or
- ASTU 2102 Beginning Ceramics: Throwing

### Complete two of the following with a grade of C or better

- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2300 Introduction to Printmaking Techniques
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 2801 Beginning Sculpture: Traditional Methods
   Or
- ASTU 2802 Beginning Sculpture: Digital Methods

### Admissions review

Successfully complete admissions review while enrolled in ARTE 3753

### Minimum GPA of 2.75

### **Majors**

### **Art Education, BFA**

The Bachelor of Fine Arts with a major in art education prepares you for a career in elementary, middle or high school art education or a career in community art programs. This degree also grooms you for graduate study in other education areas such as art museum education.

Art Education pre-major requirements

### Degree requirements

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 66 hours of art and 21 hours of professional development to include:

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2300 Introduction to Printmaking Techniques
- ASTU 2801 Beginning Sculpture: Traditional Methods or
- ASTU 2802 Beginning Sculpture: Digital Methods
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ARTE 3753 Art Education: Foundations
- ARTE 3770 Art Education: Computer Art Applications
- ARTE 4760 Art Education: Global Aesthetics
- ARTE 4790 Art Education: Inquiry and Dialogue about Art
- ARTE 4795 Topics in Art Education
- 9 advanced hours of art history
- 3 advanced hours of studio art (ASTU)

### Additional requirements

In addition to the above courses, ARTE 4750 and ARTE 4780 must be taken as part of the professional development sequence. The major in visual arts studies prepares students to teach art in public schools. Students must meet entrance requirements for and be accepted into

the College of Education. Once accepted, they must subsequently meet state certification requirements and all general requirements specified by the College of Education.

### Other course requirements

- HDFS 3123 Child Development for Non-Majors
- EDEE 4101 Clinical Teaching
- EDCI 3800 Professional Issues in Teaching
- EDCI 4060 Content Area Reading
- EDCI 4138 Student Teaching Secondary School Art

### Minor

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.75 grade point average must be maintained in all art courses; only grades of C (2.0) or better in art courses will count toward degree requirements.
- A minimum certification GPA of 2.75 is required for all UNT and transfer course work.
- A GPA of 2.75 is required on all certification courses (pass/ no pass courses do not contribute to the GPA).

### **Department of Art History**

Main Office

Art Building, Room 230

Mailing address:

1155 Union Circle #305100 Denton, TX 76203-5017 940-565-4777

Fax: 940-565-4777

E-mail: cvad.arthistory@unt.edu Web site: www.art.unt.edu

#### Heidi Strobel, Chair

**Faculty** 

The Department Art History offers the BA and MA degrees and the minor in Art History.

### **Majors**

### Art History, BA

The art history program enhances your understanding of past and contemporary visual art forms. We teach you about global artistic production, relevant technologies, critical methods, learning theories and innovative approaches.

### General degree requirements

Candidates for the Bachelor of Arts with a major in art history must meet the following requirements.

### Hours required and general/college requirements

A minimum of 120 total semester hours, 42 of which must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

### Completion of at least 48 hours of art to include

- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ARTH 4800 Methodologies in the History of Art and Visual Culture
- ARTH 4848 Art History Senior Seminar
- 6 hours of studio art
- 6 hours of art elective
- Foreign language (preferably French or German) through the sophomore year (2040–2050)

### 21 hours of advanced art history courses

(Numbered 4801 through 4845) of which at least 9 hours must be taken from the following group:

- ARTH 4802 Art of Ancient Greece
- ARTH 4803 Art of Ancient Rome
- ARTH 4804 Medieval Art
- ARTH 4805 Topics in Medieval Art
- ARTH 4806 Topics in Renaissance Art
- ARTH 4807 Topics in Seventeenth-Century Art
- ARTH 4808 Eighteenth-Century Art
- ARTH 4809 Topics in Eighteenth-Century Art

#### Note

Other art history courses addressing art before the year 1800 may be substituted with department permission. ARTH 4840 may not be taken for advanced art history credit.

### Minor requirements

A minimum of 18 hours, of which 6 must be advanced, from a field outside the College of Visual Arts and Design. Check with the minor department for specific requirements. The art history faculty strongly recommends that students minor in the foreign language relevant to their career plans in art history. Students double-majoring in art history and any other major are not required to have a minor.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 18 hours of art (including 12 advanced) must be completed at UNT.
- Transfer course work to be substituted for required art courses must be approved by a student's faculty advisor during the degree plan process.
- A 2.5 grade point average must be maintained in all art courses; only grades of C or better in art courses will count toward degree requirements.

### **Grad Track Options**

### Art History BA with grad track option leading to Art History MA

Art history undergraduate students at UNT must have successfully completed at least 75 credit hours of undergraduate coursework or the equivalent with a minimum cumulative GPA of 3.5 before applying for admission to the graduate track. Admission requires completing ARTH 4800 with a grade of A, 15 hours of advanced art history at UNT with a GPA in these courses of 3.5 or better, and completion of the undergraduate foreign language requirement.

Any graduate seminar numbered AEAH58XX is available to students on the graduate track.

Other admission requirements include:

- an official transcript
- statement of purpose
- two letters of recommendation from art history program faculty members

### Requirements

AEAH 5848

### Other Requirements

Grad track students complete 6 hours per semester for a total of 12 graduate hours prior to the completion of the B.A. degree. Grad track students during this phase may take any graduate art history seminar (ARTH 5800 level or graduate special problems courses (ART 5900) with art history faculty), substituting these for 6 hours of advanced undergraduate art history and 6 hours of electives in the B.A. degree plan. Students are encouraged to enroll in 6 hours of ART 5900 Special Problems with permanent art history faculty members during the first year in the grad track for individualized attention to research and writing skills.

#### **Minors**

### **Art History minor**

A minor in art history consists of at least 18 hours, including the art history survey sequence and 9 advanced hours selected from courses ARTH48XX. At least 9 hours must be completed at UNT.

### Course sequence

- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- 9 hours of 4000-level art history

#### Note:

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

### **Department of Design**

Main Office Art Building, Room 230

Mailing address: 1155 Union Circle #305100 Denton, TX 76203-5017 940-565-3621

Fax: 940-565-4717

E-mail: cvad.design@unt.edu Web site: cvad.unt.edu

#### Hepi Wachter, Chair

#### **Faculty**

The Department of Design offers the Bachelor of Fine Arts (BFA) degree with majors in communication design, fashion design, and interior design. The department offers two graduate degrees: the Master of Fine Arts (MFA) degree with a major in design is offered with concentrations in fashion design, and interior design, and the Master of Arts (MA) with a major in design with concentrations ininteraction design. Students interested in these degrees may find additional information at cvad.unt.edu/design.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives, or prerequisites.

#### **Communication Design**

The BFA degree program with a major in communication design is structured to help students become effective conceptual thinkers and, most importantly, effective problem solvers. Students have the opportunity to pursue a concentration in either graphic design or user-experience design.

### **Fashion Design**

The fashion design program prepares its students for successful careers in the fashion industry. In this pursuit, they develop a thorough understanding of the fashion design industry and the technical skills necessary to design, develop, and merchandise womenswear or menswear lines for the ready-to-wear market.

#### **Interior Design**

The Council of Interior Design Accreditation (CIDA) accredited interior design program is structured to provide students with entry-level exposure to residential and commercial interior design practice. The curriculum prepares students for analyzing interior design problems, assessing existing conditions, researching, synthesizing and programming solutions, visually and verbally presenting design solutions, and reviewing the process for insights on future design improvements, all to create interior design solutions that are aesthetically and, conceptually successful in support of well-being, promote healthy and safe environments.

#### Portfolio Reviews

Each major has a review system. Some majors require an entry-level portfolio review and a mid-point portfolio review, which the student must pass to continue in the major. All majors require that seniors pass an exit review prior to graduation. It is the students' responsibility to familiarize themselves with all requirements for their major. Further information regarding the review system for each major is available at cvad.unt.edu/design and the college's Academic Advising Office, Art Building Room 232.

#### Accreditation

The Bachelor of Fine Arts program in interior design is accredited by the Council for Interior Design Accreditation (206 Grandville Avenue, Suite 350, Grand Rapids, MI 49503-4014; 616-458-0400), a specialized accrediting body recognized by the Council for Higher Education Accreditation (CHEA) and a member of the Association of Specialized and Professional Accreditors (ASPA).

### **Pre-majors**

### **Communication Design pre-major**

### Communication Design admission and pre-major requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the communication design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all of the following requirements.

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1500 Introduction to Communication Design

### Specific additional requirements for each concentration are as follows:

### Graphic design

- ADES 1510 Typography I
- ADES 1540 Foundations for Communication Design
- ADES 2515 Image Making and Color Theory

### User-experience design

- ADES 1513 Contextual Research Methods
- ADES 1543 Foundations of User-Centered Design
- ADES 2513 Typographic Systems

### GPA requirements

- Have a minimum 2.75 GPA on required art courses.
- Have a minimum 2.25 UNT grade point average.

### Portfolio Reviews

### **Entry Portfolio Review:**

- After completing ADES 1500 submit a portfolio into the Communication Design Entry Portfolio Review. cvad.unt. edu/design/graphicdesign-epr
- Be selected to begin your concentration path of choice for Freshman and Sophomore design classes.

#### Sophomore Portfolio Review:

After completing ADES 1510, ADES 1540 and ADES 2515 submit a portfolio and pass the specific concentration mid-point review.

### Fashion design pre-major

### Fashion Design admission and premajor requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the fashion design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all of the following requirements:

### 30 hours of college courses

Complete a minimum of 30 hours of college courses (including the following).

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1550 Introduction to Fashion Design
- ADES 1560 Fashion Design: Introduction to Industrial Sewing Techniques
- ADES 2550 Fashion: Patternmaking I

### **GPA** requirements

- Have a minimum 2.50 GPA on required art courses.
- Have a minimum 2.25 UNT grade point average.

### **Interior Design pre-major**

### Admission and pre-major requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the interior design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all the following requirements:

### 30 hours of college courses

Complete a minimum of 30 hours of college courses (including the following).

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1625 Introduction to Interior Design
- ADES 2630 Drawing for Interior Design

### Portfolio review

Submit a portfolio for the Entry Portfolio Review based on work completed in ADES 2630 and pass the review.

### GPA requirements

- Have a minimum 2.50 GPA from ART 1600, ART 1700, ART 1800, ART 1900, ADES 1625 and ADES 2630.
- Have a minimum 2.25 UNT grade point average.

### **Majors**

### Communication Design with a concentration in Graphic Design, BFA

### Communication Design admission and pre-major requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the communication design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all of the following requirements.

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1500 Introduction to Communication Design

### Specific additional requirements for each concentration are as follows:

### Graphic design

- ADES 1510 Typography I
- ADES 1540 Foundations for Communication Design
- ADES 2515 Image Making and Color Theory

### User-experience design

- ADES 1513 Contextual Research Methods
- ADES 1543 Foundations of User-Centered Design
- ADES 2513 Typographic Systems

### **GPA** requirements

- Have a minimum 2.75 GPA on required art courses.
- Have a minimum 2.25 UNT grade point average.

### Portfolio Reviews

### Entry Portfolio Review:

- After completing ADES 1500 submit a portfolio into the Communication Design Entry Portfolio Review. cvad.unt. edu/design/graphicdesign-epr
- Be selected to begin your concentration path of choice for Freshman and Sophomore design classes.

### Sophomore Portfolio Review:

After completing ADES 1510, ADES 1540 and ADES 2515 submit a portfolio and pass the specific concentration mid-point review.

### Degree requirements

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 75 hours of art to include 21 hours of art core (required for all design majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ADES 1500 Introduction to Communication Design
- ARTH 4842 History of Communication Design
- 3 hours of ceramics, drawing and painting, metalsmithing and jewelry, new media art, printmaking, photography, or sculpture
- Advanced art history (6 hours)

### Graphic design concentration

- ADES 1510 Typography I
- ADES 1540 Foundations for Communication Design
- ADES 2510 Typography II
- ADES 2515 Image Making and Color Theory
- ADES 2520 Graphic Design
- ADES 3500 Publication Design
- ADES 3510 Interaction Design I
- ADES 3545 Communication Design Studio
- ADES 4515 Cause-Based Design
- ADES 4520 Graphic Design Advanced Campaigns
- ADES 4525 Graphic Design Final Portfolio
- ADES 4541 Portfolio Development

#### 3 hours selected from:

- ADES 4700 Professional Internship
- ART 4120 Art on Location
- ANTH 3101 American Culture and Society
- ANTH 3130 African-American Anthropology
- ANTH 3140 Latinos in the U.S.
- ANTH 3300 Peoples and Cultures of the Pacific
- BEHV 3150 Basic Behavior Principles
- JOUR 3050 Advertising Copywriting
- JOUR 4052 Advertising Portfolio
- MKTG 3650 Foundations of Marketing Practice

### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

#### Minor

No minor is required.

### **Flectives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Academic Advising Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

# Communication Design with a concentration in User-Experience Design, BFA

### Communication Design admission and pre-major requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the communication design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all of the following requirements.

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1500 Introduction to Communication Design

### Specific additional requirements for each concentration are as follows:

### Graphic design

- ADES 1510 Typography I
- ADES 1540 Foundations for Communication Design
- ADES 2515 Image Making and Color Theory

#### User-experience design

- ADES 1513 Contextual Research Methods
- ADES 1543 Foundations of User-Centered Design
- ADES 2513 Typographic Systems

### **GPA** requirements

- Have a minimum 2.75 GPA on required art courses.
- Have a minimum 2.25 UNT grade point average.

### Portfolio Reviews

#### **Entry Portfolio Review:**

- After completing ADES 1500 submit a portfolio into the Communication Design Entry Portfolio Review. cvad.unt. edu/design/graphicdesign-epr
- Be selected to begin your concentration path of choice for Freshman and Sophomore design classes.

#### Sophomore Portfolio Review:

After completing ADES 1510, ADES 1540 and ADES 2515 submit a portfolio and pass the specific concentration mid-point review.

### Major requirements

Completion of at least 75 hours of art to include 21 hours of art core (required for all design majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ADES 1500 Introduction to Communication Design
- ARTH 4842 History of Communication Design
- 3 hours of ceramics, drawing and painting, metalsmithing and jewelry, new media art, printmaking, photography, or sculpture
- Advanced art history (6 hours)

### User-experience design concentration

- ADES 1513 Contextual Research Methods
- ADES 1543 Foundations of User-Centered Design
- ADES 2513 Typographic Systems
- ADES 2518 Design Prototyping and User Testing
- ADES 2523 Digital Patterns and Systems
- ADES 3503 Planning and Developing Interactive Systems
- ADES 3513 The Design of Visual Information
- ADES 3548 Topics In User-Experience Design
- ADES 4518 Cause-Based User-Experience Design
- ADES 4523 Advanced UX Campaigns
- ADES 4528 Final Portfolio in UXD

#### 6 hours selected from:

- ADES 3548 Topics In User-Experience Design
- ART 4120 Art on Location
- ART 4570 Interdisciplinary Topics in Art
- ART 4900 Special Problems
- ART 4910 Special Problems

### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

#### Minor

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Academic Advision Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### Fashion Design, BFA

Through the Bachelor of Fine Arts with a major in fashion design, you will learn the skills necessary to conceptualize, present and develop finished garments from your original designs.

### Fashion Design admission and premajor requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the fashion design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all of the following requirements:

### 30 hours of college courses

Complete a minimum of 30 hours of college courses (including the following).

### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1550 Introduction to Fashion Design
- ADES 1560 Fashion Design: Introduction to Industrial Sewing Techniques
- ADES 2550 Fashion: Patternmaking I

### GPA requirements

- Have a minimum 2.50 GPA on required art courses.
- Have a minimum 2.25 UNT grade point average.

### Degree requirements

The following requirements must be satisfied for a Bachelor of Fine Arts with a major in fashion design.

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 78 hours of art, including an 18-hour art core (required for all design majors):

#### Art core

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III

### Fashion design major

### Completion of at least 57 hours of art to include

(in addition to the 18-hour core)

- ADES 1550 Introduction to Fashion Design
- ADES 1560 Fashion Design: Introduction to Industrial Sewing Techniques
- ADES 2550 Fashion: Patternmaking I
- ADES 2555 Fashion: Patternmaking II
- ADES 2560 Fashion Design: Advanced Industrial Sewing Techniques
- ADES 2570 Fashion Drawing
- ADES 3550 Fashion: Draping
- ADES 3560 Technical Design in Fashion
- ADES 3555 Fashion: Industry Techniques
- ADES 3570 Computers in Fashion: Presentation
- ADES 3575 Computers in Fashion: Concept to Product
- ADES 4550 Fashion: Target Market
- ADES 4555 Fashion: Collection
- ADES 4560 Fashion Design Concepts
- ADES 4580 Fashion Design: Professional Practice
- MDSE 2650 Textiles for Apparel
- MDSE 3350 Historic Costume
- Advanced Art Elective
- Art Elective

### Plus one of the following

- ART 4120 Art on Location
- ADES 3565 Fashion Accessories
- ADES 4590 Fashion Design Studio
- ADES 4595 Exploration: Fashion Design
- ADES 4700 Professional Internship

### Minor requirements

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Academic Advising, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### **Interior Design, BFA**

In the Bachelor of Fine Arts with a major in interior design, you will learn, among other subjects, about computer-aided design, lighting, green and sustainable design, design for special populations, and the history of furniture and architecture.

### **Program requirements**

### Interior Design admission and premajor requirements

### Admission and pre-major requirements

Entering students interested in pursuing a major in the Design Department in the College of Visual Arts and Design are classified as pre-majors.

To be admitted to the interior design major (and to be eligible to enroll in advanced art courses), a pre-major must meet all the following requirements:

### 30 hours of college courses

Complete a minimum of 30 hours of college courses (including the following).

#### Complete with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ADES 1625 Introduction to Interior Design
- ADES 2630 Drawing for Interior Design

#### Portfolio review

Submit a portfolio for the Entry Portfolio Review based on work completed in ADES 2630 and pass the review.

### **GPA** requirements

- Have a minimum 2.50 GPA from ART 1600, ART 1700, ART 1800, ART 1900, ADES 1625 and ADES 2630.
- Have a minimum 2.25 UNT grade point average.

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified in the "University Core Curriculum" in the Academics section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

### Required courses

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ADES 1625 Introduction to Interior Design
- ADES 2630 Drawing for Interior Design
- ADES 2640 Interior Design: Space Planning I
- ADES 3610 Interior Design: Presentation Techniques
- ADES 3620 Interior Design: AutoCAD
- ADES 3630 Interior Design: Space Planning II
- ADES 3635 Interior Design: Detailing
- ADES 3640 Interior Design: Space Planning III
- ADES 3645 Interior Design: Building Systems
- ADES 4615 Topics in Interior Design
- ADES 4625 Interior Design: Professional Practice
- ADES 4630 Interior Design: Space Planning IV
- ADES 4640 Interior Design: Space Planning V
- ADES 4700 Professional Internship
- ARTH 4815 History of Interiors and Furniture II
- ARTH 4841 History of Interiors and Furniture I

### Professional support courses

Students are also required to take the following professional support courses:

- HFMD 2655 Textiles for Home Furnishings
- MGMT 3820 Management Concepts
- MKTG 2650 Culture and Consumption

### Minor requirements

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Academic Advising, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.

- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### **Grad Track Options**

# Interior Design, BFA with grad track option leading to Design with a concentration in Interior Design for Sustainability, MA

The Department of Design offers a grad track pathway for the existing UNT undergraduate student pursuing a major in interior design to first earn their bachelor's and then earn their master's degree in a shorter period of time. In this grad track option, the student will take a maximum of 12 credit hours of graduate courses while completing the BFA with a major in interior design. These credits will then be counted toward the MA with a major in design and a concentration in interior design for sustainability. Prior to registering for graduate courses, the student must have been admitted into the grad track option.

### Admission requirements and program policies

### Admission requirements

Interior design undergraduate majors at UNT must have completed at least 75 credit hours of undergraduate course work or the equivalent before applying for admission to the grad track option. Other admission requirements include:

- an official transcript
- statement of purpose articulating a topic of sustainable design project/research interest and future career goals upon completion of the master's degree
- two letters of recommendation from program faculty members in the major area attesting to the student's ability to successfully engage in graduate level course work
- a minimum cumulative GPA of 3.5, with a minimum GPA of 3.5 in the following courses:
  - O ADES 3620
  - O ADES 3635
  - O ADES 3640
  - O ADES 3645

Students must also meet all admission criteria established by the Toulouse Graduate School, with the exception of completion of the baccalaureate degree.

The student's application will be reviewed by the entire Interior Design faculty.

### Program policies

The student admitted to the grad track option will be admitted into the MA program on a conditional basis. Once the student has satisfied all course work for the BFA degree and maintained a 3.5 or higher GPA, they will be fully admitted to the MA program.

Undergraduate students who have been accepted to the grad track option must complete all of their bachelor's degree requirements within 12 months of the first day of the semester in which they start taking graduate courses, or enrollment in graduate level course work will be suspended.

The grad track student must enroll in graduate school in the first long semester following the completion of the BFA degree. If the student fails to enroll in the first long semester upon completion of the BFA degree, the graduate course credit hours taken during the undergraduate degree will not apply to the MA degree, even if the

student returns to graduate school in the future. Once enrolled in the MA program, grad track students must complete the MA degree in the following year(s) to complete his or her MA degree with a concentration in interior design for sustainability.

Grad track students will not be eligible for most graduate prerequisites including teaching and research assistantships and related health insurance, financial aid, or graduate award programs until the undergraduate degree is completed and the student is officially accepted as a graduate student.

### Program requirements

After completing at least 90 hours of the undergraduate program, the accepted grad track student will be allowed to take the following graduate-level courses:

- ADES 5520 Methods Employed by Design Researchers (replaces an elective credit)
- ADES 5530 Theories Employed by Design Researchers (replaces an elective credit)
- ADES 5630 Interior Design: Space Planning IV (replaces ADES 4630 - Interior Design: Space Planning IV)
- ADES 5632 Interior Design: Space Planning V (replaces ADES 4640 - Interior Design: Space Planning V)

See the BFA with a major in interior design for the remainder of the requirements for the bachelor's degree.

### **Department of Studio Art**

Main Office

Art Building, Room 230

Mailing address: 1155 Union Circle #305100 Denton, TX 76203-5017 940-565-7671

E-mail: cvad.studio@unt.edu Web site: cvad.unt.edu

Nicole Foran, Chair

#### Faculty

#### About

We serve our students by focusing on their intellectual + creative growth, fostering their practice, and preparing them for lifetimes of accomplishment and meaningful contribution as culture creators. The program frames the individual needs of each student through the development of conceptual, aesthetic, and technical skills. While in the College of Visual Arts and Design, students participate in ideas and practices across disciplines while engaging in the critical practice of the fine artist.

#### Degree

The Department of Studio Art offers the BFA degree with a major in studio art and concentrations in ceramics, drawing and painting, metalsmithing and jewelry, new media art, photography, printmaking and sculpture. Students interested in these degrees may contact the department office.

#### **Entering students**

All students who are admitted to UNT who wish to major in Studio Art will be designated as Pre-Studio Art until they complete the entry review and are accepted into a concentration. Admission to the university does not guarantee admission to the major.

### **Pre-majors**

### Studio Art pre-major

Entering students interested in majoring in Studio Art in the College of Visual Art and Design will be designated as Pre-Studio Art majors until they complete the entry review and are accepted into a concentration.

Complete a minimum of 30 hours of college courses (including the following) and:

### Complete the following with a grade of C or better

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
  or
- ART 2370 Art History Survey III

# The following studio concentrations require you complete the stated courses with a "B" or better:

- a. Ceramics -ASTU 2101 and 2102
- b. Drawing and Painting -ASTU 2201 and ASTU 2202
- c. Metalsmithing and Jewelry -ASTU 2401 and ASTU 2402
- d. New Media Art -ASTU 2701 and ASTU 2702
- e. Photography -ASTU 2501 and ASTU 2502
- f. Printmaking -ASTU 2601 and ASTU 2602
- g. Sculpture -ASTU 2801 and ASTU 2802

### GPA requirements

- Have a minimum 2.5 GPA on required ART courses.
- Have a minimum 2.0 GPA overall

### **Majors**

### Studio Art with a concentration in Ceramics, BFA

We believe clay is a means of expression, a tool for communication and a conduit for critical thinking. The Ceramics program is an engaged community of undergraduate and graduate students, technical staff and faculty who promote excellence in the field. Students work with the oldest of materials while practicing contemporary methods of fine art, craft, and design. The program offers knowledge, aesthetics, technical approaches and invention through hands-on experiences with raw materials and technical processes. Throughout the course of study students learn the role of Ceramics within the history of art, design and culture while pushing the boundaries of the medium.

Students in the Ceramics program have active contact with the faculty and technical staff who provide critical and rigorous mentorship, encourage inter-disciplinary exploration and engage students in professional practices. Outside of the classroom, students participate in the student organization, the Clay Guild, which sponsors visiting artist workshops, gallery exhibitions, ceramic art sales and annual travel to the conference sponsored by the National Council on Education for the Ceramic Arts.

Throughout the curriculum, students have regular access to materials, equipment, and library resources related to the study of ceramics. All students engage in preparation of clay bodies and glazes, kiln stacking procedures, firing processes (electric, gas, wood, raku, primitive and soda) and surface techniques. The studio environment is one where vessel aesthetics – form and surface design – are taught along with ceramic sculpture – including hand-forming, wheel-throwing, and mold-making.

### **Program requirements**

### Pre-major requirements

See Studio Art pre-major requirements.

### General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

### Ceramics concentration

- ARTH 4840 Topics in the History of Crafts
- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 4100 Senior Ceramics Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

### Menu 1, 9 hours from

- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

### Menu 2, 12 hours from

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies

### Menu 3, 6 hours from

- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II

- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

#### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4100 must be taken over two semesters.

### Minor requirements

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### Studio Art with a concentration in Drawing and Painting, BFA

Pursuing your passion in Drawing and Painting means investigating a wide range of issues and media rooted in contemporary and historical art practice. The program excels in supporting students as they expand their artistic capabilities by providing and cultivating an intellectual and creative environment for students to explore, experiment, and think critically.

Students are encouraged to work across a broad range of contemporary and traditional painting and drawing practices, concepts, aesthetic conventions, methods and technique. The breadth and depth of our program is built upon the diversity of expertise of our faculty and their shared commitment to excellence as working artists and thoughtful teachers.

Students in the Drawing and Painting program have generous access to accomplished creative professionals and visiting artists who provide excellent mentorship: encouraging an adventurous exploration of media, and modeling a dedication to their creative research, inter-disciplinary experimentation and professional practices. Outside of the classroom, students participate in the student organization, Painting and Drawing Association, which cultivates a vibrant cultural community by sponsoring visiting artist workshops, museum and gallery exhibitions and art related fieldtrips.

### **Program requirements**

### Pre-major requirements

See Studio Art pre-major requirements.

### General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

### Drawing and Painting concentration

- ARTH 4813 Postmodernism and the Visual Arts 1945—Present
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 4200 Senior Drawing and Painting Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

### Menu 1, 9 hours

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

### Menu 2, 12 hours

- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series

### Menu 3, 6 hours

- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation

- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

#### Art electives, 12 hours

12 hours (6 advanced) of art electives.

### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit towards a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4200 must be taken over two semesters.

### Minor requirements

No minor is required.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### Studio Art with a concentration in Metalsmithing and Jewelry, BFA

The Metalsmithing and Jewelry concentration will shape your future through a program that sits at an exciting crossroads between traditional and contemporary art, design and craft practice. It all starts with materials and idea research with outcomes that push the possibilities of silversmithing, blacksmithing, and contemporary forms of personal expression in adornment. The program in metalsmithing and jewelry is designed to shape investigations through the study of history, theory, technical processes, cutting edge technologies, conceptual strategies, experimentation, professionalism and interdisciplinary possibilities.

Students are supported by passionate and professional faculty and staff at the forefront of their disciplines who promote excellence and who are committed to nurturing and sustaining the development of each student. Outside of the studio, students participate in the student organization, the UNT Metals Club, which sponsors visiting artist workshops, gallery exhibitions, sales and annual travel to conferences and workshops.

Throughout the curriculum, students work in a collaborative and supportive environment with regular access to materials, equipment, and library resources related to the study of metalsmithing and jewelry. The studio environment is one where students explore formal and conceptual concerns in jewelry, hollowware and small art objects.

### **Program requirements**

### Pre-major requirements

See Studio Art pre-major requirements.

### General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

### Metalsmithing and Jewelry concentration

- ARTH 4840 Topics in the History of Crafts
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 4400 Senior Metalsmithing and Jewelry Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

#### 9 hours from

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

### 12 hours from

- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology

#### 6 hours from

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples

- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4400 must be taken over two semesters.

### **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

### Studio Art with a concentration in New Media Art. BFA

New Media Art is an interdisciplinary and collaborative discipline that focuses on our relationship with technology, visual culture and performance in contemporary art. This practice is rooted in the traditions of avant-garde processes and experimental art making, and responds to the rapid pace of technological development.

Students in our program work closely with dedicated faculty and technicians to explore diverse methods of making in both the virtual and physical world. Projects challenge tradition and embrace new forms of aesthetic thinking, while all courses emphasize artistic excellence, active learning, and socially engaged practices. Students in this major enjoy adjacency to disciplines across the college and access to both digital and analog tools.

Whether it is installation, film and video, physical computing, net-art, performance, animation, immersive installations, sound, sensing devices, mapping, social practice, or participatory media, our students integrate the language of art and technology through an integrated and informed critical practice.

### Pre-major requirements

See Studio Art pre-major requirements.

### General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

### Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

### Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

### New Media Art concentration

- ARTH 4814 Theories of Contemporary Art
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 4700 Senior New Media Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

#### 9 hours from

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

#### 12 hours from

- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art

# 6 hours from

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface

- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3601 Intermediate Printmaking: Rotating
  Tanics

  Tanics

  Tanics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

#### Note

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4700 must be taken over two semesters.

# Minor requirements

No minor is required.

# **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

# Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

# Studio Art with a concentration in Photography, BFA

Photography students frame their future through the development of visual literacy, critical thinking and creative expression skills. Through lens-based processes students are immersed in their creative, professional, technical and intellectual growth in order to engage in complex, rich and multifaceted approaches to image making.

Our students are supported by accomplished active faculty and staff as well as a multitude of opportunities to interact with internationally acclaimed visiting artists who provide a wide range of views and approaches throughout the course of study. Supplementing the classroom and studio experience, students are connected to internships through our strong network of award-winning alumni (commercial photographers, fine art galleries or other creative professionals) who provide excellent creative and professional opportunities and the student organization Parallax.

While in the program students are immersed in genres and mediums spanning historic processes, black and white, digital imaging, mixed media, web technology, installation and video. Students leave the program empowered through the development of a professional and creative practice, self-discipline, cultural awareness and a personal voice. Throughout the curriculum students have regular access to an up-to-date digital scanning and printing studio, a lighting studio, large darkroom and alternative processes spaces, as well as equipment and library resources related to the study of photography.

# **Program requirements**

# Pre-major requirements

See Studio Art pre-major requirements.

# General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

# Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

# Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

# Photography concentration

- ARTH 4843 History of Photography
- ASTU 2501 Beginning Photography: Photo I

- ASTU 2502 Beginning Photography: Photo II
- ASTU 4500 Senior Photography Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

#### 9 hours from

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

#### 12 hours from

- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography

#### 6 hours selected from

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics

- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

#### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design, unless otherwise specified by their degree's major requirements. This requirement includes both course that are completed in residence and those that are transferred to UNT. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4500 must be taken over two semesters.

# Minor requirements

No minor is required.

# **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/ or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

# Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

# Studio Art with a concentration in Printmaking, BFA

Our Printmaking program supports students in their development of a personal vision and studio practice informed by a rich tradition and ever-expanding approaches to image making. In our carefully maintained printmaking studios students explore intaglio, relief, lithography, screen printing, monotype, artist's bookmaking and interdisciplinary processes integrating both handmade and photo/digital matrixes.

Our Printmaking faculty are nationally and internationally recognized professional artists who train students with technical skills, instill a sense of conceptual rigor, promote creative research and mentor students for professional development opportunities. Our program collaborates with print businesses in the region to offer students industry experience and develop professional networks. The Printmaking Association of North Texas Students (PANTS) organizes exhibitions, community events, field trips, fund raisers, awards, visiting artist events and portfolio exchanges.

# **Program requirements**

# Pre-major requirements

See Studio Art pre-major requirements.

# General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

# Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

# Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

# Printmaking concentration

- ARTH 4844 History of Prints
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 4600 Senior Printmaking Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

### 9 hours from Menu 1

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

### 12 hours from Menu 2

- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype

#### 6 hours from Menu 3

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry:
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging

- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art
- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

#### Art electives

15 hours of art electives (12 advanced)

#### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4600 must be taken over two semesters.

### Minor requirements

No minor is required.

## **Electives**

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

### Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

# Studio Art with a concentration in Sculpture, BFA

The Sculpture program supports traditional, experimental and transdisciplinary approaches to studio art practice through broadening students' framework of understanding while increasing their capacity to think beyond convention. From found objects to large-scale public monuments, ancient

ceremonial relics to immersive new media installations, the possibilities made available by such an expansive field are limitless.

Our program is led by an active and accomplished faculty and staff who instruct students on and through the technical skills, conceptual strategies, aesthetic presentation and formal issues of sculpture. Supplementing the classroom and studio experience, students are connected to internships, a strong visiting artist and scholar program and the Sculpture Collective, a student run cocurricular organization.

In the studio, students gain technical skills including woodworking, welding, metal fabrication, mold-making, casting, digital fabrication, public art proposals and installation practice. We encourage and direct the development of the individual student through a process of creative inquiry, conceptualization, realization and critique. Students may choose to focus on object making, performance, installation, video, or public art. Throughout the curriculum students have regular access to excellent facilities, staff, equipment, and library resources related to the study of Sculpture.

## **Program requirements**

# Pre-major requirements

See Studio Art pre-major requirements.

# General degree requirements

Candidates for the Bachelor of Fine Arts Degree with a major in studio art will meet the following requirements:

# Hours required and general/college requirements

A minimum of 120 total semester hours of which 42 must be advanced, and fulfillment of degree requirements for the Bachelor of Fine Arts degree as specified under the "General University Requirements" in the Academic section of this catalog and the College of Visual Arts and Design requirements.

# Major requirements

Completion of at least 78 hours of arts to include a minimum of 18 hours in a prescribed field and 24 hours of art core (required for all studio majors):

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation
- ART 1900 Foundations: Systems and Transformations
- ART 2350 Art History Survey I
- ART 2360 Art History Survey II
- ART 2370 Art History Survey III
- ASTU 3000 Interdisciplinary: Rotating Topics
- ASTU 4010 Professional Practices for the Studio Artist

# Sculpture concentration

- ARTH 4814 Theories of Contemporary Art
- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods
- ASTU 4800 Senior Sculpture Studio (6 hours)
- 3 advanced hours of art history
- 12 hours (9 advanced) of art electives

### Menu 1, 9 hours from

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry
- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing
- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde

## Menu 2, 12 hours from

- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

### Menu 3, 6 hours from

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies
- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- Figure Painting

  ASTU 3205 Intermediate Drawing and Painting:

ASTU 3204 - Intermediate Drawing and Painting:

- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series
- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology
- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3502 Intermediate Photography: Darkroom Photography
- ASTU 3503 Intermediate Photography: Digital Imaging

- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography
- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype
- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media
- ASTU 3705 Intermediate New Media: Augmented and Virtual Reality Art

#### Note:

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Additionally, the required 6 credits of ASTU 4800 must be taken over two semesters.

#### Electives

Hours required for electives may vary based on course selection and the University Core Curriculum Requirements. Electives may be required to satisfy the advanced hour requirement (42) and/or the minimum total hours required for the degree. For specific information see an academic advisor in the College of Visual Arts and Design Student Services Office, Art Building, Room 232.

# Other requirements

- 24 advanced hours must be completed at UNT.
- 36 hours of art (including at least 12 advanced hours) must be completed at UNT.
- Transfer course work substituted for required UNT art courses must be approved by a student's faculty advisor during the degree audit process.
- A 2.5 grade point average must be maintained in all art courses; only a grade of C (2.0) or better in art courses will count toward degree requirements.

#### **Minors**

# **Ceramics minor**

#### Studio Art minor

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

#### Ceramics

- ASTU 2101 Beginning Ceramics: Handbuilding
- ASTU 2102 Beginning Ceramics: Throwing

### 6 hours selected from

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

#### 6 hours from the menu below

- ASTU 3101 Intermediate Ceramics: Rotating Topics
- ASTU 3102 Intermediate Ceramics: Surface and Ornamentation
- ASTU 3103 Intermediate Ceramics: Form, Function and the Body
- ASTU 3104 Intermediate Ceramics: Molds and Multiples
- ASTU 3105 Intermediate Ceramics: Material Studies

#### Note:

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

# **Drawing and Painting minor**

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

# Requirements

- ASTU 2202 Beginning Drawing and Painting: Painting II
- ASTU 2201 Beginning Drawing and Painting: Painting I
- ART 1600 Foundations: Perception and Translation

# 3 hours from

- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

#### (6 hours from the menu below)

- ASTU 3201 Intermediate Drawing and Painting: Rotating Topics
- ASTU 3202 Intermediate Drawing and Painting: Figure Drawing I
- ASTU 3203 Intermediate Drawing and Painting: Figure Drawing II
- ASTU 3204 Intermediate Drawing and Painting: Figure Painting
- ASTU 3205 Intermediate Drawing and Painting: Experimental Approaches
- ASTU 3206 Intermediate Drawing and Painting: Themes, Variations and Series

#### Note

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

# **Metalsmithing and Jewelry minor**

# Studio Art minor

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

# Metalsmithing and Jewelry

- ASTU 2401 Beginning Metalsmithing
- ASTU 2402 Beginning Jewelry

# 6 hours from

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

#### 6 hours from

- ASTU 3401 Intermediate Metalsmithing and Jewelry: Rotating Topics
- ASTU 3402 Intermediate Metalsmithing and Jewelry: Color and Surface
- ASTU 3403 Intermediate Metalsmithing and Jewelry: Plasticity
- ASTU 3404 Intermediate Metalsmithing and Jewelry: Adornment
- ASTU 3405 Intermediate Metalsmithing and Jewelry: Technology

### Note:

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

### **New Media Art minor**

### Studio Art minor

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

## New Media Art

- ASTU 2701 Beginning New Media: Time and Movement
- ASTU 2702 Beginning New Media: Analog and Avant-Garde

#### 6 hours from

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

### 6 hours

- ASTU 3701 Intermediate New Media: Rotating Topics
- ASTU 3702 Intermediate New Media: Net Art
- ASTU 3703 Intermediate New Media: Creative Coding
- ASTU 3704 Intermediate New Media: Performance and Electronic Media

 ASTU 3705 - Intermediate New Media: Augmented and Virtual Reality Art

# **Photography minor**

# Studio Art minor

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

# Photography

- ASTU 2501 Beginning Photography: Photo I
- ASTU 2502 Beginning Photography: Photo II

#### 6 hours from

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

#### 6 hours from

- ASTU 3501 Intermediate Photography: Rotating Topics
- ASTU 3504 Intermediate Photography: Photography, Sound and the Moving Image
- ASTU 3505 Intermediate Photography: Alternative Processes
- ASTU 3506 Intermediate Photography: Lighting Techniques
- ASTU 3507 Intermediate Photography: Field Photography

#### Note:

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

# **Printmaking minor**

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

# Requirements

- ART 1600 Foundations: Perception and Translation
- ASTU 2601 Beginning Printmaking: Relief
- ASTU 2602 Beginning Printmaking: Screen Printing

#### 3 hours from

- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

# (6 hours from the menu below)

- ASTU 3601 Intermediate Printmaking: Rotating Topics
- ASTU 3602 Intermediate Printmaking: Intaglio
- ASTU 3603 Intermediate Printmaking: Lithography
- ASTU 3604 Intermediate Printmaking: Monotype

### Note

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

# **Sculpture minor**

# Studio Art minor

A minor in studio art consists of at least 18 hours, including at least 6 advanced hours. At least 9 hours must be completed at UNT.

# Sculpture

- ASTU 2801 Beginning Sculpture: Traditional Methods
- ASTU 2802 Beginning Sculpture: Digital Methods

# 6 hours from

- ART 1600 Foundations: Perception and Translation
- ART 1700 Foundations: Space (Physical, Temporal and Virtual)
- ART 1800 Foundations: Narrative and Representation

# 6 hours from

- ASTU 3801 Intermediate Sculpture: Rotating Topics
- ASTU 3802 Intermediate Sculpture: Multiples and Monuments
- ASTU 3803 Intermediate Sculpture: Installation Art
- ASTU 3804 Intermediate Sculpture: Art in Public

### Note:

For all students seeking a minor in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD minor. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

# **Toulouse Graduate School**

Main Office
Eagle Student Services Center, Room 354

Mailing address: 1155 Union Circle #305459 Denton, TX 76203-5017 940-565-2383 Fax: 940-565-2141

E-mail: graduateschool@unt.edu

Web site: tgs.unt.edu

# Victor R. Prybutok, Vice Provost for Graduate Education and Dean of the Toulouse Graduate School

Joseph R. Oppong, Academic Associate Vice Provost and Academic Associate Dean

### **Graduate degrees offered**

For listings of graduate degree programs offered at UNT, navigate to the *Graduate Catalog* using the drop-down menu above, and then select "Degrees, certificates, teacher certifications" from the left-hand navigation.

#### **Admission to the Toulouse Graduate School**

General admission requirements to the Toulouse Graduate School, specific admission requirements to graduate degree programs, and descriptions of graduate courses are located in the *Graduate Catalog*. Please refer to the *Graduate Catalog* for this information.

# **UNT at Frisco**

Main Office

UNT at Frisco - Hall Park 2811 Internet Blvd., Suite 100 Frisco, TX 75034

972-668-7100

Email: UNTFrisco@unt.edu

UNT at Frisco - Inspire Park 6170 Research Rd. Frisco, TX 75033

496-362-6474

Email: inspirepark@unt.edu

Web site: frisco.unt.edu

#### **Programs of Study**

UNT at Frisco offers undergraduate programs in the following areas:

- Applied Arts and Sciences, BAAS
- Business Integrated Studies, BBA, Sport Entertainment Management Track
- Computer Science, BS
- Consumer Experience Management, BS
- Information Technology, BA
- Integrative Studies, BS, Project Design and Analysis
- Integrative Studies, BS, with a focus in Strategic Corporate Communication
- Interdisciplinary Studies, BS (EC-6)
- Journalism with a concentration in Public Relations, BA
- Logistics and Supply Chain Management, BS
- Marketing, BBA
- Psychology, BA
- Recreation, Event and Sport Management, BS

UNT at Frisco offers graduate programs in the following areas:

- Advanced Data Analytics, MS
- Business Analytics, MBA
- Business Administration with a concentration in Business Studies, MBA, Sport Entertainment Management track
- Business Administration with a concentration in Marketing Analytics, MBA
- Counseling, MS/MEd
- Design with a concentration in Interaction Design, MA
- Educational Leadership, EdD
- Educational Leadership, PhD
- Heath Services Administration, MS
- Interdisciplinary Studies, MS
- Interdisciplinary Studies, MA

### **Academic Advising**

Undergraduate academic advising is available for students whose majors are offered at Frisco. Click one of the following links to reserve a timeslot: Prospective Students Appointments | Current Student Appointments.

#### **Career Services**

Career and professional development workshops are frequently available each semester; check the UNT Frisco Events Calendar to see what's coming up next. Career advising appointments can be made through your student account on Handshake or by emailing your Career Coach. Please bring a draft of your resume to the appointment. Email appointment requests to Frisco.careerready@unt. edu or call Hall Park at 972-668-7100.

#### **Counseling Services**

Counselors will be available on campus Tuesdays 1-6 p.m. and Wednesdays 9 a.m.-6 p.m. Services available are group workshops, therapy dogs and individual counseling. To make an appointment, call 940-565-2741 and ask for Frisco availability. For more information and resources including Therapy Assistance Online and anonymous mental health screenings, read more here studentaffairs. unt.edu/counseling-and-testing-services.

For after-hours needs, you may call the UNT Police at 940-565-3000 and ask for the On-Call Counselor.

For emergencies, please call 9-1-1.

### **Disability Accommodations**

Students requesting reasonable accommodations for a disability should register through the Office of Disability Access (ODA) as a first step. Click here to start the process: https://disability.unt.edu/services/apply. Once you receive your Letter of Accommodations (LoA) from your ODA Coordinator, you'll provide a copy of your LoA to each instructor at the start of every semester to begin receiving accommodations in your courses.

#### **Food Pantry**

Our food pantry is available for students who are dealing with food insecurities of varying levels. Confidentiality will be maintained for students visiting the food pantry, and where appropriate, referral to additional campus and/or community resources can be made. Ask about this service at the front desk or by calling 972-668-7100.

#### **Financial Aid and Scholarships**

Students with questions about financial aid or scholarships should be checking the my.unt.edu Student Center regularly. To Do List Items and Holds will give detailed descriptions with next steps. Students can receive help on financial aid at UNT Frisco by contacting the front desk at 972-668-7100 or emailing UNTFrisco@unt.edu. Students can also contact the Student Financial Aid and Scholarships Office directly at 940-565-2302 |or by email at financialaid@unt.edu.

# **Health and Wellness**

Look for activities and workshops on the <u>events calendar</u> such as Fall Flu Shot Clinics, stress-reduction activities, dietician consultations and more. For students planning to Study Abroad, you may request a waiver for medical form charges at the Student Health and Wellness Center in Denton; email UNTFrisco@unt.edu. A Nurse Hotline is available 24/7 to answer questions on treatment of medical issue or how to determine severity 214-266-8777.

#### **Recreation and Fitness**

Opportunities to join peers in recreational activity, look for monthly opportunities on the <u>events calendar</u> for items such as group exercise, personal fitness consultations, body composition testing, and more. Submit suggestions for future activities to UNTFrisco@unt.edu.

#### **Student Organizations**

As our campus grows, the need for specialized connections among students is becoming more and more important. Please contact UNTFrisco@unt.edu if you would like to find other like-minded peers with common goals and create new student organizations for our campus.

# **Volunteer Opportunities**

Volunteering to serve the community around us is a great way to make meaningful connections with our area partners, your peers, and within your field of interest. To find available service projects, check the <a href="mailto:events calendar">events calendar</a>, or email UNTFrisco@unt.edu to propose a new project.

Occasionally other offices will visit our campus to deliver workshops, activities, or information such as Student Legal Services, Student Money Management Center, Off-Campus Student Services, Student Health and Wellness Center, etc. Watch the events calendar for updates on visits.

# **Texas Common Course Numbering System (TCCNS)**

The Texas Common Course Numbering System (TCCNS) has been designed for the purpose of aiding students in the transfer of general academic courses between colleges and universities through-out Texas. A link to the list of currently approved TCCNS numbers may be found in the left-hand navigation on this page. In course descriptions, TCCNS prefixes and/or numbers, when applicable, are indicated in parentheses immediately following the UNT course number. Information provided is subject to change without notice and does not constitute a contract between UNT and a student or applicant for admission. Prospective transfer students should contact the academic dean's advising office of their intended major for course work guidelines prior to enrollment.

TCCNS	UNT
ACCT 2301	ACCT 2010
ACCT 2302	ACCT 2020
ACCT 2401	ACCT 2010
ACCT 2402	ACCT 2020
ANTH 2101/2301	ANTH 2700
ANTH 2301	ANTH 2700
ANTH 2301	BIOL 2700
ANTH 2346	ANTH 1010
ANTH 2351	ANTH 2300
ARAB 1411	ARBC 1010
ARAB 1412	ARBC 1020
ARAB 2311	ARBC 2040
ARAB 2312	ARBC 2050
ARTS 1301	ART 1300
ARTS 1303	ART 2350
ARTS 1304	ART 2360
ARTS 1311	ART 1800
ARTS 1312	ART 1700
ARTS 1316	ART 1600
ARTS 1317	ART 1900
ARTS 2316	ASTU 2201
ARTS 2317	ASTU 2202
ARTS 2326	ASTU 2801
ARTS 2333	ASTU 2601
ARTS 2341	ASTU 2402
ARTS 2346	ASTU 2101
ARTS 2347	ASTU 2102
ARTS 2356	ASTU 2501
ARTS 2357	ASTU 2502
ASTR 1103/1303	PHYS 1062
ASTR 1403	PHYS 1062
ASTR 1104/1304	PHYS 1052
ASTR 1404	PHYS 1052
BCIS 1305	BCIS 2610
BCIS 1405	BCIS 2610
BIOL 1106/1107	BIOL 1760
BIOL 1108/1308	BIOL 1112

TCCNS	UNT
BIOL 1306	BIOL 1710
BIOL 1307	BIOL 1720
BIOL 1322	HMGT 1450
BIOL 1406/1407	BIOL 1710 /BIOL 1720/BIOL 1760
BIOL 1408	BIOL 1112
BIOL 2101	BIOL 2311
BIOL 2102	BIOL 2312
BIOL 2106/2306	BIOL 1132
BIOL 2121	BIOL 2042
BIOL 2301	BIOL 2301
BIOL 2302	BIOL 2302
BIOL 2321	BIOL 2041
BIOL 2401	BIOL 2301 /BIOL 2311
BIOL 2402	BIOL 2302/BIOL 2312
BIOL 2406	BIOL 1132
BIOL 2421	BIOL 2041/BIOL 2042
BUSI 1307	FINA 2770
CHEM 1111	CHEM 1430
CHEM 1112	CHEM 1440
CHEM 1311	CHEM 1410
CHEM 1312	CHEM 1420
CHEM 1411	CHEM 1410 / CHEM 1430
CHEM 1412	CHEM 1420/ CHEM 1440
CHEM 2323	CHEM 2370
CHEM 2325	CHEM 2380
CHIN 1411	CHIN 1010
CHIN 1412	CHIN 1020
CHIN 2311	CHIN 2040
CHIN 2312	CHIN 2050
COMM 1307	JOUR 1210
COMM 1335	MRTS 1310
COMM 2300	JOUR 2250
COMM 2302	JOUR 2300
COMM 2311	JOUR 2310
COMM 2339	MRTS 2010

TCCNS	UNT
COMM 2366	MRTS 1320
COSC 1315	CSCE 1020
COSC 1336	CSCE 1030
COSC 1337	CSCE 1040
COSC 1436	CSCE 1030
COSC 1437	CSCE 1040
COSC 2325	CSCE 2610
COSC 2336	CSCE 2110
COSC 2436	CSCE 2110
COSC 2425	CSCE 2610
CRIJ 1301	CJUS 2100
DRAM 1120	THEA 2095
DRAM 1310	THEA 1340
DRAM 1322	THEA 2351
DRAM 1330	THEA 1046
DRAM 1341	THEA 2380
DRAM 1342	THEA 1043
DRAM 1351	THEA 1050
DRAM 2336	THEA 2051
DRAM 2366	MRTS 1320
ECON 2301	ECON 1110
ECON 2302	ECON 1100
ENGL 1301	ENGL 1310
ENGL 1302	ENGL 1320
ENGL 2307	ENGL 2100
ENGL 2311	TECM 2700
ENGL 2321	ENGL 2321
ENGL 2326	ENGL 2326
ENGL 2331	ENGL 2331
ENGL 2332	ENGL 2210
ENGL 2333	ENGL 2220
ENGL 2341	ENGL 2341
ENGL 2351	ENGL 2351
ENGR 1201	ENGR 1201
ENGR 1204	ENGR 1304
ENGR 1304	ENGR 1304
ENGR 2301	ENGR 2301
ENGR 2302	ENGR 2302
ENGR 2332	ENGR 2332

TCCNS	UNT
ENGR 2401	ENGR 2301
ENGR 2402	ENGR 2302
FREN 1411	FREN 1010
FREN 1412	FREN 1020
FREN 2311	FREN 2040
FREN 2312	FREN 2050
GEOG 1302	GEOG 2170
GEOG 1303	GEOG 1200
GEOL 1101/1301	GEOG 1710
GEOL 1103/1303	GEOL 1610
GEOL 1401	GEOG 1710
GEOL 1403	GEOL 1610
GERM 1411	GERM 1010
GERM 1412	GERM 1020
GERM 2311	GERM 2040
GERM 2312	GERM 2050
GOVT 2305	PSCI 2305
GOVT 2306	PSCI 2306
HECO 1322	HMGT 1450
HIST 1301	HIST 2610
HIST 1302	HIST 2620
HIST 2321	HIST 1050
HIST 2322	HIST 1060
ITAL 1411	ITAL 1010
ITAL 1412	ITAL 1020
ITAL 2311	ITAL 2040
ITAL 2312	ITAL 2050
JAPN 1411	JAPN 1010
JAPN 1412	JAPN 1020
JAPN 2311	JAPN 2040
JAPN 2312	JAPN 2050
LATI 1411	LATI 1010
LATI 1412	LATI 1020
LATI 2311	LATI 2040
LATI 2312	LATI 2050
MATH 1314	MATH 1100
MATH 1316	MATH 1600
MATH 1324	MATH 1180
MATH 1325	MATH 1190
MATH 1332	MATH 1580
MATH 1342	MATH 1680
MATH 1350	MATH 1350
MATH 1351	MATH 1351
MATH 1414	MATH 1100

TCCNS	UNT
MATH 1442	MATH 1681
MATH 2305	MATH 2000
MATH 2312	MATH 1650
MATH 2313	MATH 1710
MATH 2314	MATH 1720
MATH 2315	MATH 2730
MATH 2318	MATH 2700
MATH 2412	MATH 1650
MATH 2413	MATH 1710
MATH 2414	MATH 1720
MATH 2415	MATH 2730
MATH 2418	MATH 2700
MUSI 1116	MUTH 1410
MUSI 1117	MUTH 1510
MUSI 1181	MUAG 1011
MUSI 1182	MUAG 1012
MUSI 1183	MUAG 1124
MUSI 1188	MUAG 1117
MUSI 1306	MUMH 2040
MUSI 1307	MUMH 1610
MUSI 1311	MUTH 1400
MUSI 1312	MUTH 1500
MUSI 2116	MUTH 2410
MUSI 2117	MUTH 2510
MUSI 2216	MUTH 2410
MUSI 2217	MUTH 2510
MUSI 2311	MUTH 2400
MUSI 2312	MUTH 2500
PHED 1304	HLTH 1900
PHIL 1301	PHIL 1050
PHIL 1304	PHIL 2070
PHIL 2303	PHIL 2050
PHIL 2306	PHIL 1400
PHIL 2316	PHIL 2310
PHYS 1101	PHYS 1430
PHYS 1102	PHYS 1440
PHYS 1103/1303	PHYS 1062
PHYS 1104/1304	PHYS 1052
PHYS 1110/1310	PHYS 1315
PHYS 1115/1315	PHYS 1210
PHYS 1301	PHYS 1410
PHYS 1302	PHYS 1420
PHYS 1401	PHYS 1410 / PHYS 1430

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SPCH 2341         COMM 2060           TECA 1303         HDFS 2033           TECA 1318         HLTH 1100	SPCH 1315	COMM 2040
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TECA 1318 HLTH 1100	SPCH 2341	COMM 2060
	TECA 1303	HDFS 2033
TECA 1354 HDFS 1013	TECA 1318	HLTH 1100
	TECA 1354	HDFS 1013

# **Course descriptions**

#### **Accounting**

# ACCT 2010 - Accounting Principles I (Financial Accounting)

(ACCT 2301 or ACCT 2401)

3 hours

External uses of accounting information; interpretation of accounting data; analysis of financial statements; income and cash flow analysis; nature of assets and liabilities; understanding accounting reporting process.

Prerequisite(s): ECON 1100 (may be taken concurrently); MATH 1100 or higher (MATH 1180 preferred).

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# ACCT 2020 - Accounting Principles II (Managerial Accounting)

(ACCT 2302 or ACCT 2402)

3 hours

Study of the use of accounting information for business decision making. Topics include: cost behavior analysis, cost-volume-profit relationships, and the identification of costs relevant to the decision-making process. Students are introduced to various cost system designs, standard costs, variable costing, operational budgeting, and decision making in decentralized business.

Prerequisite(s): ACCT 2010 with a grade of C or better; ECON 1100; MATH 1100 or higher (MATH 1180 preferred).

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 3110 - Intermediate Accounting I**

3 hours

In-depth study of the process of preparing and presenting financial information about an entity for outside users (Part I). Topics vary but typically include: standard setting; the accounting cycle including data accumulation, adjustments and preparation of financial statements; and valuation. There is a focus on the recognition, measurement and disclosure of revenue; inventory and cost of sales; and plant assets.

Prerequisite(s): Junior level entrance exam with a passing grade of 70 percent or higher; ACCT 2010, and ACCT 2020 with a grade of C or better, FINA 3770 (may be taken concurrently) with a grade of C or better.

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a grade of C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 3120 - Intermediate Accounting II**

3 hours

In-depth study of the process of preparing and presenting financial information about an entity for outside users (Part II). Topics vary but typically include analysis of recognition, measurement and disclosure of: equity investments, financing activities (bonded debt, leases, pensions), income taxes, stockholders' equity, specialized reporting problems and cash flow.

Prerequisite(s): ACCT 3110 and ACCT 3405, both with a grade of C or better; FINA 3770; ACCT 3405 (may be taken concurrently).

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a grade of C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 3270 - Cost Accounting

3 hours

Accounting in manufacturing operations; cost concepts and classifications; cost accounting cycle; accounting for materials, labor and burden; process cost accounting; budgeting; standard costs; cost reports; direct costing and differential cost analysis.

Prerequisite(s): ACCT 2010 and ACCT 2020 with grades of C or better; ECON 1100 and ECON 1110; BCIS 2610; and MATH 1190 or MATH 1710.

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a grade of C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 3405 - Professional Development**

1 hou

Enables students to develop knowledge, skills and attitudes necessary to function effectively and succeed in the business world. Topics vary but typically include dressing for success, confidence and motivation, self-assessment, handling conflict and stress, personal and business ethics, dining etiquette, resume writing, professional certification opportunities, job search and interviewing, and the necessity for continuous self-improvement. In addition to faculty instruction, topics are covered by using former students and other guest lecturers from business, industry and government to expose students to career enhancing opportunities and to provide valuable insights from first-hand experiences.

Prerequisite(s): ACCT 3110 with a grade of C or better.

May not be taken more than twice at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class standing; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4100 - Accounting Systems**

3 hours

Introduction to technology/accounting information systems and their interface with business processes, internal controls and database management systems. Emphasis on maintaining and auditing system security and integrity. Practical experience with a commercial accounting package and database management software.

Prerequisite(s): ACCT 3110 with a grade of C or better.

Corequisite(s): ACCT 3120.

May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a grade of C or better) a course for which this is a prerequisite. (This course may be taken during the junior year.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4130 - Financial Statement Analysis**

3 hours

Ratio analysis and interpretation of balance sheet and income statement data. Account classifications and income measurements; company ratios, trends and present position; development of industry standards and status of business indicators as a guide for economic forecasts.

Prerequisite(s): ACCT 2010 and ACCT 2020 with grades of C or better; ECON 1100 and ECON 1110; BCIS 2610.

Not open to accounting majors. May not be taken more than twice at UNT. Students may not retake this course once they have completed (with a C or better) a course for which this is a prerequisite.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# ACCT 4140 - Advanced and Not-for-Profit Accounting Principles

3 hours

Problems connected with income determination and equity accounting, and consolidated statements. Problems connected with accounting for Not-for-Profit entities.

Prerequisite(s): ACCT 3120 with a grade of C or better.

May not be taken more than twice at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4270 - Advanced Cost Accounting**

3 hours

Nature, measurement and analysis of accounting data appropriate to managerial decision making, and comprehensive budgeting; statistical cost estimation; cost-volume-profit analysis; gross profit analysis; application of probability to cost control; capital planning. PERT-cost.

Prerequisite(s): ACCT 3270 with a grade of C or better.

May not be taken more than twice at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **ACCT 4300 - Federal Income Taxation**

3 hours

Comprehensive introduction to the U.S. federal income tax system. Emphasizes the taxation of individuals but many topics also apply to business entities. Coverage includes technical tax rules and motivations behind these rules, as well as tax planning opportunities and limitations.

Prerequisite(s): ACCT 2010 and ACCT 2020 and ACCT 3110 with grades of C or better.

May not be taken more than twice at UNT. (This course may be taken during the junior year.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4320 - Federal Income Taxation II**

3 hours

This course is designed to build on the fundamental tax concepts introduced in Federal Income Tax I (ACCT 4300). This course will provide a broad overview of how the Internal Revenue Code taxes corporations, partnerships, estates and trusts and also cover the basics of calculating the income tax provision.

Prerequisite(s): ACCT 4300 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 4400 - Auditing — Professional Responsibilities

3 hours

Introduction to auditing and the professional responsibilities of a career in any specialty of the accounting profession. Topics include the legal and ethical responsibilities of accountants; professional auditing standards; the acquisition, evaluation and documentation of audit evidence; reports on the results of the engagement.

Prerequisite(s): ACCT 3120 and ACCT 4100, both with a grade of C or better, and BLAW 3430.

May not be taken more than twice at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4420 - International Accounting**

3 hours

Integrates the functional areas of accounting and demonstrates how accounting relates to the disciplines in the College of Business core. Cross-functional and global approaches to organizational issues are emphasized. Enhances the ability of students to think critically, and to develop knowledge, skills, and attitudes necessary to compete effectively in the global business world. Topics covered include: multinational strategy, global perspectives in accounting, environmental, social and political influences on accounting, accounting information systems in a multinational enterprise, performance evaluation in a multinational enterprise, and the exploration of timely topical issues such as NAFTA, the European Union, and the globalization of securities markets.

Prerequisite(s): ACCT 4100 with a grade of C or better.

May not be taken more than twice at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### ACCT 4800 - Internship

3 hours

Supervised work in a job relative to student's career objective.

Prerequisite(s): Student must meet the employer's requirements and have consent of the professional program director.

May be repeated, but only 3 hours may apply toward degree program credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **ACCT 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **ACCT 4951 - Honors College Capstone Thesis**

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### Addiction Studies

#### ADDS 3975 - Addictions

#### 3 hours

Examines the biological, social-developmental, and psychological impact of substance use and behavioral-process addiction and its relationship to individual and family functioning. Investigates the relationship between substance use and chronic stress, trauma, and psychological health. Reviews current treatment methods and settings for substance use disorders in addition to current and historical social-political issues related to substance use and legislation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4075 - Drugs and Alcohol

#### 3 hours

Covers the psychological, biological and behavioral effects of substance use and addiction with particular focus on the impact of alcohol, cannabis, nicotine, opiates, stimulants, depressants and hallucinogens on mind, body and behavior.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ADDS 4175 - Addiction Treatment Models**

#### 3 hours

Provides an overview of treatment strategies used in the treatment of alcohol/drug use and dependence. Examines basic chemical dependency treatment service delivery systems within the context of alcohol and other drug use counseling theory.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4275 - Alcohol, Drugs and Disability

#### 3 hours

Examines the biological, psychological and systemic nature of substance use and addiction, their overlap with other mental and physical disabilities, and relationship to the process of rehabilitation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4375 - Addiction Counseling and Groups

#### 3 hours

Principles and practice for the most common form of addictions treatment offered today. Explores methods of dealing with substance use disorder issues in a group and offers opportunities to apply skills in class setting.

Prerequisite(s): ADDS 4175.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4575 - Current Issues in Substance Use Disorders

#### 3 hours

Current issues in substance use disorders are explored using various types of research reports and other professional literature. These sources are used to help students understand the role of research in developing programs, formulating policies and evaluating one's practice. Students become critical consumers of professional literature as they develop specialized expertise on specific problems, groups or practices used in treating addictions and substance use disorders.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4675 - Addictions Counseling Competencies

3 hours

Focuses on familiarizing students with the core competencies necessary for effective interventions within addiction treatment settings and prepares students to apply these skills in alcohol and other drug abuse (AODA) counseling practice.

Prerequisite(s): ADDS 4175, RHAB 4475.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# ADDS 4775 - Ethical and Professional Issues in Addiction Practices

3 hours

Examines principles, ethics, legal issues and professionalism in the addiction field and introduce students to professional readiness skills. Focuses on the importance of self-awareness, obligations to ethical and behavioral standards in helping relationships, and the application to practice of prior course content throughout the major. Also explores the history of the addiction profession and provide guidance for career readiness.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4800 - Studies in Addiction

3 hours

This is a special topics course on the study of addiction. Topics may change based on the current research and evidence-based practices of addiction studies.

Prerequisite(s): None.

Department consent required. May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4881 - Addictions Practicum

6 hours (3;0;0)

Practical experience in a supervised chemical dependency setting aimed at the integration of theory and practice and refinement of substance use treatment counseling skills. Requires completion of a minimum of 300 clock hours within the practicum setting plus attendance at weekly integrative seminars.

Prerequisite(s): Completion of 18 hours of addiction course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ADDS 4900 - Special Problems in Addiction Studies

3 hours

This is an individualized special topics course which allows students to work in depth on a project related to addiction studies.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **Aerospace Studies**

#### AERO 1030 - USAF Heritage and Values

1 hour (1;1;1)

Introduction to the Air Force way of life providing a historical perspective on war and US military, AF operations, principles of war, and airpower.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### AERO 1040 - USAF Heritage and Values

1 hour (1;1;1)

Introduction to the Air Force way of life providing a historical perspective on war and US military, AF operations, principles of war, and airpower.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# AERO 2030 - The Evolution of the U.S.A.F. Air and Space Power

1 hour (1;1;1)

Provides a fundamental understanding of both leadership and team building and the many layers and aspects of leadership. Includes team building activities and conflict management and an assessment of communication skills.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# AERO 2040 - The Evolution of the U.S.A.F. Air and Space Power

1 hour (1;1;1)

Provides a fundamental understanding of both leadership and team building and the many layers and aspects of leadership. Includes team building activities and conflict management and an assessment of communication skills.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### AERO 2920 - Cooperative Education in Aerospace Studies

1-3 hours

Supervised work in a job or project directly related to the student's major, professional field of study or career objective.

Prerequisite(s): Student must meet employer's requirements and have consent of department chair.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# AERO 3310 - Leading People and Effective Communication

4 hours (3;1;1)

In depth study of leadership and ethics including writing and briefing skills.

Prerequisite(s): Prerequisite(s): AERO 2030 and 2040

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# AERO 3320 - Leading People and Effective Communication

4 hours (3;1;1)

In depth study of leadership and ethics including writing and briefing skills

Prerequisite(s): AERO 3310.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# AERO 4310 - National Security Affairs/Preparation for Active Duty

4 hours (3;1;1)

Examines the basic elements of national security policy and process; teaches basic air force domain operations as well as selected roles of the military in society and current domestic and international issues affecting the military profession. Covers the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. Special topics of interest focus on the military as a profession, officership, preparation for active duty, and current issues affecting the military.

Prerequisite(s): AERO 3310, AERO 3320.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# AERO 4320 - National Security Affairs/Preparation for Active Duty

4 hours (3;1;1)

Examines the basic elements of national security policy and process; teaches basic air force domain operations as well as selected roles of the military in society and current domestic and international issues affecting the military profession. Covers the responsibility, authority, and functions of an Air Force commander and selected provisions of the military justice system. Special topics of interest focus on the military as a profession, officership, preparation for active duty, and current issues affecting the military.

Prerequisite(s): AERO 3310, AERO 3320, AERO 4310.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### AERO 4920 - Cooperative Education in Aerospace Studies

1\_4 hours

Supervised work in a job or project directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 hours credit in aerospace studies; student must meet employer's requirements and have consent of department chair.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# Analytics, Computation Sciences and Operations

#### ACSO 4410 - Introduction to Stochastic Processes

3 hours

Introduction to basic concepts and techniques of random processes to construct models for business and science applications. Topics include Poisson processes, Markov chains, renewal theory, models for queuing and reliability.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

# ACSO 4510 - Deterministic Modeling for Operations Research

3 hours

Introduction to optimization, including linear programming, network models and integer programming. Emphasizes developing suitable models for business and science applications and solving them using appropriate software.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

# ACSO 4610 - Applications in Analytics and Operations Research I

3 hours

Application of analytics and operations research methods to case study projects designed to help students apply techniques in real-world settings and attain proficiency in professional communication. Focuses on discipline-specific skills necessary to excel in careers or graduate studies.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

# ACSO 4620 - Applications in Analytics and Operations Research II

3 hours

Second course in applying analytics and operations research methods to case study projects designed to help students apply techniques in real-world settings and attain proficiency in professional communication. Projects are more complex than those considered in the first course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

## **Anthropology**

#### **ANTH 1010 - Introduction to Anthropology**

(ANTH 2346)

3 hours

Surveys and explains the cultural, linguistic and biological legacy of humankind, from antiquity to the present, using the research tools of anthropology. Anthropology is both a scientific and humanistic endeavor that attempts to explain the differences and similarities between and among human groups. Anthropology studies where people come from, who they are, what they do, and why they do it.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### **ANTH 1100 - World Cultures**

#### 3 hours

Introduction to the ways humans, past and present, have thrived in three different cultural worlds: tribal, imperial and commercial, including the interaction between people and their environments and the role of social power in determining the forms that human cultures have taken through history into the present day. Focuses on capitalism as a cultural form and examines its impacts on societies and groups in our increasingly interdependent world.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 1150 - World Cultures Through Film

3 hours

Through the use of ethnographic and documentary film, as well as lecture/discussion, this web-based course illustrates the life ways, values and beliefs of human societies throughout the world. This survey includes examples from native North America, Latin America, Australia, Southeast Asia, Africa, East Asia, Melanesia, Polynesia, modern North America and Europe.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 2200 - Gender in Cross-Cultural Perspective

3 hours

The construction of both masculinity and femininity in cross-cultural contexts. Also central are the issues and debates important within the last three decades of feminist anthropology that speak to the questions posed by widespread gender asymmetry and yet the abundant cultural diversity in the expression of gender ideology, roles and relations worldwide. The impact of the globalizing trends of capitalism and neocolonialism is addressed in terms of its impact of changing gender roles both in the first and third worlds.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 2300 - Culture and Society

(ANTH 2351)

3 hours

Cultural anthropology is the social science that tries to make sense out of people's lifestyles around the world, encompassing many subjects such as law, religion, politics, health, language, economics and globalization. It involves analyzing human ways of life with holistic, comparative, global, and relativistic perspective. As we compare and contrast different cultures around the world, we just as often analyze ourselves.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 2700 - Introduction to Physical Anthropology

(ANTH 2301)

3 hours (3;2)

Study of human biological evolution from primate beginnings to the present era. Emphasis is placed upon anatomical and physiological variations and their adaptive significance.

Prerequisite(s): None.

Same as BIOL 2700.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# ANTH 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 3101 - American Culture and Society

3 hours

Culture, cultural diversity and multiculturalism constitute some of the most significant social issues in America today. Oriented around the core concept of culture and cultural groups; designed to introduce the student to the basic concepts of culture and cultural diversity and develop an awareness and appreciation for the full range of diversity in the American (U.S.) culture. Special time and attention devoted to the origins, development and consequences of the diversity that plays such a central role in the lives of people in this nation-state culture.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### **ANTH 3110 - Indigenous Peoples of North America**

3 hours

Examines the common stereotypes and media (mis)interpretations of indigenous peoples and cultures in order to see beyond such one-dimensional portrayals of the American Indian. Introduction to a number of important themes in the history of Native American peoples over the last 500 years, including colonization, culture change and sovereignty. Students gain a sense of the richness and diversity of Native American culture and experience.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 3120 - Indigenous Cultures of the Southwest

3 hours

The cultural history of the Native American populations in the Greater Southwest from prehistoric times to the present, with an emphasis on current cultural, political and environmental issues. Topics include prehistoric settlement, culture contact, colonialism, cultural identity, intertribal politics, economic development, health issues, indigenous revitalization and sovereignty movements, cultural resource management and tourism. Particular attention is given to the influences of Spanish and American political, military and economic forces, and to the relationship between the Southwest Indians and anthropologists.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### ANTH 3130 - African-American Anthropology

3 hours

Develops a "double consciousness" of knowledge of African-American (or black) culture in the United States, the impact of blacks on mainstream American culture, and vice versa. Covers the role of U.S. history, politics and economics as having shaped and been shaped by the presence of people of African descent on this continent and in this hemisphere, including historical roots, classic literature, religion, social structural aspects of African-American culture, oral traditions, identity and representation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3140 - Latinos in the U.S.

3 hours

Uses identity and resistance theories to explore the various constructions of Latin@ race, ethnicity and identity, and the social and political implications of being Latin@ today. Explores the ways in which Latin@s have been excluded from the national imaginary while maintaining and transforming their own cultural identify. How this process of marginalization has deeply changed the racial and cultural landscape for Latin@s and non-Latin@s.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3200 - Latin America

The indigenous, colonial and mestizo cultures of Latin America from prehistoric, historic and contemporary perspectives. The dominant culture groups that have comprised this region, and specific issues of conquest and colonialism, neocolonialism, the role of religion, peasants and social movements; and migration.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3210 - Meso America

The indigenous, colonial and mestizaje cultures of Middle America from prehistoric to contemporary times. Beginning with the peopling of the Americas and concluding with a review of current issues and politics, students explore the dominant culture groups that have comprised this region, and specific issues of colonialism, imperialism, neocolonialism, syncretized Catholicism, peasant rebellions, migration and globalization.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3220 - Mayan Culture

Holistic understanding of the ancient Mayan civilization, illuminating crucial economic, political and ideological contemporary processes; exploring the intriguing symbolism embedded in the ancient Maya culture; understanding colonial and current Mayan rebellions.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3300 - Peoples and Cultures of the Pacific

3 hours

Surveys the diverse cultures and traditions of the Pacific, each with its own unique style and history covering thousands of years. Geography, politics, history, ethnography and economics of many cultural groups in the region, from the discovery of these islands to the present.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3400 - Peoples and Cultures of Africa

The diversity of African people and culture through a variety of sources-ethnographies, films, literature and narratives. The reality of life in contemporary Africa as well as the way it has been portrayed by anthropologists, explorers, historians and the media. Looks in detail at the continent's rich geography, environment, history, politics, religion, economics and ethnicities, as well as the challenges that current events in Africa pose for the rest of the world.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3500 - Cultures and Civilizations of the Middle East

The prehistory, history and contemporary situation of one of the most unusual areas of cultural diversity and human adaptation in the world. Special attention is given to the colonial and religious history of the area that underlies much of its current problems. Its unique role in the developing world economic system is addressed, as well as those current phenomena that make it such a volatile area.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3600 - Peoples and Cultures of Europe

Investigation of the myriad peoples of Europe within the context of the impact of broader trends and institutional frameworks. Microand macro-level analyses are used to understand a wide range of issues of both historical and contemporary importance.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3700 - Peoples and Cultures of South Asia

A survey of the culturally rich and diverse cultures and traditions of South Asia, each with its own unique history covering thousands of years. From the days of prehistory to the present period of profound social, economic, political and technological changes, this course provides an in-depth background and understanding of the peoples and cultures of this area.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3710 - Peoples and Cultures of East Asia

3 hours

Overview of cultures and contemporary issues in societies in the Far East, in the context of social and political change and development. Anthropological and ethnographic studies, supplemented by selected research from sociology, history and political science, and specific areas of cultural and social change in each society, including kinship and family, ethnicity, economic and political development, industrialization, urbanization, and health and social policy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3720 - Peoples and Cultures of Southeast Asia

3 hours

Survey of mainland and insular areas of Southeast Asia. Development of indigenous cultures, the period of empires influenced by India and China, the merger with the Islamic world, Western colonialism and emerging nationalism, and the modern period of seeking its global identity.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 3900 - Special Topics in Area Studies

3 hours

Designed to develop greater understanding, awareness, appreciation and sensitivity to global diversity; the prehistory, history, social and cultural adaptations and practices of various cultural groups according to major geographical regions; the relationship among the various systems of culture; and the interconnectedness of peoples throughout the world. Among the cultural areas offered are Circumpolar Region, Eastern Europe, the Great Civilizations of Mexico, Australia, etc.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# ANTH 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4000 - Applied Anthropology

3 hours

Development, theory, methods and approaches of applied anthropology. Through case materials, the course examines both the current and historical roles and contributions of the various subfields in the application of anthropology to the problems of culture. Special attention is directed at developing some understanding and appreciation of the problems and ethics involved in applied or practical activities and to developing the necessary skills and methods for assuming such a role as an applied anthropologist.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4011 - Anthropological Field Methods

3 hours

Concentrates on the field methods of anthropology, in particular the various data gathering techniques, methods of analysis and field techniques of participant observation. In addition to acquiring the skills of the participant observation method, students gain an increased awareness, understanding and appreciation of the problems associated with conducting research in cultures other than their own. Special attention is devoted to the interactional aspects of dealing with people from a variety of cultural backgrounds.

Prerequisite(s): ANTH 2300 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### ANTH 4021 - Development of Anthropological Thought

3 hours

Overview of the history of anthropological thought from its origins to the contemporary schools of anthropology, with emphasis on the scientific, intellectual and sociopolitical causes and consequences of changes in major conceptual orientations to man and culture.

Prerequisite(s): ANTH 2300 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 4110 - Design Anthropology

3 hours

Students learn the fundamentals of this field. By collaborating on an applied project, they gain practice in the research methods of participant observation, interviewing, and videotaping. Students learn to engage in collaborative analysis using qualitative software and work with designers and customers to translate their research into practical applications.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# ANTH 4200 - Health, Healing and Culture: Medical Anthropology

3 hours

Contemporary medical anthropology, with a focus on the biocultural basis of health and global sociocultural variations in illness and healing. Study of comparative health systems, political-economic and ethical issues in health and care, health professions, and patients' views of illness, and cross-cultural definitions and understandings of disease, illness and cure.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4210 - Culture and Human Sexuality

3 hours

Examines sexualities cross-culturally in their specific historical, social, religious and political contexts to explore how that seemingly most natural aspect of humanity — sex — is structured and experienced very differently across the globe. A primary focus is how sex and sexuality are discursively constructed as a matter of utmost privacy, yet are paradoxically a matter of deep public concern. Examines the intimate connection between sex and the nation by exploring topics such as family planning policies, anti-sodomy laws, and laws against interracial marriages.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4220 - Anthropology in Public Health

3 hours

Introduction to the contributions of anthropology in public health. Sociocultural perspective on the fundamentals of public health, including but not limited to international health, domestic health, epidemiology, infectious disease, child survival, women's and men's health, and health policy.

Prerequisite(s): ANTH 4200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4230 - Psychological Anthropology

3 hours

Explores the relationship between the self, culture and society. Compares concepts of self, socialization and behavior in anthropological and psychological theory and research, universal concepts of human nature, and examines processes of interpretation by individuals in diverse cultural and social groups over the life span. Sociocultural contexts of alternative states of consciousness and mental illness are also compared.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### ANTH 4300 - Migrants and Refugees

3 hours

Anthropological understanding of "uprooted" and displaced social groups who leave their country and culture. Worldwide political, economic and social issues are analyzed, as are the processes of accommodation, adaptation and re-creation of their cultural systems in different socioeconomic and political contexts. Beginning with general characteristics of the anthropological discussion on "displacement", the course then ventures into different models for the analysis and understanding of migration and refugee movements.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4400 - Environmental Anthropology

3 hours

Focuses on major environmental questions, theories, problems, issues and possible solutions illustrated by case studies from different parts of the world. Examines environmental issues pertaining to land, sea and natural resources; food production systems; deforestation; population problems; poverty and environmental justice; natural hazards and risks; resource conflicts and warfare; over-fishing; economic development; mineral and oil extraction; landscapes; and biodiversity conservation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4500 - Language and Culture

3 hours

Introduction to linguistic anthropology, designed to acquaint students with some of the ways in which languages and cultures are connected to each other, in that communication patterns are culturally structured. Three broad areas: how language offers resources to individuals to help them accomplish their goals; how language offers resources to institutions and social groups that help them maintain their power; and how language shapes our thought patterns. Students learn the basic techniques of analyzing conversations by working on a semester-long project.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### ANTH 4550 - Race, Ethnicity and Identity

3 hours

How race, ethnicity and identity operate as categories of social inequality. Draws on critical perspectives of race and ethnicity to analyze how they work as overlapping categories of both inclusion and exclusion that are used to divide, rank and discriminate. Discussion of possible ways to overturn the social injustices caused by ethnic and racial subordination as currently experienced in the U.S.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4601 - Anthropology of Education

3 hours

Issues and approaches relevant to the study of education within the field of anthropology, including methods used in the study of education and schooling, and the significance of cultural transmission. Students are exposed to works in the field of anthropology about cultural difference, minority status and learning. Highlights new perspectives and critiques related to contemporary educational problems found in societies such as the U.S.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4701 - Topics in Sociocultural Anthropology

3 hours

Selected topics of interest and significance in sociocultural anthropology. While this course is offered on a regular basis, particular topics are taught irregularly.

Prerequisite(s): ANTH 1010 or ANTH 2300, or consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4751 - Anthropology of Religion

3 hours

Focuses on comparing religious and supernatural belief across cultures, through the perspective of anthropology. The origin, development and function of religions in human societies, as well as classic anthropological concerns about the role of myth, ritual, ethics, magic and shamanism in society. By comparing what is religious in many cultures, students develop a better understanding of the relationship between human beings, religion, and their own religious beliefs.

Prerequisite(s): ANTH 1010 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4760 - Inequality, Social Justice and the City

3 hours

Historical and ethnographic examination of urban society and how people-centered movements might regain "rights to the city". Focuses on local examples of urban social justice causes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4770 - Ethnographic Field School

3-6 hours

Field methods in anthropology. Practice of the unique field methods used in anthropology, especially "participant observation," through travel to a domestic or international field site and becoming immersed in the local culture. Students gain an in-depth understanding of contemporary and historic culture through relevant literature on the area and anthropological field methods, and through practical experience by putting field techniques and methods of data gathering and analysis to work in the field.

Prerequisite(s): None.

May be repeated for credit up to a total of 15 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### **ANTH 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ANTH 4920 - Cooperative Education in Anthropology

3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 hours credit in anthropology; student must meet the employer's requirements and have consent of the institute director.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ANTH 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **Applied General Music**

#### MUAG 1001 - Piano Class for Non-Music Majors

1 hour (0;3)

Fundamentals of keyboard technique for beginning piano students: level I (non-major).

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1002 - Piano Class for Non-Music Majors

1 hour (0:3)

Fundamentals of keyboard technique for beginning piano students: level II (non-major).

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1011 - Keyboard Skills for Music Majors

(MUSI 1181)

1 hour (0;3)

Functional keyboard skills combined with the application of music theory principles at the piano (progressions, sight reading, harmonization and transposition) for beginning students: level I.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1012 - Keyboard Skills for Music Majors

(MUSI 1182)

1 hour (0;3)

Functional keyboard skills combined with the application of music theory principles at the piano (progressions, sight reading, harmonization and transposition) for beginning students: level II.

Prerequisite(s): A grade of C or better in the previous level (MUAG 1011).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1013 - Keyboard Skills for Music Majors

1 hour (0;3)

Functional keyboard skills combined with the application of music theory principles at the piano (progressions, sight reading, harmonization and transposition) for beginning students: level III.

Prerequisite(s): A grade of C or better in the previous level (MUAG 1012).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1014 - Keyboard Skills for Music Majors

1 hour (0;3)

Functional keyboard skills combined with the application of music theory principles at the piano (progressions, sight reading, harmonization and transposition) for beginning students: level IV (includes the Piano Proficiency Exam).

Prerequisite(s): A grade of C or better in the previous level (MUAG 1013).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1101 -

#### Introduction to Winds and Percussion Methods

1 hour

Develops the knowledge and skills of choral music education students to the level necessary to teach instrumental music (woodwinds, brass, and percussion) in a public school setting. Focuses on 1) teaching techniques for individual instruments, 2) developing playing skills on individual instruments with a focus on the ability to model for students, 3) compiling resources that will assist the student in future instrumental music teaching.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

### MUAG 1102 - High Brass Methods

1 hour (0:3)

Development of pedagogical skills and knowledge for teaching trumpet and horn in school music settings. Prepares undergraduate music education students to go into any beginner to intermediate brass class setting and successfully teach high brass instruments (trumpet and horn). Skills include, but are not limited to, instrument on instrument selection, teaching posture, breathing, instrument parts, instrument assembly, embouchure, tone production, articulation, range, fingerings, transpositions, and care and maintenance for trumpet and horn.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1107 - Guitar Class

1 hour (0;3)

Classical guitar for beginners. Students provide instruments. Secure recommended specifications from instructor.

Prerequisite(s): Enrollment only by audition and consent of college.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **MUAG 1117 - Percussion Class**

(MUSI 1188)

1 hour (0:3)

All major percussion instruments; proper playing techniques and methods for teaching fundamentals.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1121 - Strings Class

1 hour (0;3)

Basic techniques of violin, viola, cello and bass.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1124 - Voice Class for Non-Music Majors

(MUSI 1183)

1 hour (0;3)

Fundamentals of correct breathing, tone production and diction.

Prerequisite(s): None.

For non-music majors with little or no previous voice training. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1125 - Flute and Saxophone Methods

1 hour (0:3)

Development of pedagogical skills and knowledge for teaching flute and saxophone in school music settings. Prepares undergraduate music education students to go into any beginner to intermediate woodwind class setting and successfully teach flute and saxophone. Skills include, but are not limited to, instruction on instrument selection, teaching posture, breathing, instrument parts, instrument assembly, embouchure, tone production, articulation, range, fingerings, transpositions, and care and maintenance for each woodwind instrument. In addition, students learn how to incorporate other elements of teaching a beginner band class, such as creating objective sheets, rhythmic reading, basic music theory, and creating a timeline for a beginning band class.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1202 - Low Brass Methods

1 hour (0;3)

Development of pedagogical skills and knowledge for teaching trombone, euphonium and tuba in school music settings. Prepares undergraduate music education students to go into any beginner to intermediate brass class setting and successfully teach low brass instruments (trumpet and horn). Skills include, but are not limited to, instruction on instrument selection, teaching posture, breathing, instrument parts, instrument assembly, embouchure, tone production, articulation, range, fingerings, transpositions, and care and maintenance for trumpet and horn.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1221 - Strings Class

1 hour (0:3)

Basic techniques of violin, viola, cello and bass.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1224 - Voice Class for Music Majors

1 hour (0;3)

Fundamentals of correct breathing, tone production, diction and basic vocal pedagogy.

Prerequisite(s): None.

For instrumental music majors. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1225 - Clarinet, Oboe and Bassoon Methods

1 hour (0;3

Development of pedagogical skills and knowledge for teaching clarinet, oboe, and bassoon in school music settings. Prepares undergraduate music education students to go into any beginner to intermediate woodwind class setting and successfully teach clarinet, oboe and bassoon. Skills include, but are not limited to, instruction on instrument selection, teaching posture, breathing, instrument parts, instrument assembly, embouchure, tone production, articulation, range, fingerings, transpositions, and care and maintenance for each woodwind instrument. In addition, students learn how to incorporate other elements of teaching a beginner band class, such as creating objective sheets, rhythmic reading, basic music theory, and creating a timeline for a beginning band class.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 1905 - English Diction for Singers

1 hour (2:0)

Diction/pronunciation skills for singing in English. Introduction to phonetic analysis of vocal music in English.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1906 - French Diction

1 hour (2;0)

Diction/pronunciation skills for singing in French; introduction to phonetic analysis of vocal music in French.

Prerequisite(s): MUAG 1905 and MUAG 1909 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUAG 1907 - German Diction**

1 hour (2;0)

Diction/pronunciation skills for singing in German; introduction to phonetic analysis of vocal music in German.

Prerequisite(s): MUAG 1905 and MUAG 1909 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 1909 - Italian Diction

1 hour (2;0)

Diction/pronunciation skills for singing in Italian; introduction to phonetic analysis of vocal music in Italian.

Prerequisite(s): MUAG 1905 or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUAG 3230 - Keyboard Improvisation

3 hours

Whether they be pianists, organists, collaborative pianists, or harpsichordists, keyboardists sometimes find themselves in situations in which improvisation skills are needed. A clearer understanding of the principles involved will give students a better chance to succeed in these situations, and will also help students better understand harmony in everything they play.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3240 - Techniques of Piano Accompanying

3 hours

Review of sight-reading skills; repertoire from Italian anthology; simpler songs of Schubert, Schumann and Faure; arias. Concerto accompaniments from classic repertoire; discussion and demonstration of piano reductions.

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3250 - Techniques of Piano Accompanying

3 hours

Study of Lieder and art-song repertoire, arias, concerti and instrumental solos.

Prerequisite(s): MUAG 3240 or consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 3260 - Piano Literature

3 hours (3;0)

Bach through the early romantics. Survey of major composers, styles and forms; individual topics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3270 - Piano Literature

3 hours (3:0)

The late romantics to the present. Survey of major composers, styles and forms; individual topics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3500 - Health and Wellness in Performing Arts

3 hours

Explores occupational health through a society-behavior-biology nexus model. The primary focus is on gaining a practical understanding of occupational injuries including musculoskeletal problems from repetitive tasks, noise-induced hearing loss from overexposure to sound, mental health problems associated with competition at work and economic instability, and vocal health. Emphasis on personal and social responsibility, the impact of societal groups on injury prevention, and the development of lifetime wellness skills.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3800 - Fundamentals of Conducting

2 hours (3;0)

Fundamentals of conducting, including beat patterns, various gestures for attack, release and phrasing. Includes the use of the left hand, score reading, development of aural skills, rehearsal techniques and interpretation.

Prerequisite(s): MUTH 2400, MUTH 2410. Junior standing.

Meets with MUAG 5805

MUAG 3800 is a prerequisite for MUAG 3820 and MUAG 3870.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUAG 3820 - Choral Conducting

2 hours (3;0)

Continuation of MUAG 3800. Focuses on refining physical skills, the introduction of group choral training, choral rehearsal techniques and aural development skills.

Prerequisite(s): MUAG 3800, MUTH 2500, MUTH 2510.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 3870 - Instrumental Conducting

2 hours (3:0)

Score reading and preparation; practical application of transposition for all instruments; psychology of conducting; multimeter patterns; stylistic considerations; extensive conducting practicum utilizing both wind and orchestral literature.

Prerequisite(s): MUAG 3800, MUTH 2500, MUTH 2510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4000 - Advanced Choral Techniques

3 hours

Choral organizations, singing, conducting, performing, repertoire and history. Actual experience in a model a cappella choir.

Prerequisite(s): MUAG 3800, MUAG 3820, MUED 4203.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4001 - Student Teaching in Studio Piano

3 hours (1;2)

Observation and supervised student teaching with an emphasis on private studio teaching.

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4002 - Student Teaching in Group Piano

3 hours (1:2)

Observation and supervised student teaching with an emphasis on group piano teaching.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4160 - Elementary Piano Pedagogy

3 hours

Approaches for children and adult beginners; technique, style and musicianship; review and recommendation of materials for all grades. Supervised student teaching.

Prerequisite(s): None.

Meets with MUAG 5160.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4170 - Intermediate Piano Pedagogy

3 hours

Approaches for children and adult beginners; technique, style and musicianship; review and recommendation of materials for all grades. Supervised student teaching.

Prerequisite(s): MUAG 4160 or consent of college.

Meets with MUAG 5170.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4200 - Video Games: Behind the Screens

3 hours

Students play, study, and theorize several video games in depth. Students integrate studies in music and sound into the visual domain. The musical dimension of the course is designed for non-majors. Our examination of music and sound will involve an elementary level of pitch-based description in addition to studies of data visualization of sound--particularly through the software Sonic Visualizer.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4210 - Vocal Literature

3 hours

Solo literature since the Renaissance; style, interpretation and materials for all voice classifications. Music performed by class members and through recordings.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4220 - Fundamentals of Singing-Acting Techniques

1 hour (1;2)

Introductory course to the process of singing-acting which clearly identifies all the parts of the total performing system — mind, emotions, body, face and voice — and presents a way of developing the power of each of those parts separately, and then integrating them in various combinations. Experiential learning course in which the student applies the techniques to his or her individual operatic repertoire or to assigned scenes from opera.

Prerequisite(s): Students must have passed the upper division exam in voice, have studied at least two semesters with current voice teacher, have permission from voice teacher, and have at least two operatic arias in repertoire.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4225 - Oratorio Repertoire and Practicum

3 hours

Comprehensive study and performance of oratorio repertoire from the Baroque through Contemporary periods.

Prerequisite(s): MUMH 3500 and MUMH 3510.

Meets with MUAG 5225.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4300 - Science and Pedagogy of Singing

3 hours

Basic knowledge of respiration, phonation, resonation and articulation; concepts and techniques for the teaching of singing. Laboratory demonstrations and studio observations for students of voice, choral conducting and composition.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4310 - Science and Pedagogy of Singing

2 hours

Basic knowledge of respiration, phonation, resonation and articulation; concepts and techniques for the teaching of singing. Laboratory demonstrations and studio observations for students of voice, choral conducting and composition.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# **MUAG 4350 - Repair and Maintenance of Musical Instruments**

1 hour (0;3)

Repair of brass, woodwind and percussion instruments. For instrumental music teachers and those interested in instrument repair.

Prerequisite(s): MUAG 1125 or MUAG 1225, or consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAG 4360 - Instrumental Pedagogy and Repertoire

3 hours

Study and analysis of instrumental literature; correlation of literature and pedagogical materials; survey of schools of performance and instruction; brass, percussion, keyboard, strings and woodwinds.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4370 - Instrumental Pedagogy and Repertoire

3 hours

Study and analysis of instrumental literature; correlation of literature and pedagogical materials; survey of schools of performance and instruction; brass, percussion, keyboard, strings and woodwinds.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4380 - Organ Literature and Pedagogy

3 hours

Survey of organ repertories and styles from the Renaissance through the early 21st century with emphasis on representative masterpieces from the important national schools of composition. Aligned with this study will be due consideration of the instruments influencing the performance and registration of these repertories and pedagogical issues relevant to the teaching of this music.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4410 - Harpsichord Literature and Pedagogy

3 hours

Harpsichord music of the Renaissance and early Baroque periods. Survey of major composers, national styles and forms; construction and design of appropriate instruments. Performance practices are thoroughly explored. Pedagogical principles are applied to repertoire. Individual research projects.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4420 - Harpsichord Literature and Pedagogy

3 hours (3;0)

Harpsichord literature from the mid-17th century to the present, including the music of Bach. Survey of major composers, styles, forms and ensemble literature; construction and design of appropriate instruments. Performance practices are thoroughly explored. Pedagogical principles are applied to repertoire. Individual research projects.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUAG 4700 - Senior Recital

1 hour (0;0;1)

Public recital in which the student must demonstrate mastery of music performance skills appropriate to the completion of a bachelor's degree in performance.

Prerequisite(s): Three terms/semesters of MUAM 35xx and consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAG 4710 - Instrumental Studies Senior Recital Capstone

3 hours (1;0;2)

Public performance of music by each student completing undergraduate studies in performance. The culmination of at least four years of work in academic and applied music, it represents the academic, musical and artistic growth the student has experienced throughout the undergraduate career. The senior recital is typically given in the last semester of undergraduate study.

Prerequisite(s): Three semesters of MUAM 35XX and consent of college. Successful completion of all College of Music Proficiency exams, including the Theory Proficiency Exam (TPE), Upper Division Exam (UDE), and Piano Proficiency Exam.

Individual instruction.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4711 - Keyboard Senior Recital Capstone

3 hours (1;0;2)

Public performance of music by each student completing undergraduate studies in keyboard performance. The culmination of at least four years of work in academic and applied music, it represents the academic, musical and artistic growth the student has experienced throughout the undergraduate career. The senior recital is typically given in the last semester of undergraduate study.

Prerequisite(s): Three semesters of MUAM 3501, MUAM 3502 or MUAM 3528 and consent of college. Successful completion of all College of Music Proficiency exams, including the Theory Proficiency Exam (TPE), Upper Division Exam (UDE), and Piano Proficiency/Score Reading Exam.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4712 - Voice Senior Recital Capstone

3 hours (1;0;2)

Public performance of music by each student completing undergraduate studies in vocal performance. The culmination of at least four years of work in academic and applied music, it represents the academic, musical and artistic growth the student has experienced throughout the undergraduate career. The senior recital is typically given in the last semester of undergraduate study.

Prerequisite(s): Three semesters of MUAM 3503 and consent of college. Successful completion of all College of Music Proficiency exams, including the Theory Proficiency Exam (TPE), Upper Division Exam (UDE), and Piano Proficiency Exam.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4720 - Organ Service Playing I

2 hours (1;1)

Intense study of basic hymn playing, harmonic progressions, melody harmonization, open score reading (including alto and tenor clefs), modulation, figured bass, transposition and elementary improvisation.

Prerequisite(s): MUTH 2500, MUTH 2510.

Successful completion of this course allows students to compete for major church positions and prepare for the AAGO certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4730 - Organ Service Playing II

2 hours (1:1)

Advanced study of figured bass, open score reading (four parts including both tenor and alto clefs), transposition of more difficult textures, and improvisation of binary, ternary and variation (choral partita) structures.

Prerequisite(s): MUAG 4720 or placement by permission of college.

Successful completion of this course prepares students for FAGO certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4740 - Seminar in Church Music

3 hours

For interests and talents of students; class and private conferences. Topics include historical and contemporary developments in hymnody; liturgical music; church choir literature and techniques; and church music philosophy, education and administration.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4890 - Seminar in Performance and Repertoire

3 hours

Consideration of style, interpretation, performance practice traditions of selected portions of the performing repertoire; student performances and recordings.

Prerequisite(s): Consent of college.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4900 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4910 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAG 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **Applied Gerontology**

#### AGER 2000 - Global Aging and Individual Aging

3 hours

Introduction to gerontology as an interdisciplinary field of study, a field that includes important psychological, social, economic and demographic dimensions and forces that are altering the life of individuals and the operation of various societies. Brief examination of biological, psychological, social, and economic factors and dimensions that make up the aging experiences of individuals as well as how the "aging population" affects the way we organize our various societies. Public policy issues are the focus of each class to show the relevance of the basic science material presented in the course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 2250 - Images of Aging in Film and Literature

3 hours

Study of attitudes toward aging through depictions of the elderly in English-language films and literary works. A major goal of the course is to replace stereotypical views of the elderly with an understanding of the variety of human experience in the last decades of life.

Prerequisite(s): None.

Core Category: Component Area Option or Language, Philosophy and Culture

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 3480 - Psychology of Adult Development and Aging

3 hours

Personality, cognitive, social and sensory-perceptual aspects of development from early adulthood through death. Emphasis is on the development of a comprehensive understanding of the adult portion of the life span.

Prerequisite(s): None.

Same as PSYC 3480.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4020 - Psychology of Death and Dying

3 hours

Concepts and attitudes concerning death and dying from a psychological perspective; current research on death and dying; development of insights and understanding to prepare the student to interact effectively with people who are terminally ill and their family members.

Prerequisite(s): Advanced standing and consent of department.

Same as PSYC 4020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4060 - Therapeutic Activity Intervention and Aging

3 hours

Develops an awareness of the physiological, psychological, economic and sociological processes of aging that affect recreation and leisure behavior and involvement patterns. Emphasis is on age-related illness, disease, and disability and therapeutic activity intervention.

Prerequisite(s): AGER 4550/SOCI 4550 or equivalent recommended. Same as RESM 4060

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4250 - Topics in Gerontology

1-3 hours

In-depth analysis and discussion of selected significant subjects in aging.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4450 - The Family in Later Life

3 hours

Later stages in the family life cycle are surveyed with emphasis on changing family composition, role transitions and support systems.

Prerequisite(s): SOCI 1510 or equivalent.

Same as SOCI 4450.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# AGER 4500 - Long-Term Care Case Management with Older Adults

3 hours

Practitioner-oriented course focuses on the foundations of case/care management and the care management process as practiced with impaired elderly clients and their family caregivers. Topics include older client intake and assessment, establishing goals and a plan of care, coordinating and linking services and resources, and managing and monitoring care. Situations commonly encountered with at-risk elders are examined using protocols.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4550 - Sociology of Aging

3 hours

Twenty-somethings, generation Xers, baby boomers—all will be senior citizens sooner or later. Their sex, race/ethnicity and social class will affect their experience of aging. Course explores issues related to successful aging, including what young adults should be doing now to ensure that they have happy, healthy, wealthy and creative golden years.

Prerequisite(s): SOCI 1510 or equivalent.

Same as SOCI 4550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4560 - Minority Aging

3 hours

Introduction to the study of minority elderly in the United States, including their physical and mental health, income security, family relations and service issues. Course content focuses on African-American, Asian/Pacific Islander, Hispanic and Native American elders.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4700 - Women in Later Life

3 hours

Examination of the social, psychological and economic issues facing older women from historical, current and futuristic viewpoints. The course identifies historical forces that have shaped the status of older women, explores major issues of importance to older women today, and identifies issues and probable responses that will affect older women in the future.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4750 - Sexuality and Aging

3 hours

One of the most pervasive myths of aging is that older people are non-sexual. This course challenges popular stereotypes and examines sexual attitudes, activity and behavior as people age. In addition to common social beliefs and attitudes that may affect the opportunity for sexual expression among older adults, biological changes and sexual response are explored, as are other aspects of intimacy important to aging individuals.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4780 - Aging Programs and Services

3 hours

Introduction to the history of social policy in aging; derivations and directions of public policy; interrelationships of agencies; discussion of selected programs and services for the aged.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# AGER 4800 - The Social Context of Aging: Global Perspectives

3 hours

Analysis of the aging experience in a global context, historically and currently. Topics include perceptions of aging, definition of need in old age, and models for delivering health and social services to older persons.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4840 - Studies in Aging Field Practicum

3 hours

Field practicum (12 hours per week) in an agency or institution delivering services to the elderly; 170 clock hours in the field.

Prerequisite(s): AGER 3480, AGER 4550, AGER 4780. Senior standing in the applied gerontology program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4850 - Studies in Aging Field Practicum

3 hours

Field practicum (12 hours per week) in an agency or institution delivering services to the elderly; 170 clock hours in the field.

Prerequisite(s): AGER 3480, AGER 4550, AGER 4780. Senior standing in the applied gerontology program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4870 - Social Research and Practice

3 hours

Principles and procedures; sources of data, techniques of collection and analysis, and statistical description.

Prerequisite(s): Junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4880 - Quantitative Methods of Social Research

3 hours

Role of quantitative methods in social research; application of quantitative techniques and procedures to social data, statistical inference; data processing.

Prerequisite(s): AGER 4870 or equivalent.

Same as SOWK 4880.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### AGER 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### AGER 4960 - Studies in Aging Institute

1\_3 hours

Selected topics are developed in an institute format and are regularly scheduled.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **Arabic**

#### **ARBC 1010 - Elementary Arabic**

(ARAB 1411)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 1020 - Elementary Arabic

(ARAB 1412)

3 hours (3:2)

Grammar and phonetics; reading, composition and oral-aural practice

Prerequisite(s): ARBC 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 2040 - Intermediate Arabic

(ARAB 2311)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): ARBC 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 2050 - Intermediate Arabic

(ARAB 2312)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): ARBC 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ARBC 2900 - Special Problems

1-3 hour

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 2910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# ARBC 3040 - Advanced Topics in the Culture of the Middle

3 hours

Explores the history and culture of the Near East, from the time of Muhammad to the present. Examines the rise and definition of Islamic civilization and the spread of Islam. Topics include major political figures and historical events, institutions, economic developments, social issues (education, family, women), history of ideas, literary movements, art history, and music history.

Prerequisite(s): ARBC 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 3060 - Advanced Topics in Arabic Language

3 hours

Study of authentic materials in classical prose to create a foundation for the mastery of classical Arabic. Also involves more extended readings and discussions of contemporary and historical cultural topics. In addition to a review of syntax and morphology, the course intends to increase the range and accuracy of oral and written expression and aural comprehension. Classes are conducted entirely in Arabic.

Prerequisite(s): ARBC 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARBC 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ARBC 4910 - Special Problems**

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### Archaeology

#### ARCH 2800 - Archaeological Science

3 hours (3;2)

Human prehistory and methods of scientific investigation; emphasizes archaeological cultures from early hominid sites in East Africa to entry of peoples into the New World. Course stresses methods of interdisciplinary research, including geology, paleoenvironmental reconstruction, paleodiet and artifact-faunal analysis. Labs employ artifacts and bones for study.

Prerequisite(s): None.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01; Lab (LF): \$2

#### ARCH 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARCH 3650 - Origins of Civilization

3 hours

Comparative study of the cultural, technological and ecological patterns of change leading to urban civilizations. Surveys the archaeological evidence for the domestication of plants and animals, and the emergence of villages. The art, architecture, economic and sociopolitical characteristics of early civilizations in the Near East and Mesoamerica are examined.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARCH 4620 - Topics in Archaeology

3 hours

Selected topics of interest and significance in archaeology. Subjects such as historic archaeology, Texas archaeology, New World archaeology, Old World archaeology and Meso-American archaeology are potential topics offered during different terms/semesters.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ARCH 4810 - Archaeological Field School

6 hours

Comprehensive training in site survey, excavation techniques, laboratory processing, restoration and analysis of archaeological materials through direct participation in an archaeological field project.

Prerequisite(s): ARCH 2800 or consent of department.

Held off campus; room and board fees may be required. Usually offered only during the summer months and based on the availability of field projects. This course is taught in cooperation with the Institute of Applied Science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### Art

#### ART 1200 - Art Appreciation

Art elements and principles applied to forms of visual expression for art majors.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 1300 - Art Appreciation for Non-Art Majors

(ARTS 1301)

Introduction to basic concepts and vocabularies of the visual arts worldwide, designed to expand aesthetic growth and involvement with the visual world.

Prerequisite(s): None.

For non-art majors only.

Core Category: Creative Arts or Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ART 1301 - Honors Art Appreciation**

History and analysis of Western art with reference to non-Western cultures.

Prerequisite(s): Acceptance into the Honors College.

May be substituted for ART 1200 or ART 1300.

Core Category: Component Area Option or Creative Arts Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ART 1440 - Design I

Combination of lecture and studio in a structured approach to 2-dimensional design, incorporating theory, concepts/terminology (point/line, shape, value, texture, color, space) and problem-solving techniques. Students are required to apply concepts and terminology both visually and verbally.

Prerequisite(s): None.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ART 1450 - Design II

Combination of lecture and studio in a structured approach to 3-dimensional design, incorporating theory, concepts/terminology (relief, free standing and linear forms; effects of light/color on 3-dimensional forms) and problem-solving techniques. Students are required to apply concepts and terminology both visually and verbally.

Prerequisite(s): ART 1440.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 1500 - Drawing I

3 hours (1:5)

Development of drawing skills based on art elements and concepts.

Prerequisite(s): None.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 1510 - Drawing II

3 hours (1:5)

Further development of drawing skills. Complex perspective, figure studies (including drawing from a live nude model), exploration of color, examination of contemporary and historic art, and development of independent research projects.

Prerequisite(s): ART 1500.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 1600 - Foundations: Perception and Translation

(ARTS 1316)

3 hours (1;5)

Focuses on the translation of visual phenomena using a variety of digital and analog drawing (mark-making) materials.

Prerequisite(s): None.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 1700 - Foundations: Space (Physical, Temporal and Virtual)

(ARTS 1312)

3 hours (1;5)

Explores multiple conceptions of space, ranging from physical objects to metaphorical space.

Prerequisite(s): None.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 1800 - Foundations: Narrative and Representation

(ARTS 1311)

3 hours (1;5)

Emphasizes multiple levels of representation ranging from the physical to the intangible.

Prerequisite(s): None.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 1900 - Foundations: Systems and Transformations

(ARTS 1317)

3 hours (1;5)

Critically analyzes multiple (choice- and research-based) perspectives of object- and image-making and challenges students to develop a personal framework in the processes of visual art and

Prerequisite(s): Two of the following: ART 1600, ART 1700, ART

Corequisite(s): One of the following: ART 1600, ART 1700, ART 1800.

Concurrent enrollment in lecture/laboratory components required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ART 2020 - Digital Tools and Technologies for Creative Practice

3 hours (0;6)

Introductory course exposing students to the language and application of digital media and resources for art and design practice. Introduces students to digital art-making and communication for art environments, social media, interactive media, and 2D/3D digital fabrication technology through the use of digital tools, including Adobe Creative Cloud applications, iMovie, and open source software. Students achieve competency in basic contributions to digital image culture through the use of various technology both in application and process.

Prerequisite(s): Two of the following: ART 1600, ART 1700, ART 1800, ART 1900.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 2350 - Art History Survey I

(ARTS 1303)

3 hours

Introduction to the development of art forms from the earliest prehistoric cave paintings through the late Middle Ages.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 2360 - Art History Survey II

(ARTS 1304)

3 hours

Art from the  $14^{th}$  century to the mid  $19^{th}$  century throughout the world.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 2370 - Art History Survey III

3 hours

An introduction to the development of global art forms from the midnineteenth century to the present.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

## ART 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### **ART 2910 - Special Problems**

1-3 hours

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ART 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ART 3030 - Digital Communication for Art and Creative Entrepreneurship

3 hours (0;6)

Investigation in the conceptual, technical and practical uses of digital tools for communication and promotion in the art and design fields. Students learn a diversity of techniques applied in art studio practice, social media practice, arts administration, design management, museology, and the creative economy at large using digital applications, computer programs and technology. Focuses on the creation of various digital products for arts promotion and entrepreneurship using applications in Adobe Creative Cloud, social media, and existing web-based platforms.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and ART 2020, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 3825 - Honors Information Visualization

3 hours

A freehand drawing and analytical design course for non-art majors.

Prerequisite(s): Honors student status and consent of Honors College.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 4120 - Art on Location

3 hours

Visits to major museums, galleries, showrooms and design studios. Research on selected art topics or projects. Course includes field trip and classroom lectures.

Prerequisite(s): ART 2350 and ART 2360, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4450 - Professional Internship

3-6 hours

In-training programs offered in cooperation with approved business and professional houses. Students wishing credit must have instructor approve plan. Term reports required of students and employers.

Prerequisite(s): Junior standing.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ART 4570 - Interdisciplinary Topics in Art

3 hours (0;0;3-6)

Study of advanced art topics, incorporating content related to multiple art disciplines. Topics include advanced issues in art direction/photography; typographic issues for fine artists; and parallels in art, culture and dress.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4614 - Art and Business

3 hours

Introduction to how art, business and economics intersect in a variety of settings, both for-profit (galleries, auction houses, artists' studios) and non-profit (museums, municipalities, universities and arts organizations). Following an introduction to basic terms and concepts, topics include art markets, philanthropy, legal and management issues related to the visual arts, branding and marketing in the arts, and art business models. Emphasizes real-life scenarios, case-studies, and problem-based learning to develop critical thinking and problem-solving skills, improve oral and written communications, and stimulate interest in the economics of art-related fields.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900, ART 2350, ART 2360, ART 2370.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4800 - Art Studio

3 hours (0;6)

Developing additional competence in special areas.

Prerequisite(s): Advanced standing and consent of instructor; specific studio courses may require additional prerequisites.

All may be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4813 - Computer Art Studio

3 hours (0;6)

Developing additional competence in special areas.

Prerequisite(s): Advanced standing and consent of instructor.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ART 4899 - Topics in Interdisciplinary Arts and Design Studies

3 hours

Special topics course for interdisciplinary art design studies majors. Advanced interdisciplinary study of art and design. Specific topics vary. Delivered as seminar consisting of assigned readings, class discussion, research, and projects.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900, ART 2350, ART 2360, ART 2370; 3 hours of advanced art history or 3 hours from IADS Menu 2.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ART 4910 - Special Problems

1-3 hours

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ART 4940 - Understanding Art Museums

3 hours

Explores the history, organization, functions and collections of art museums. Assignments in Dallas/Fort Worth museums required.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ART 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **Art Education**

#### ARTE 1750 - Visual Arts Integration

1 hour (0;2)

Exploration of planning for meaningful visual art integration within early childhood and elementary education, experimentation with a variety of media and processes, along with an appreciation of a variety of art forms.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTE 3753 - Art Education: Foundations

3 hours

Introduction to the field of art education.

Prerequisite(s): Pre-major status in art education or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTE 3770 - Art Education: Computer Art Applications

3 hours (0;6)

Exploration of the role of computers as a tool in visual arts studies. Emphasis placed on the visual, conceptual and practical use of computers as a medium for making art and connections to the practice of art education.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900, and pre-major status in art education; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ARTE 4750 - Art Education: Elementary Art Education Practices

3 hours (3;3)

Child development theory and creativity examined in relation to contemporary practice in the elementary art classroom. Partial field experience component required.

Prerequisite(s): ARTE 3753 and admission to the Art Education BFA program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTE 4760 - Art Education: Global Aesthetics

3 hours

Cross-cultural examination of philosophical aesthetic issues in art, focusing on the relationship of art to culture.

Prerequisite(s): ART 2350, ART 2360, ARTE 3753.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ARTE 4780 - Art Education: Secondary Art Education Practices

3 hours (3;3)

Preadolescent and adolescent creative development and theory examined in relation to contemporary art-making practice in the secondary art classroom.

Prerequisite(s): ARTE 3753, ARTE 4750, and admission to both the Art Education BFA program and the College of Education's Teacher Education program is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTE 4790 - Art Education: Inquiry and Dialogue about Art

3 hours

Understanding and finding meaning in artworks and artifacts within an authentic context through inquiry-based models.

Prerequisite(s): ARTE 4750, ARTE 4760, ARTE 4795.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTE 4795 - Topics in Art Education

3 hours

Selected topics related to the field of art education.

Prerequisite(s): ARTE 3753.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### **Art History**

# ARTH 4800 - Methodologies in the History of Art and Visual Culture

#### 3 hours

Study of major contributions to the development and practice of art history methodologies and visual arts studies (including theory and criticism). Taught as a seminar, with emphasis on research (bibliographies, papers) as well as class discussion based on weekly assigned readings and presentations.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; must have degree audit on file; sophomore or junior status within major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4801 - Topics in Art History

#### 3 hours

Selected topics in the history of art.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4802 - Art of Ancient Greece

#### 3 hours

Art of Ancient Greece and the Aegean from circa 3000 BC to the 1st century BC.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4803 - Art of Ancient Rome

#### 3 hours

Art of Ancient Rome during the Republican and Imperial eras, from 753 BC to AD 476.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4804 - Medieval Art

#### 3 hours

Art from fall of the Roman Empire to late Gothic international style.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4805 - Topics in Medieval Art

#### 3 hours

Selected topics in Medieval art from the 3rd century through the 15th century.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4806 - Topics in Renaissance Art

#### 3 hours

Selected topics in art of the Renaissance.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4807 - Topics in Seventeenth-Century Art

#### 3 hours

Selected topics in 17th-century art.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4808 - Eighteenth-Century Art

#### 3 hours

Survey of art from the 18th century.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4809 - Topics in Eighteenth-Century Art

#### 3 hours

Selected topics in 18th-century art, with emphasis on new perspectives and current scholarship.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ARTH 4810 - Nineteenth-Century Art

#### 3 hours

Survey of art of the 19th-century.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4811 - Topics in Nineteenth-Century Art

#### 3 hours

Selected topics in 19th-century art, with emphasis on new perspectives and current scholarship.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4812 - Modernism and the Visual Arts 1890-1945

#### 3 hours

Considers the emergence of "modernism" in the visual arts, exploring the development, interpretation, and use of works of modern art, while examining the historical, social, and cultural conditions of "modernity" in Europe and North and South America, from the latenineteenth century to 1945.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4813 - Postmodernism and the Visual Arts 1945– Present

3 hours

Considers the emergence of "postmodernism" in the visual arts, exploring the development, interpretation, and use of postmodern works, while examining the historical, social, and cultural conditions of "postmodernity" globally, ca. 1945 to the present.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4814 - Theories of Contemporary Art

3 hours

Selected theoretical and critical issues in recent art.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4815 - History of Interiors and Furniture II

3 hours

Introduction to the design, function and use of interiors and furnishings from the 19th century to the present.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4816 - American Art

3 hours

Survey of American art, with an emphasis on new perspectives and current scholarship.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4817 - Topics in American Art

3 hours

Selected topics in American art from the 15th century to the present, with emphasis on new perspectives and current scholarship.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4818 - Topics in Latin American Art

3 hours

Topics in Latin American art, ranging from the 16th century to 1945.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4819 - Topics in Native American Art

3 hours

Selected topics in the arts of Native North America from pre-contact times to the present.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4820 - Pre-Columbian Art of Mesoamerica

3 hours

Art and architecture of the Pre-Columbian cultures of Mesoamerica.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4821 - Topics in Pre-Columbian Art

3 hours

Selected topics in the Pre-Columbian art of the Americas.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4822 - African Art

3 hours

Study of the aesthetics of art objects and artifacts from Sub-Saharan Africa and their relationship to the social, political, religious and economic factors that give rise to their cultural significance.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4823 - Asian Art

3 hours

Survey of the art of India, China, and Japan from prehistoric to modern times, including architecture, sculpture, painting, ceramics and printmaking.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4824 - Topics in Asian Art

3 hours

Selected topics in the arts of Asia.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4825 - Topics in Islamic and/or Middle Eastern Art

hours

Selected topics in the arts of the Islamic and/or Middle Eastern cultures.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4840 - Topics in the History of Crafts

3 hours

Selected topics in the history of crafts.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4841 - History of Interiors and Furniture I

3 hours

Introduction to the design, function and use of furniture and interiors from prehistory through the 19th century.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4842 - History of Communication Design

3 hours

Provides economic, political, social and technological perspectives on the work that has been created and disseminated by designers of visual communications, particularly over the course of the last 125 years, in a manner that makes their endeavors relevant to the design world of today and to contemporary society. Students gain an understanding of the major movements, styles and figures in the world of visual communication design that have emerged around the world since the latter portion of the 19th century. Significant emphasis is placed on how and why a variety of decision-making processes have informed and influenced the discipline in theory and practice during this span of time, and on the impact that its past developments are having and might have on current trends.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ARTH 4843 - History of Photography

3 hours

Survey of the history of photography, including developments in photographic technologies, practices, theory and analysis.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ARTH 4844 - History of Prints**

3 hours

Survey of the history of prints from the Renaissance to the 20th century.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ARTH 4845 - Topics in the History of Architecture and Design

3 hours

Selected topics in the history of architecture and design.

Prerequisite(s): ART 2350 and ART 2360.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ARTH 4848 - Art History Senior Seminar

3 hours

Introduction to research methodologies and practices of scholarship relevant to the study of a topic in art history. Delivered as a seminar consisting of assigned readings, class discussion, and oral and written presentations.

Prerequisite(s): ART 2350, ART 2360 and ART 2370; ARTH 4800; 9 hours of advanced art history; senior status within major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **Astronomy**

#### PHYS 1052 - The Solar System

(ASTR 1404 or PHYS 1404)

3 hours (3:2)

History of astronomy and the physical properties of the earth, moon, planets and minor bodies. Includes weekly outdoor and indoor laboratory exercises.

Prerequisite(s): None.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

#### PHYS 1062 - Stars and the Universe

(ASTR 1403 or PHYS 1403)

3 hours (3;2)

Properties of stars and stellar systems and a study of the origin, evolution and future of the universe. Includes weekly outdoor and indoor laboratory exercises.

Prerequisite(s): None.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

# Audiology and Speech-Language Pathology

#### ASLP 1040 - American Sign Language I

(SGNL 1301 or SGNL 1401)

3 hours

Introduction to American Sign Language. Development of a beginning vocabulary of approximately 600-plus signs. Principles of linguistics and grammatical structures. History and current trends of ASL. Development of basic expressive skills using the manual alphabet, numbers and signs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### ASLP 1050 - American Sign Language II

(SGNL 1302 or SGNL 1402)

3 hours

Expansion of basic vocabulary to approximately 1,200-plus signs. Practical application of the linguistics and grammar of ASL. Introduction to deaf culture. Development of expressive fluency in finger-spelling and signing. Primary focus upon receptive recognition and comprehension of simple situational conversations in ASL.

Prerequisite(s): ASLP 1040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ASLP 2015 - Nature of Communication Disorders**

3 hours

Nature and characteristics of speech-language and hearing impairments, including disorders prevalent in multicultural populations. Emphasis on recognition of symptoms, referral sources and suggested treatment programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ASLP 2020 - Phonetics**

3 hours

The international phonetic alphabet, basic articulatory acoustic phonetic principles, pronunciation rules, segmental and suprasegmental features, and in-class practice of phonetic transcription.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### ASLP 2040 - American Sign Language III

(SGNL 2301)

3 hours

Expansion of vocabulary to approximately 1,800-plus signs. Provide and receive natural conversational information in ASL in a variety of contextual settings. Exposure to deaf community events and interaction with deaf adults.

Prerequisite(s): ASLP 1050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### ASLP 2050 - American Sign Language IV

(SGNL 2302)

3 hours

Development of receptive and expressive vocabulary to approximately 2400-plus signs. Spontaneous utilization of ASL at conversational rates with fluent signers. Translation of ASL idiomatic expressions into English. Signing of English idioms into conceptually based ASL. The deaf perspective of bilingual and bi-cultural issues.

Prerequisite(s): ASLP 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ASLP 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## ASLP 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 3010 - Clinical Methods in Audiology and Speech-Language Pathology I

3 hours

Introduction to the processes involved in the assessment, diagnosis, and remediation of speech, language and hearing disorders. Factors affecting these processes, such as service delivery, work settings, cultural and linguistic diversity, and public policy are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 3025 - Anatomical Bases of Speech and Hearing

3 hour

Anatomy and physiology of the articulatory, phonatory, respiratory and auditory systems involved in speech production and perception.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### ASLP 3030 - Speech and Hearing Sciences

3 hours

Fundamental processes underlying the production and perception of speech, and the physical and psychological aspects of sound and their measurement.

Prerequisite(s): ASLP 2015, ASLP 2020, MATH 1680 or MATH 1681 (or equivalent), BIOL 1112 (or equivalent), PHYS 1270 or PHYS 1315 (or equivalent). Student earning less than a C in any one of these courses will be allowed to retake that course only once.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ASLP 3035 - Language Development**

3 hours

Language development from birth through adolescence, with consideration of current theories of acquisition, pertinent research and issues related to cultural diversity.

Prerequisite(s): ASLP 2015, ASLP 2020, MATH 1680 (or equivalent), BIOL 1112 (or equivalent), PHYS 1270 or PHYS 1315 (or equivalent). Student earning less than a C in any one of these courses will be allowed to retake that course only once.

#### ASLP 3040 - Introduction to Audiology

3 hours

Overview of the field with emphasis on disorders of the auditory system and assessment of hearing sensitivity.

Prerequisite(s): ASLP 3030.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4035 - Speech Sound Disorders

3 hours

Introduction to the nature, causes and characteristics of articulation and phonological disorders; principles of evaluation and remediation.

Prerequisite(s): ASLP 2020, ASLP 3035.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4040 - Introduction to Language Disorders

3 hours

Nature, causes and characteristics of language disorders in children and adults. Principles of evaluation and remediation of language problems.

Prerequisite(s): ASLP 3035 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4045 - Basic Rehabilitative Audiology

3 hours

Methods of improving communication skills of the hearing impaired through speech and language training, amplification, speech reading, auditory training and counseling.

Prerequisite(s): ASLP 3040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## ASLP 4050 - Neurological Bases of Speech and Hearing

3 hours

Structure and function of the human nervous system as related to speech and language learning and usage. Emphasis on the reception and integration of sensation and the production of verbal and nonverbal responses.

Prerequisite(s): ASLP 2015, ASLP 2020, ASLP 3025, MATH 1680 (or equivalent), BIOL 1112 (or equivalent), PHYS 1270 or PHYS 1315 (or equivalent). Student earning less than a C in any one of these courses will be allowed to retake that course only once.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4060 - Clinical Methods in Audiology and Speech-Language Pathology II

3 hours (1;0;2–3)

Advanced principles and procedures of clinical service delivery in speech-language pathology and audiology. Includes guided observation, discussion and learning activities with emphasis on integration and application of knowledge from previous ASLP courses.

Prerequisite(s): ASLP 2015, ASLP 2020, ASLP 3010, MATH 1680 (or equivalent), BIOL 1112 (or equivalent), PHYS 1270 or PHYS 1315 (or equivalent). Student earning less than a C in any one of these courses will be allowed to retake that course only once.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## ASLP 4065 - Clinical Practicum in Speech-Language Pathology/Audiology II

3 hours (1;0;2–3)

Students observe/participate in actual clinical service delivery to clients of the UNT Speech and Hearing Center, working with speech-language and audiology clinical faculty and graduate students. SPHS 4065 should be taken in the last semester before graduation.

Prerequisite(s): ASLP 4060.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## ASLP 4070 - Topics in Speech-Language Pathology and Audiology

3 hours

Investigation, analysis and discussion of a significant, contemporary topic in the area of speech-language pathology and audiology.

Prerequisite(s): ASLP 3010, ASLP 3035.

May be repeated for credit as topics vary up to 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4075 - Undergraduate Clinical Practicum in Speech-Language Pathology

3 hours (1;2)

ASLP 4075 consists of two clinically based experiences: 1) classroom instruction for 2 hours per week on clinical policies and procedures, and 2) clinical practicum assignment involving a client and/or group treatment experience in the UNT Speech and Hearing Center for 2-4 hours per week, under the supervision of a UNT clinical supervisor.

Prerequisite(s): ASLP 4060

Permission to enroll in this class is required by the ASLP department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### ASLP 4900 - Special Problems

1-3 hours

Problem must be approved by department director.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **ASLP 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Aviation Logistics**

#### **LGAV 3100 - Introduction to Aviation Industry**

3 hours

Introduction to the aviation discipline including an investigation of the key role the aviation industry plays in the global transportation network. Emphasis on how aviation management impacts current business practices in a globalizing economy. The importance of aviation transportation networks on business practice is examined.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

#### **LGAV 3110 - Aviation Maintenance Programs**

3 hours

Basics of aviation maintenance management. Familiarization with functions and responsibilities of aviation maintenance managers. Topics include managing maintenance; complying with regulatory, legal and technical requirements of aviation maintenance; and defining safety concepts of the aviation maintenance industry. Emphasis on the identification of optimum applications used in aviation maintenance.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

#### LGAV 3120 - Aviation Safety Systems

3 hours

A safety philosophy and framework to develop the tools and method needed to understand, construct and manage proactive safety systems. Topics include basic concepts of quality management, risk management and process-based risk assessment in aviation. Special attention is given to the tools and analysis needed to establish reliable, repeatable processes that contribute to effective decision making that impact aviation safety.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LGAV 3130 - Air Cargo Planning and Control

3 hours

Examination of the basics of air cargo operations and the economic principles facing air transportation after deregulation. Topics include how scheduled and unscheduled airlines handle air cargo services including containerization, deregulation, hazardous material handling, and marketing. Special emphasis on the economics of air transportation and the analysis of distribution costs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### LGAV 3140 - Air Passenger Planning and Control

3 hours

Management of air passenger operations in the aviation industry including fleet operations and passenger and crew scheduling. Topics include optimizing flight routing, flight networks and fleet diversity; scheduling air/ground crew assignments and gate assignments; and understanding the impact of hub and spoke systems and maintenance locations on air passenger operations. Emphasis on developing analytical tools to effectively manage air passenger operations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LGAV 3150 - Transportation Regulation and Trade Compliance

3 hours

The legal structure of transportation. Addresses international, federal, local and state statutes as well as the regulatory statutes and case law necessary for the conduct of commercial transportation operations in a globalized economy. Addresses the formulation of transportation and trade policy. Topics include regulatory statutes and compliance, customs and trade restrictions, antitrust, international trade law as it relates to transportation, contracts, insurance and liability, supply chain regulations and case law.

Prerequisite(s): BLAW 3430.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LGAV 4100 - Airport and Infrastructure Planning and Control

3 hours

Comprehensive inquiry into the management of airport operations. Topics include the history of airports, the roles of government agencies, and the impact of deregulation and wide-bodied aircraft on airports. Special attention is given to the management of the airport planning process including the general Federal Aviation Regulations pertaining to airport management and the role of government airport planning and development.

Prerequisite(s): LGAV 3100, LGAV 3130, LGAV 3140.

Capstone course to be taken during the last term/semester of course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### LGAV 4500 - Human Factors and Cockpit Resource Leadership

3 hours

Comprehensive inquiry into the Advanced Qualification Programs (AQP) used by air carriers to develop programs for the training of flight crews. Focus on Crew Resource Management (CRM) and Line of Flight Training (LOFT) with specific emphasis on avoiding errors, trapping errors before they are committed, and mitigating the consequences of errors.

Prerequisite(s): None.

Capstone course to be taken during the last term/semester of course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### LGAV 4810 - Special Topics in Aviation Logistics

3 hours

Investigation, analysis and discussion of a variety of topics that are important in aviation logistics. Topics may include air service development, human factors, air service operations, revenue management, scheduling and network planning, fleet management, economic development, environmental impact, transportation security, congestion management, air traffic flow management, transportation demand and forecasting.

Prerequisite(s): Completion of 9 hours of upper level LGAV and/or LSCM courses.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### LGAV 4900 - Special Problems

1-3 hours

Supervised study on a selected logistics and aviation logistics topic. Typically requires a research paper and significant independent study.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

### LGAV 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **Bachelor of Applied Arts and Sciences**

#### BAAS 3000 - Pathways to Civic Engagement

#### 3 hours

Promotes understanding of self in relation to theory and practice of civic engagement. Topics include the history of civic engagement and civil society, earning and spending social capital, voluntary sector engagement, trends in civic engagement in the U.S., and social issues. This course has a service learning requirement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

#### BAAS 3020 - Fundamentals of Inquiry and Discovery

#### 3 hours

Focuses on how to evaluate information and apply some of the methods commonly used by social scientists from a variety of disciplines to answer questions about social life. Topics include measuring concepts, determining the most appropriate method of data collection, constructing a survey instrument, selecting a sample, conducting basic data analysis, presenting findings and addressing the ethical and political issues associated with formal research.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### BAAS 4100 - Managing a 21st Century Career

#### 3 hours

In this capstone experience, students will integrate knowledge gained through their core courses, technical backgrounds, and advanced focus areas as they develop a plan for engaging as professionals and citizens in a rapidly changing world. Skills in teamwork, social awareness, personal awareness, and critical thinking will be further honed as students make connections between knowledge areas and learn to match their skills to careers, now and in the future. They will work with challenging social and business issues, applying decision-making strategies as they develop effective recommendations for action. Students will explore personal branding as they develop their professional identity. Serves as the capstone course for the B.A.A.S. degree.

Prerequisite(s): BAAS 3000, BAAS 3020, and senior standing.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

### **Behavior Analysis**

#### **BEHV 2110 - Behavior Principles and Personal Relations**

3 hours

Describes behavior principles that underlie social interactions among individuals. Identifies behavior patterns conducive to satisfying and socially productive interactions and patterns likely to be destructive to others as well as to oneself. Makes use of behavior principles to understand how behavior patterns change in relation to the behavior of others in the social environment. Students use behavior principles to understand the role of their own behavior in productive and in destructive interactions.

Prerequisite(s): None.

May not be substituted for any course required for major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### BEHV 2300 - Behavior Principles I

3 hours

Behavior is examined as a part of the natural world, with primary focus on principles describing relations between operant behavior and its consequences. The principles of reinforcement, extinction, differential reinforcement and punishment are related to naturally occurring events and to experimental and intervention procedures. Basic measurement concepts introduced.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### **BEHV 2700 - Behavior Principles II**

3 hours

Behavioral principles describing relations between behavior and antecedents. Principles of operant stimulus control, discrimination and generalization, stimulus equivalence and establishing operations are related to laboratory procedures, to occurrence in everyday life and to intervention techniques. Principles of respondent (Pavlovian) conditioning related to laboratory procedures, everyday occurrence and their applications in behavioral interventions.

Prerequisite(s): BEHV 2300 or BEHV 3150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## BEHV 3000 - Applied Behavior Analysis and Autism I: Basic Techniques

4 hours (3;1)

Describes basic treatment techniques involved in behavioral treatment of children with autism. Students learn behavioral characteristics and etiology of autism and the history of applied behavior analysis in autism, and complete extensive supervised practical training.

Prerequisite(s): BEHV 2300 or BEHV 3150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **BEHV 3150 - Basic Behavior Principles**

3 hours

Basic principles underlying behavior change in all fields; experimental underpinnings of science of behavior; focus on the relations among events that account for the acquisition and maintenance of individual behavior.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### BEHV 3200 - Science, Skepticism and Weird Behavior

3 hours

Utilizes scientific critical thinking to examine the causes of various strange phenomena, including alleged paranormal events, magic, superstition, mystery illnesses, bogus therapies and pseudoscience. Seeks to explain why people believe and do weird things. Provides training in basic scientific thinking about causal explanations and in understanding the scientific method as applied to interesting everyday phenomena.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **BEHV 3440 - Data Collection and Analysis**

4 hours (3;1)

Methods of observing and measuring behavior and for analyzing behavioral data. Topics include dimensional properties of behavior, techniques of direct observation, methods of summarizing data, preparing graphs and analyzing graphed data. Introduces single-subject experimental designs including reversal, multiple baseline and multi-element designs.

Prerequisite(s): BEHV 2700; BEHV 2300 or BEHV 3150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **BEHV 3550 - Behavior Change Techniques**

4 hours (3;1)

Designing and implementing behavior change techniques. Topics include shaping, discrimination training, instructional and imitation training, and differential reinforcement. Behavior change techniques will be applied in such settings as classrooms, institutions, workshops and group homes and their effectiveness evaluated.

Prerequisite(s): BEHV 2700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **BEHV 3660 - Survey of Applied Behavior Analysis** Literature

3 hours

Comprehensive survey of recent literature in multiple areas of application. Topics include applications in classroom behavior, skill acquisition, developmental disabilities, rehabilitation, interpersonal behavior, autism, community behaviors, family interactions, organizational behavior management and others.

Prerequisite(s): BEHV 2300 or BEHV 3150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## BEHV 3770 - Building Skills with Behavior Technology

4 hours (3;1)

Acquisition of complex repertoires for persons with developmental disabilities. Topics include selection of target behaviors, planning intervention procedures, evaluating results and ensuring maintenance of skills. Ethical and aesthetic considerations.

Prerequisite(s): BEHV 3440 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **BEHV 3996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

## BEHV 4000 - Applied Behavior Analysis and Autism II: Program Development

4 hours (3;1)

Describes curricular, research and development issues involved in the scientist-practitioner model of applied behavior analysis interventions for young children with autism. Students design data collection systems, identify variables affecting behavior, and evaluate program efficacy. Students conduct upper-level program design and implementation, and complete extensive practical training.

Prerequisite(s): BEHV 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### BEHV 4010 - Functional Analysis and Problem Behavior

4 hours (3;1)

Introduction to function-based treatment approaches for problem behavior. Topics include anecdotal assessment, descriptive assessment, experimental analysis and various courses of treatment derived from functional assessment, with emphasis on the importance of consistency between procedures and the functional properties of problem behavior.

Prerequisite(s): BEHV 3440 or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### BEHV 4310 - Behavior Principles and Self-Management

3 hours

Uses behavior principles to understand and deal with problems in self-management. Self-assessment of goals, options and necessary trade-offs is followed by a behavior analysis of the nature of the self-management problem. Each student applies behavioral principles to develop and implement an individual self-management plan to reach a particular short-term goal.

Prerequisite(s): BEHV 2300 or BEHV 3150.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### **BEHV 4400 - Organizational Behavior Management**

3 hours

Describes theory and techniques of applying behavior analysis principles to solve performance problems and design more effective workplaces. Focuses on pinpointing critical work behaviors, measuring work performance, analyzing the contingencies responsible for the performance, implementing and evaluating intervention programs involving stimulus control, feedback and reinforcement systems to improve employee performance. Discusses organizational behavior management as a philosophy and as a tool for improving job performance in any organization.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### BEHV 4750 - Capstone Course in Applied Behavior Analysis

3 hours

Integrates and extends basic behavioral principles and behavior change procedures to address professional issues including behavioral assessment and goal development, selection of appropriate behavior change procedures, ethical and legal responsibilities, and technology transfer. Prepares students for professional certification in applied behavior analysis.

Prerequisite(s): Senior status and a minimum of 18 hours in behavior analysis.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **BEHV 4800 - Topics in Behavioral Applications**

3 hours

Focus is on the complex relations between behavior and the environment in specific kinds of settings. Topics include applications in institutional settings and work environments in public and private sectors, business and industry.

Prerequisite(s): BEHV 2300 or BEHV 3150.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **BEHV 4900 - Special Problems**

1-3 hours

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### BEHV 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# Bilingual and English as a Second Language Education

## EDBE 2050 - Understanding and Teaching Multilingual Students

3 hours

An intersectional approach to understand and conceptualize the histories, backgrounds, identities, and current realities of multilingual students in US educational contexts. Critical theoretical, conceptual, and historical perspectives around multilingualism and multilingual learners will provide a foundation for engaging these same learners through empowering, humanizing, and research-based pedagogies, which will be discussed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDBE 2060 - Latina/o/x Children's and Young Adult Literature for the Elementary Multilingual Classroom

3 hours

The integration of children's picture books and Young Adult (YA) literature that has succinct connections to the histories and lived experiences of Latina/o/x youth is an important curricular component that provides both context and platforms for the elementary multilingual classroom. Students will be exposed to picture books and YA literature that focus on the realities, identities, and complexities of Latina/o/x youth, families, and communities, and develop learning experiences that are guided by these same picture books and YA literature.

Prerequisite(s): None.

Requires field hours at an offsite location; Course taught in Spanish

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDBE 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDBE 3050 - Teaching English as an Additional Language

3 hours

Focuses on the methods and techniques of teaching English as an additional language and assessing emergent bilinguals in elementary and secondary schools. Using asset-based approaches, the course will examine the use of bilingual learners' strengths in the classroom to design and implement meaningful and authentic lessons, assessments, and classroom activities that advance the students' knowledge of the English language and the content areas. Also explores educational structures and pedagogical methodologies that promote language and literacy development entered in the students' family and community traditions.

Prerequisite(s): EDBE 2050

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDBE 3060 - Biliteracy in Bilingual Classrooms

3 hours

Explores theories, approaches and techniques related to literacy and biliteracy development for multicultural and multilingual children. Emphasizes classroom environments that promote additive bilingualism. Students will gain an understanding of the role of teachers and administrators in the implementation of literacy and

biliteracy for multicultural and multilingual children. Students will also explore current research related to methods, strategies, and materials for promoting students' strong literacy and biliteracy skills. Students will apply theories, research, and experience to design native language instruction and assessments in bilingual classrooms.

Prerequisite(s): EDBE 2060

Course taught in Spanish.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDBE 3470 - Foundations of Bilingual and English as a Second Language Education

3 hours

Examination of philosophies and theoretical underpinnings of bilingual and ESL education, including a review of historical antecedents of bilingual education and evaluation of federal and state language policies governing the education of language-minority children. Required for students seeking EC–6 certification with specialization in bilingual or ESL education and for all students seeking 4–8 certification.

Prerequisite(s): None.

May be taken concurrently with EDBE 3480.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDBE 3480 - Bilingualism/Multiculturalism for English Language Learning: Issues and Perspectives

3 hours

Study of the bilingual/ESL learner; perspectives on multiculturalism; discussions of cognitive, social and affective factors impacting second language development; insights into education in a pluralistic society. Three lecture hours a week. Required for students seeking EC–6 certification with specialization in bilingual or ESL education and for all students seeking 4–8 certification.

Prerequisite(s): None.

May be taken concurrently with EDBE 3470.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDBE 3600 - Dual Language Bilingual Education: Programs, Policy and Practice

3 hours

Examines the rich and complex historical perspectives, inequities at the levels of policy and practice, and types of programs in multilingual education. Specific attention will be placed upon Dual Language Bilingual Education (DLBE) programs due to their rapid growth at the local, state, and national levels, promising academic achievement results, and culturally sustaining pedagogies that are being integrated into these programs.

Prerequisite(s): EDBE 3060 Corequisite(s): EDBE 3650

Must be admitted to teacher education program: Must be taken in Block A; Requires field hours at an offsite location; Course taught in Spanish

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDBE 3650 - Teaching and Learning in the Bilingual Classroom

3 hours

Examines research-based strategies, methods, and materials to teach the different content areas in the bilingual classroom. Special attention is given to the affective, linguistic and academic needs of bilingual students in grades Pre-K through 5. Using an asset-based paradigm to linguistic diversity, this course acknowledges the value of home and community languages and connects these perspectives to classroom instruction and assessment for bilingual learners.

Prerequisite(s): Admission to teacher education program; EDBE 3060.

Corequisite(s): EDBE 3600

Must be taken in Block A. Course taught in Spanish

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### EDBE 4470 - Curriculum and Assessment for Bilingual/ ESL Education

3 hours

Examination of the organization of curriculum for second language learners with special focus on testing and evaluation procedures appropriate for bilingual and ESL classrooms; study of formal and informal assessment of language proficiency for instructional purposes and use of standardized achievement tests. Required for students seeking EC–6 or 4–8 generalist certification with specialization in bilingual or ESL education.

Prerequisite(s): EDBE 3470, EDBE 3480. Admission to Teacher Education or consent of department.

May be taken concurrently with EDBE 4490.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDBE 4480 - Bilingual Approaches to Content-Based Learning

3 hours (3:0:1.5)

Study of appropriate first language usage in bilingual classrooms, focusing on different core curriculum areas, methods and materials and review of language distribution strategies. Focus on responsive instruction that makes use of effective communication techniques and instructional strategies that actively involve students in the learning process. Required for students seeking EC–6 or 4–8 generalist certification with specialization in bilingual or ESL education. Requires 1.5 hours per week field experience in a bilingual education classroom. Language of instruction is Spanish.

Prerequisite(s): EDBE 3470, EDBE 3480. Admission to Teacher Education or consent of department and successful completion of departmental proficiency examination in Spanish.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDBE 4490 - Teaching ESL EC-12: Instructional Strategies and Resources

3 hours (3;0;1.5)

Study of methods and techniques of teaching English as a second language in elementary and secondary schools. Language development techniques and resources for students at different levels of English proficiency. Focus on helping students to develop strategies (consistent with state standards for language and content learning) that can improve the English language proficiency and grade level subject matter knowledge of English language learners. Required for students seeking EC–6 generalist certification with specialization in bilingual or ESL education or 4-8 certification with mathematics/ESL, science/ESL, social studies/ESL or reading/ELA/ESL or special education.

Prerequisite(s): Admission to teacher education or consent of department.

May be taken concurrently with EDBE 4470.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDBE 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Biochemistry

#### **BIOC 2900 - Introduction to Biochemical Research**

1\_3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): CHEM 1430 (may be taken concurrently) and consent of instructor.

For elective credit only; may not be substituted for required chemistry courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOC 2910 - Introduction to Biochemical Research**

1-3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): CHEM 1430 (may be taken concurrently) and consent of instructor.

For elective credit only; may not be substituted for required chemistry courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOC 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOC 3621 - Principles of Biochemistry**

3 hours

Chemistry of biomolecules; amino acids, proteins, enzymes, carbohydrates, lipids, nucleotides, nucleic acids, vitamins and coenzymes; metabolism of biomolecules, generation and utilization of energy.

Prerequisite(s): Completion of foundation requirements for your declared biological sciences major. If major is outside of biological sciences, must complete foundation requirements for the biology BA. If these requirements are not met, department consent is required.

May not be used in the degree if credit is earned in BIOC 4540 or BIOC 4550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOC 3622 - Principles of Biochemistry Laboratory**

1 hour (0;4)

Laboratory techniques for BIOC 3621.

Prerequisite(s): None.

Corequisite(s): BIOC 3621.

May not be used in the degree if credit is earned in BIOC 4560.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### BIOC 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOC 4540 - Biochemistry I

3 hours

Chemistry and biochemistry of carbohydrates, lipids, amino acids and proteins, and nucleic acids; biochemical energetics, enzyme catalysis, vitamins and coenzymes, and their interrelationships in energy-producing cycles and pathways.

Prerequisite(s): Completion of Foundation requirements for the declared biological sciences major and C or higher in CHEM 2380. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in CHEM 2380 must be completed. If these requirements are not met, department consent is required.

May not be used in the degree if credit is earned for BIOC 3621.

May not be taken more than twice or repeated at the graduate level as BIOC 5540.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOC 4550 - Biochemistry II

3 hours

Continuation of BIOC 4540. Metabolic pathways in biosynthesis and degradation of lipids, nucleic acids, proteins and carbohydrates; photosynthesis, nitrogen cycle, and metabolic regulation.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOC 4540. If major is outside of biological sciences, completion of foundation requirements for the biology BA and C or higher in BIOC 4540 is required. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOC 5550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOC 4560 - Biochemistry Laboratory**

2 hours (1;3)

Analysis and characterization of amino acids, peptides, enzymes, lipids, nucleic acids, carbohydrates, and metabolic pathways and processes. Techniques include a variety of chromatographic methods, electrophoresis, UV-vis spectroscopy and radiochemistry.

Prerequisite(s): BIOC 4540 (may be taken concurrently).

May not be used in the degree if credit is earned for BIOC 3622. May not be repeated at the graduate level as BIOC 5560.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## BIOC 4570 - Biochemistry and Molecular Biology of the Gene

3 hours

Mechanisms and regulation of genetic expression, chromosome replication, mutagenesis and DNA repair, and gene cloning in prokaryotic and eukaryotic systems.

Prerequisite(s): Completion of Foundation requirements for your declared Biological Sciences major and C or higher in BIOL 3451/3452 or BIOL 3510/3520 or BIOC 4540. If major is outside of Biological Sciences, must complete foundation requirements for the Biology BA and C or higher in BIOL 3451/3452 or BIOL 3510/3520 or BIOC 4540. If you do not meet these requirements, department consent is required.

Same as BIOL 4570.

May not be used to satisfy minor requirements in chemistry.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOC 4580 - Molecular Biology and Biotechnology Laboratory

2 hours (0;5)

Experiments in recombinant DNA techniques, gene regulation and other areas of molecular biology.

Prerequisite(s): BIOC 4570 (may be taken concurrently) or BIOL 3770 (may be taken concurrently), or consent of department.

Same as BIOL 4580.

May not be used to satisfy major or minor requirements in chemistry. May not be repeated at the graduate level as BIOC 5580 or BIOL 5580.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOC 4900 - Special Problems**

1-3 hours

Prerequisite(s): CHEM 3220 or equivalent, and consent of directing professor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOC 4910 - Special Problems**

1-3 hours

Prerequisite(s): CHEM 3220 or equivalent, and consent of directing professor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## **BIOC 4930 - Special Problems**

1–3 hours

Individual study without laboratory.

Prerequisite(s): Junior or senior standing and approval of supervising faculty member and/or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOC 4940 - Honors Research in Biochemistry

3 hours

Advanced original independent research supervised by a faculty member in the biological sciences. For students interested in pursuing careers in research or medicine.

Prerequisite(s): 3.25 GPA or better in the sciences, at least 12 hours of biology and 16 hours of biochemistry/chemistry, junior or senior standing and departmental approval.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### BIOC 4950 - Honors Thesis in Biochemistry

3 hours

Continuation of BIOC 4940 involving advanced original independent research culminating in a written report supervised by a faculty member in the biological sciences. The results are written in standard thesis format and presented orally. For students interested in pursuing careers in research or medicine.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOC 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Biological Sciences**

#### **BIOL 1000 - Discover Life Science**

3 hours

An introduction to topics in the life sciences. Explores different areas of life science research and applications.

Prerequisite(s): None.

Recommended for students interested in majors in the life sciences. Topics vary.

**Core Category:** Component Area Option Category I Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 1082 - Biology for Educators**

3 hours (3;3)

Develop a meaningful and functional command of key biological concepts, an understanding of the interrelationships among all living things, and a correlation between what pre-service teachers are required to learn and what they are required to teach. Includes laboratory. A general biology course with laboratory designated for elementary and middle school education majors seeking teacher certification.

Prerequisite(s): None.

This course may not be used to satisfy the laboratory science requirement for majors in the College of Liberal Arts and Social Sciences.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 1112 - Contemporary Biology**

(BIOL 1308/BIOL 1108; BIOL 1408)

3 hours (3;3)

Study of major theories and principles of biology pertaining to cell and molecular biology, form and function of tissue and organ systems, and principles of ecology as they relate to animal and plant diversity and evolution; ethical and social issues relating to humans as components of living systems. Includes laboratory.

Prerequisite(s): None.

May not be counted toward a major or minor in biology.

**Core Category:** Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 1132 - Environmental Science**

(BIOL 2306/2106; BIOL 2406)

3 hours (3;2)

Interdisciplinary approach to understanding basic concepts in environmental science including critical scientific thought, biodiversity, resource management, pollution, global climate change, resource consumption and population growth. Emphasis on how these concepts affect and are affected by human society. Includes laboratory.

Prerequisite(s): None.

May not be counted toward a major or minor in biology.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

### **BIOL 1142 - Microbes and Society**

3 hours (3;3)

Survey of microbiology and the uses and the impacts of microorganisms on human society, including food, role in ecosystems, and disease. Includes laboratory.

Prerequisite(s): None.

May not be counted toward major or minor in biology.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### **BIOL 1710 - Biology for Science Majors I**

(BIOL 1306; BIOL 1406)

3 hours

An integrated approach to cell and molecular biology with an emphasis on biological chemistry, cell structure and function, Mendelian and molecular genetics, evolutionary biology.

Prerequisite(s): For students preparing for advanced study in the biological sciences.

For students preparing for advanced study in the biological sciences.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### BIOL 1711 - Honors Biology for Science Majors I

3 hours

An integrated approach to cell and molecular biology with an emphasis on biological chemistry, cell structure and function, Mendelian and molecular genetics, evolutionary biology.

Prerequisite(s): High school pre-AP/AP biology and chemistry are highly recommended.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### BIOL 1720 - Biology for Science Majors II

(BIOL 1307; BIOL 1407)

3 hours

An integrated approach to the anatomical, physiological and functional aspects of nutrition, gas exchange, transport, reproduction, development, regulation, response and ecology of microorganisms, plants and animals.

Prerequisite(s): For students preparing for advanced study in the biological sciences.

For students preparing for advanced study in the biological sciences.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### BIOL 1722 - Honors Biology for Science Majors II

3 hours

An integrated approach to the anatomical, physiological and functional aspects of nutrition, gas exchange, transport, reproduction, development, regulation, response and ecology of microorganisms, plants and animals.

Prerequisite(s): High school pre-AP/AP biology and chemistry are highly recommended.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 1750 - Introductory Biology Research Laboratory I

2 hours (1:5)

Research-based course in which students learn experimental approaches and techniques as applied to biological research. Students generate novel biological data that contributes to answering a larger biological research question. Primary focus is on wet lab techniques and explorations.

Prerequisite(s): Concurrent enrollment in BIOL 1710 and consent of department.

**Core Category:** Component Area Option Category I (when combined with BIOL 1755)

#### **BIOL 1755 - Introductory Biology Research Laboratory II**

1 hour (1;3)

Research-based course in which students learn experimental approaches and techniques as applied to biological research. Students generate novel biological data that contributes to answering a larger biological research question. Primary focus is on wet lab techniques and explorations.

Prerequisite(s): BIOL 1750, concurrent enrollment in BIOL 1720 and consent of department.

**Core Category:** Component Area Option Category I (when combined with BIOL 1750)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 1760 - Biology for Science Majors Laboratory**

(BIOL 1106/1107; BIOL 1406/1407)

2 hours (0;5)

Laboratory techniques and research methods for introductory biology.

Prerequisite(s): Credit for or concurrent enrollment in BIOL 1710 or BIOL 1711 or BIOL 1720 or BIOL 1722.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### BIOL 1761 - Honors Biology for Science Majors Laboratory

2 hours (0;5)

Laboratory techniques and research methods for introductory biology.

Prerequisite(s): Credit for or concurrent enrollment in BIOL 1711 or BIOL 1722.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 2041 - Microbiology**

(BIOL 2321; BIOL 2421)

3 hours

Survey of the microbial world; classification, ecology, morphology and physiology of eukaryotic and prokaryotic microorganisms.

Prerequisite(s): C or higher in the following: BIOL 1710, either BIOL 1750 or BIOL 1760 (may be taken concurrently), and CHEM 1420 (may be taken concurrently).

Corequisite(s): Concurrent enrollment in BIOL 2042 is recommended but not required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 2042 - Microbiology Laboratory**

(BIOL 2121)

1 hour (0;4)

Laboratory techniques in general microbiology. Survey of microorganisms including bacteria, fungi, protozoa, and algae. Culture, staining and identification of bacteria.

Prerequisite(s): C or higher in the following: BIOL 1750 or BIOL 1760, and BIOL 2041 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 2140 - Principles of Ecology**

3 hours

Ecological and evolutionary approach to understanding distribution, abundance, dispersion and form-function diversity of organisms. Focus on organisms, their physiological and life history adaptations, and populations.

Prerequisite(s): C or higher in: BIOL 1710, BIOL 1720, and BIOL 1750 or BIOL 1760 or BIOL 1761.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 2141 - Ecology Laboratory**

1 hour (0:3)

Laboratory techniques and research methods for ecology, including field surveys, statistical analysis and report writing.

Prerequisite(s): C or higher in BIOL 2140 (may be taken concurrently).

Required for ecology for environmental science majors and open to all biology majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 2241 - Biology of Higher Plants**

3 hours

Introduction to basic principles of form, function, ecology and evolution of plants, as well as modern topics related to plant adaptation in changing environments and the exploitation of plants by humans for improved quality of life in developing and developed countries.

Prerequisite(s): C or higher in: BIOL 1710, BIOL 1720, BIOL 1760 or BIOL 1761.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 2251 - Biodiversity and Conservation of Animals**

3 hours

Focuses on basic principles of form, function, evolution, biogeography, and ecology of animals, as well as modern topics related to the theory and practice of conservation.

Prerequisite(s): C or higher in: BIOL 1710, BIOL 1720, and BIOL 1750 or BIOL 1760 or BIOL 1761.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 2301 - Human Anatomy and Physiology I

(BIOL 2301; BIOL 2401)

3 hours

Functional anatomy and physiology of the human body including biological chemistry, cell morphology, membrane and tissue physiology, musculoskeletal system and the nervous system.

Prerequisite(s): None.

Corequisite(s): BIOL 2311.

For kinesiology, dance majors; allied health, and biology students.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### **BIOL 2302 - Human Anatomy and Physiology II**

(BIOL 2302; BIOL 2402)

3 hours

Functional anatomy and physiology of the human body including the endocrine, digestive, respiratory, cardiovascular, urinary and reproductive systems.

Prerequisite(s): BIOL 2301/BIOL 2311.

Corequisite(s): BIOL 2312.

For kinesiology, dance majors, allied health, and biology students.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### BIOL 2311 - Human Anatomy and Physiology I Laboratory

(BIOL 2101; BIOL 2401)

1 hour (0;3)

Laboratory studies examining the functional anatomy and physiology of the human body including cell morphology, tissue histology, musculoskeletal anatomy and nervous system anatomy.

Prerequisite(s): C or higher in BIOL 2301 (may be taken concurrently).

For kinesiology, dance majors, allied health, and biology students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 2312 - Human Anatomy and Physiology II Laboratory**

(BIOL 2102; BIOL 2402)

1 hour (0;3)

Laboratory studies examining the functional anatomy and physiology of the human body including the endocrine, digestive, respiratory, cardiovascular, urinary and reproductive systems.

Prerequisite(s): C or higher in BIOL 2302 (may be taken concurrently).

For kinesiology, dance majors, allied health and biology students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOL 2700 - Human Evolution and Physical Anthropology

(ANTH 2301)

3 hours (3;2)

Study of human biological evolution from primate beginnings to the present era. Emphasis is placed upon anatomical and physiological variations and their adaptive significance.

Prerequisite(s): None.

Same as ANTH 2700.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### **BIOL 2900 - Special Problems**

1-3 hours

Individual readings and laboratory research projects in the biological sciences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## **BIOL 2910 - Special Problems**

1-3 hours

Individual readings and laboratory research projects in the biological sciences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## **BIOL 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3000 - Comparative Anatomy of Vertebrates**

4 hours (3:6)

Development, anatomy and phylogenetic relationships of vertebrate organ systems. Laboratory studies of representative vertebrate animals.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 3030 - Careers in the Life Sciences

1 hou

Career choices and survival skills for the life sciences. Introduction to opportunities for life science majors in academia, industry, teaching and government, and information on preparation for these careers.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 3080 - Physiological Bases of Exercise and Sport

3 hours

Applied physiology course of study including bioenergetics, neuromuscular factors, and cardiovascular and pulmonary dynamics during exercise. Emphasis is placed on acute and chronic responses of human physiology to exercise stress.

Prerequisite(s): Completion of the Foundation requirements for your declared Biological Sciences major and C or higher in either BIOL 3800 or BIOL 4505, or Department consent. If major is outside of Biological Sciences, follow the Foundation requirements for the Biology BA.

Same as KINE 3080.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3150 - Conservation Biology Laboratory**

1 hour (1;0;3)

Laboratory and discussion exercises focused on topics related to conservation biology.

Prerequisite(s): C or higher in BIOL 3160 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3160 - Conservation Biology**

3 hours

Principles and values relating to natural biological resources; ecological concepts applied to resource management and protection of aquatic and terrestrial ecosystems.

Prerequisite(s): Completion of the Foundation requirements for your declared Biological Sciences major or Department consent. If major is outside of Biological Sciences, follow the Foundation requirements for the Biology BA.

#### **BIOL 3170 - Plants and Human Society**

3 hours

Relationships of plants to the environment and human activities; impact of plants on human social development, history, economics and religion.

Prerequisite(s): Completion of the Foundation requirements for your declared Biological Sciences major or Department consent. If major is outside of Biological Sciences, follow the Foundation requirements for the Biology BA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3331 - Biomedical Criminalistics**

3 hours

Survey of the various forensic sciences with emphasis on direct examination of human remains and directly related biological evidence; e.g. anthropology, pathology, odontology. Students learn how cases arise, i.e. how remains are located, recovered and processed. Supporting biological, clinical and physical sciences will also be covered; e.g. toxicology, entomology, DNA science, forensic geology/palynology and remote sensing.

Prerequisite(s): Consent of Forensic Science Program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3350 - Human Heredity**

3 hours

Study of the fundamental principles of human genetics.

Prerequisite(s): BIOL 1112.

May not be counted toward a major in biology. For education, kinesiology and health promotion majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOL 3360 - Heredity Lab

1 hour (0;3)

Laboratory exercises dealing with basic principles of Mendelian genetics, introductory cytogenetics and probability problems.

Prerequisite(s): BIOL 3350 (may be taken concurrently) or consent of instructor.

May not be used to fulfill the requirements for the BA or BS in biology. For the minor in biology and education, kinesiology, and health promotion majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3381 - Medical Bacteriology**

3 hours

Bacteria and disease; host-parasite relationships, immunology and epidemiology.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 must be completed. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3382 - Medical Bacteriology Laboratory**

1 hour (0;4)

Laboratory techniques in medical bacteriology that emphasize the isolation and characterization of the clinical organisms, including techniques used in their control.

Prerequisite(s): C or higher in BIOL 3381 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3451 - Genetics**

3 hours

Genetic structure and inheritance in viruses, bacteria and higher organisms with emphasis on gene biochemistry, Mendelian genetics and population genetics.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3452 - Genetics Laboratory**

1 hour (0.4)

Laboratory studies examining classical transmission genetics and modern molecular genetics. Heavy emphasis on experimental crosses and application of molecular genetics.

Prerequisite(s): C or higher in BIOL 3451 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 3500 - Medical Terminology**

2 hours

Basic-level medical terminology using a word building system in a programmed learning format. Emphasis is on learning Latin and Greek prefixes and word roots and utilizing these to build medical terms.

Prerequisite(s): None.

Recommended as advanced elective to assist students in preprofessional programs leading to working in medicine, physical therapy, and other health care fields or for those wishing to seek advanced degrees relating to human medical research. May not be counted for advanced division of science hours for the BA or BS in biology and biochemistry.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3510 - Cell Biology**

3 hours

Structure and function of animal and plant cells with emphasis on cell membranes, cytoplasmic organelles and the nucleus.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA. Concurrent enrollment in CHEM 2380 strongly encouraged.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOL 3520 - Cell Biology Laboratory**

1 hour (0;2.5)

Laboratory studies emphasizing the isolation and characterization of subcellular organelles.

Prerequisite(s): C or higher in BIOL 3510 (may be taken concurrently).

#### **BIOL 3770 - Biotechnology**

3 hours

Applications of biotechnology in today's society. Emphasis on molecular biotechnology and its applications in industry, agriculture, medicine and forensic science. Students may enroll in BIOL 4580 for the companion laboratory component.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042 and BIOL 3451/BIOL 3452 or BIOL 3350. If major is outside of biological sciences, foundation requirements for the biology BA must be completed and C or higher in BIOL 2041/BIOL 2042 and BIOL 3451/BIOL 3452 or BIOL 3350. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3800 - Animal Physiology**

3 hours

Cardiovascular, respiratory, renal, gastrointestinal, endocrine, muscular, and nervous system functions.

Prerequisite(s): Completion of foundation requirements for your declared biological sciences major and C or higher in PHYS 1410/1430 or PHYS 1510/1530 or PHYS 1710/1730. If major is outside of biological sciences, foundation requirements for the biology BA must be completed and PHYS 1410/1430 or PHYS 1510/1530 or PHYS 1710/1730 must be completed with a C or higher. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3850 - Introduction to Computational Life Science**

3 hours

Survey treatment of the applications of computational paradigms in the natural and physical sciences.

Prerequisite(s): Consent of instructor.

Same as CSCE 3850.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 3900 - Advanced Research in Life Sciences**

3 hours (2:4)

Topics in life science research. Participants conduct authentic research on a life science question in association with a UNT faculty researcher. Research takes place in a laboratory class setting.

Prerequisite(s): Consent of instructor.

May not be repeated.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOL 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4000 - Plant Ecology**

4 hours (3;4)

Role of plants in biological communities. Field and laboratory studies of the major local community types.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is

outside of biological sciences, follow the foundation requirements for the biology BA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4005 - Contemporary Topics in Biology**

1-3 hours

Contemporary topics in biological sciences. Specific titles vary but may include microbiology, molecular biology, physiology/ neuroscience, ecology/environmental science, botany and zoology.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

May be repeated for credit as topics vary. Same topic may not be repeated at the graduate level as BIOL 5005.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4006 - Topics in Forensic Biology**

1-3 hours

Topics include forensic entomology, forensic toxicology or forensic biology of the human skeleton.

Prerequisite(s): Junior or senior standing or consent of department.

May be repeated for credit as topics vary. Same topic may not be repeated at the graduate level as BIOL 5006.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4030 - Physiological Ecology**

4 hours (3;3)

Animals live within a diverse array of habitats, each characterized by its own physical and biological constraints varying in intensity, duration and periodicity. In this course, students will learn various ways in which animals have evolved to meet these challenges and thrive in the context of their natural environments (biotic and abiotic). Specifically, a survey of the physiological, behavioral and biochemical adaptations of animals to environmental factors, including temperature, oxygen, water, salinity, pH and toxic chemicals will be explored.

Prerequisite(s): Completion of Foundation Requirements for the declared Biological Sciences major and C or higher in either BIOL 2140/BIOL 2141 or BIOL 2251.

If major is outside of Biological Sciences, Foundation Requirements for the Biology, BA and C or higher in either BIOL 2140/BIOL 2141 or BIOL 2251 must be completed. If these requirements are not met, department consent is required.

BIOL 5030.

May not be repeated for graduate credit as BIOL 5030.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

### **BIOL 4045 - Foundations of Ecological Theory**

3 hours

Background and concepts of ecological theory are reviewed through the survey of both original and current literature.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2140. If major is outside of biological sciences, must complete foundation requirements for the biology BA and C or higher in BIOL 2140. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5050.

#### **BIOL 4050 - Animal Ecology**

4 hours (3;4)

Role of animals in biological communities. Field and laboratory studies of the ecology of local fauna.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2140. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2140 must be completed. If these requirements are not met, department consent is required.

May not be counted toward a BA or BS degree in biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4051 - Community Ecology**

3 hours

Structure, dynamics and diversity of biotic communities and ecosystems. Focus on population interactions, niche relationships and processing of matter and energy.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2140/BIOL 2141. If major is outside of biological sciences, foundation requirements for the biology BA and any C or higher in BIOL 2140/BIOL 2141 must be completed. If these requirements are not met, department consent is required.

Corequisite(s): BIOL 4052.

May not be repeated at the graduate level as BIOL 5051.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4052 - Community Ecology Laboratory**

1 hour (0;4)

Field and laboratory exercises on distribution, dispersion, abundance and diversity of organisms and their populations. Focus on quantitative description of biotic communities and ecosystems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2140/BIOL 2141. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2140/BIOL 2141 must be completed. If these requirements are not met, department consent is required.

Corequisite(s): BIOL 4051.

May not be repeated at the graduate level as BIOL 5052.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOL 4053 - Introduction to Subantarctic Biocultural Conservation

3 hours

Introduction to the subantarctic ecosystems and cultures of Southern South America (geography, climate, ethnography, environmental philosophy and ecology) and exposure to both the practical and theoretical aspects of biocultural conservation, including its interdisciplinary character integrating the sciences and humanities.

Prerequisite(s): Upper-level standing in the humanities or sciences. Same as PHIL 4053.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4054 - Tracing Darwin's Path**

3 hours

An annual in-depth field course that introduces students to the sub-Antarctic biota, geography, history, cultures and ecosystems of the Cape Horn Biosphere Reserve using the Omora Ethnobotanical Park as a field site that demonstrates the integration of ecological science and field environmental ethics in a novel approach to biocultural diversity. Prerequisite(s): Upper level academic standing and consent of department.

Same as PHIL 4054.

May not be repeated at the graduate level as BIOL/PHIL 5054.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4055 - Ornithology**

3 hours

Classification, distribution, ecology, adaptations, and behavior of birds. Emphasis on both local and global species.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Corequisite(s): BIOL 4056.

Meets with BIOL 5055.

May not be repeated at the graduate level as BIOL 5055.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOL 4056 - Ornithology Laboratory**

1 hour (0:3)

Laboratory emphasis on field identification, behavior, and habitats of birds.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Corequisite(s): BIOL 4055.

Meets with BIOL 5056.

May not be repeated at the graduate level as BIOL 5056.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4057 - Mammalian Ecology and Evolution**

4 hours (3;3)

Emphasis on diversity, morphology, ecological roles and contemporary field and analytical techniques. Identification of mammals to family level using skulls, tracks, scats, pictures, and identification of live individuals to species.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in either BIOL 2140 or BIOL 2251. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in either BIOL 2140 or BIOL 2251 must be completed. If these requirements are not met, department consent is required.

Must also enroll in laboratory.

Mandatory field trip attendance, including participation in two-night, overnight field trip to take place over a weekend.

May not be repeated for graduate credit as BIOL 5057.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4070 - Insect Biology**

4 hours (3:3)

Morphology, physiology, ethology, classification and control of insects and related arthropods.

Prerequisite(s): Completion of the foundation requirements for your declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

May not be repeated at the graduate level as BIOL 5070.

#### BIOL 4085 - Fish Diversity and Ecology

4 hours (3:3)

Emphasis on evolution, diversity, biology, ecology, and management and conservation of fishes. Field techniques and species identification, with focus on fishes of Texas.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in either BIOL 2140/BIOL 2141 or BIOL 2251. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in either BIOL 2140/BIOL 2141 or BIOL 2251 must be completed. If these requirements are not met, department consent is required.

Mandatory field trip attendance.

May not be repeated for graduate credit as BIOL 5085.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4091 - Parasitology**

3 hours

Biology, ecology and classification of animal parasites; immunology and physiology of host-parasite interaction.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

May not be repeated at the graduate level as BIOL 5091.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4092 - Parasitology Laboratory**

1 hour (0;3)

Laboratory studies on the basic identification and transmission of common eukaryotic parasites of humans with heavy emphasis on identification of organisms using preserved and fresh preparations and the study of parasite morphology.

Prerequisite(s): BIOL 4091 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## BIOL 4100 - Introduction to Environmental Impact Assessment

3 hours

Principles and practices of preparing environmental impact assessments and statements. Addresses how to understand the effects that projects, plans and policies have on the environment and the impact those effects have on specific resources, ecosystems and human communities. Methods for identifying impacts, describing the affected environment, predicting and assessing impacts and selecting the proposed action from a group of alternatives for meeting specified needs are examined.

Prerequisite(s): Completion of the Foundation requirements for your declared Biological Sciences major or Department consent. If major is outside of Biological Sciences, follow the Foundation requirements for the Biology BA.

May not be repeated at the graduate level as BIOL 5100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 4110 - Endocrinology**

3 hours

Regulation of physiological processes in animals by hormones and related chemical agents.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 3800 or BIOL 4505. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 3800 or BIOL 4505 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4120 - Environmental Chemistry**

3 hours

Presents a scientific overview of environmental contaminants; their occurrence, sources and impact on humans and the environment.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

May not be repeated at the graduate level as BIOL 5120.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## BIOL 4160 - Advanced Techniques in Microbiology and Molecular Biology

4 hours (1;4)

Intensive laboratory exercises in cultivation, analysis and gene transfer in bacterial mutants. Emphasis on techniques for studying macromolecular and enzyme synthesis, preparation and analysis of plasmid DNA, cloning and gene expression.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041 and one of the following courses: BIOC 3621, BIOC 4540 or BIOL 3510. If major is outside of biological sciences, foundation requirements for the biology BA must be completed and C or higher in BIOL 2041 and one of the following courses: BIOC 3621, BIOC 4540 or BIOL 3510. If these requirements are not met, department consent is required.

Corequisite(s): BIOL 4170.

May not be used for advanced biology hours for the biology BA. May not be repeated at the graduate level as BIOL 5160. Offered only in a five-week summer session.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4170 - Advanced Techniques in Microbiology and Molecular Biology Laboratory

2 hours (0:3)

Continuation of BIOL 4160 lab exercises.

Prerequisite(s): None.

Corequisite(s): BIOL 4160.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### **BIOL 4180 - Techniques in Molecular Biology**

4 hours (1;4)

Advanced molecular biology laboratory methodology. Techniques include gene cloning, plasmid purification, restriction analysis, DNA fingerprinting and DNA sequencing.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042 and BIOL 3510/BIOL 3520. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 and BIOL 3510/BIOL 3520 must be completed. If these requirements are not met, department consent is required.

Corequisite(s): BIOL 4190.

May not be used for advanced biology hours for the BA in biology. May not be repeated at the graduate level as BIOL 5180. Offered summer only.

#### BIOL 4190 - Techniques in Molecular Biology Laboratory

2 hours (0:3)

Continuation of BIOL 4180 lab exercises.

Prerequisite(s): None.

Corequisite(s): BIOL 4180.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### **BIOL 4201 - Immunology**

#### 3 hours

Immune defense mechanisms including immunobiology, immunochemistry, immunogenetics, immune response to infectious agents, allergy and autoimmune diseases.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and CHEM 2380 (may be taken concurrently). If major is outside of biological sciences, must complete foundation requirements for the biology BA and CHEM 2380 (may be taken concurrently). If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5201.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 4202 - Immunology Laboratory**

1 hour (0:3)

Laboratory studies on the basic anatomy of the immune system and analytical techniques and experimental design in immunology.

Prerequisite(s): None.

Corequisite(s): BIOL 4201.

May not be repeated at the graduate level as BIOL 5202.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### **BIOL 4220 - Neuropsychopharmacology**

#### 3 hours

Comprehensive examination of the physiological effects of major psychotropic drug classes that affect the central nervous system, including the interactions between neurotransmitter systems and physiology; neuroanatomical pathways and behavior; synaptic functions and behavioral disorders.

Prerequisite(s): Completion of the foundation requirements for your declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the biology BA.

Open to all majors. May not be repeated at the graduate level as BIOL 5220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4230 - Cardio-respiratory Physiology**

#### 3 hours

Comparative physiology of the cardiovascular and respiratory systems of vertebrates with an emphasis on physiological control mechanisms and interactions of the two systems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2301/BIOL 2302 or BIOL 3800 or BIOL 4505. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2301/BIOL 2302 or BIOL 3800 or BIOL 4505 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5230.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4240 - Forensic Microscopy**

3 hours (2;4)

Introduction to microscopic analysis with emphasis on the fundamentals necessary for identification and characterization of trace evidence materials such as glass, hair, fibers, explosives, soil, paint and biological samples.

Prerequisite(s): Consent of forensic science program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

## BIOL 4250 - Pharmacology: Biological Basis of Drug Action

3 hours

An overview of pharmacology based on principles of drug action; emphasis on drugs by class, and not specific drugs per se. General principles, antibiotics and pharmacology of the autonomic, cardiovascular, central nervous and endocrine systems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. In addition, students must have completed with a grade of C or higher at least one physiology course from the following options: BIOL 2301 and BIOL 2302 or BIOL 3800 or BIOL 4505. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4260 - Principles of Evolution**

3 hours

Population genetics; ecological, geographical and historical concepts of evolution.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 3451/BIOL 3452. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 3451/BIOL 3452 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5260.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4261 - Principles of Evolution Laboratory**

1 hour (0:3)

Laboratory and discussion exercises focused on topics related to Evolutionary Biology.

Prerequisite(s): BIOL 4260 (may be taken concurrently).

Same as BIOL 5261.

May not be repeated at the graduate level as BIOL 5261.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 4280 - Aquatic Botany**

3 hours (2;3)

Ecology, identification and management of aquatic plants and algae. Special emphasis on the role of aquatic plants in reservoir and river ecosystems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5280.

#### **BIOL 4290 - Marine Biology**

3 hours

Covers the basics of marine biology with a global approach, using examples from numerous regions and ecosystems worldwide. Highlights interactions of physical and chemical factors and habitat diversity with the biological components of the world's oceans. Environmental topics such as fisheries, mariculture, pollution and conservation.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5290.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4300 - Histology

4 hours (3;3)

Microstructure and ultrastructure of animal cells and tissues; relationship of structure and function in tissues and organs. Computer-assisted analysis of tissue structure.

Prerequisite(s): Completion of foundation requirements for your declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4320 - Integrative Molecular Physiology Laboratory**

3 hours (2:3)

The molecular basis for physiological cardiovascular development, including molecular methods to quantify mRNA for receptors, and measurements of cardiovascular function.

Prerequisite(s): Completion of foundation requirements for your declared biological sciences major and C or higher in BIOL 2301/BIOL 2302 or BIOL 3800 or BIOL 4505. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2301/BIOL 2302 or BIOL 3800 or BIOL 4505 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5320.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4330 - Developmental Biology**

3 hours

Mechanisms of development, differentiation and growth in animals at the molecular, cellular and genetic levels. Areas of particular emphasis include transcriptional control mechanisms, embryonic patterning, cell—cell interactions, growth factors and signal transduction, and regulatory hierarchies. Coverage also includes the roles that environmental factors play in development, the medical applications of our knowledge of development and the roles that development plays in evolution.

Prerequisite(s): Completion of Foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5330.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4370 - General Toxicology**

3 hours

Introduction to the basic principles of toxicology. Focus on absorption, distribution, metabolism and elimination of toxicants; target organ toxicity mechanisms of toxic action; carcinogenesis; and risk assessment.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4375 - Molecular Toxicology**

2 hours

Survey of toxicology at the biochemical and molecular level to include a discussion of a variety of toxic modes of action, modern techniques used in molecular toxicology, and current toxilogical research literature.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4380 - Fundamentals of Aquatic Toxicology**

3 hours (2;3)

Theory and methodologies used by scientists, regulatory agencies and industry to measure the impact of man's activities on freshwater aquatic ecosystems. The course has its foundations in history, but concentrates on current methodologies and theories.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5380.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4400 - Wetland Ecology and Management**

4 hours (3:4)

Ecology and management of various types of wetlands with emphasis on the role of aquatic and wetland plants in determining wetland structure and function. Wetland restoration and creation for wildlife habitat or water quality benefits are reviewed.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2140/BIOL 2141. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2140/BIOL 2141 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5400.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### BIOL 4420 - Invertebrate Biology

4 hours (3;3)

Biology of non-vertebrate animals with emphasis on phylogenetic relationships and anatomical, physiological and behavioral adaptation to varied environments.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5520.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4440 - Stream Ecology**

4 hours (3;4)

Ecological principles of how stream dynamics influence the biological and hydrologic patterns and processes occurring in stream ecosystems. Laboratory studies designed to teach techniques and test hypotheses related to environmental assessment.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042 or BIOL 2140. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 or BIOL 2140 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5440.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4460 - Eukaryotic Genetics**

3 hours

Research and theory in eukaryotic genetics with an emphasis in metazoan genetic model systems and human genetics, including chromosome structure, genomic analysis, developmental genetics and diseases.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 3451/BIOL 3452 and BIOL 3510/BIOL 3520. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 3451/BIOL 3452 and BIOL 3510/BIOL 3520 must be completed. If these requirements are not met, department consent is required. Previous or concurrent enrollment in molecular biology or biochemistry recommended.

May not be repeated at the graduate level as BIOL 5460.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOL 4480 - Medical Genetics**

3 hours

Human genetics including cytogenetics, immunogenetics, population genetics, molecular genetics and human biochemical genetics.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in either BIOL 3451/BIOL 3452 or BIOL 3350 and either CHEM 2380 or CHEM 3601. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in either BIOL 3451/BIOL 3452 or BIOL 3350 and either CHEM 2380 or CHEM 3601 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5840.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOL 4501 - Bacterial Diversity and Physiology**

3 hours

Comparative survey of bacteria. Growth, ecology, metabolism, energy transformations, differentiation and adaptive mechanisms.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5501.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4502 - Bacterial Diversity and Physiology Laboratory

1 hour (0:3)

Isolation of bacteria from nature. Enrichment methods, morphology, enumeration of bacterial growth and enzymes.

Prerequisite(s): BIOL 4501 (may be taken concurrently).

May not be repeated at the graduate level as BIOL 5502.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4503 - Plant Physiology and Development**

3 hours

How plants live, grow, and interact with their environments from the molecular to the organismal level and with ecosystem considerations. Topics include nutrient acquisition and distribution, biochemistry and metabolism, growth and development.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5503.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 4504 - Plant Physiology Laboratory**

1 hour (0:3)

Companion laboratory to BIOL 4503.

Prerequisite(s): BIOL 4503 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4505 - Comparative Animal Physiology**

3 hours

Comparison of structure and physiological function in a wide variety of animals. Emphasis on thermoregulation and on respiratory, circulatory, excretory, endocrine and digestive systems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5505.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4506 - Biology of Extreme Environments**

3 hours

Lecture- and discussion-based course exploring the biology of, and adaptations to, extreme environments. Drawing examples from animals, plants and microbes, this integrative course explore the biochemical, metabolic, physiological, morphological and behavioral adaptations that have allowed life to thrive at the extreme edges. Course emphasizes development of scientific writing and presentation skills.

Prerequisite(s): Completion of the foundation requirements for the declared biological sciences major or department consent. If major is outside of biological sciences, follow the foundation requirements for the Biology BA.

## **BIOL 4510 - Animal Physiology Laboratory**

1 hour (0;3.5)

Experimental studies of physiological function in animals. Emphasis on energetics, membrane transport, thermoregulation, osmoregulation, neurophysiology, cardiovascular, respiratory and muscle function.

Prerequisite(s): BIOL 3800 or BIOL 4505 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4530 - Virology**

3 hours

Molecular biology of viruses infecting bacteria, plants and animals; interaction of viruses and host cells; viral genetics; replication, pathogenesis, oncology, immunology, chemotherapy and vaccines.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 2041/BIOL 2042. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 must be completed. If these requirements are not met, department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4540 - Virology Laboratory**

1 hour (0:4)

Growth and cultivation of bacterial viruses including the production and purification of viral stocks. The use of bacteriophage as model systems to study virus reproduction and cellular metabolism, and as tools in modern molecular biology to study genetic processes.

Prerequisite(s): BIOL 4530 (may be taken concurrently), or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4560 - Aquatic Insects of North America**

4 hours (3;4)

Ecology, sampling methods, systematics and classification of Neartic aquatic insects at the family level; use of keys and key terminology in aquatic insect identification.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5570.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4570 - Biochemistry and Molecular Biology of the Gene

3 hours

Mechanisms and regulation of genetic expression, chromosome replication, mutagenesis and DNA repair, and gene cloning in prokaryotic and eukaryotic systems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major and C or higher in BIOL 3451/BIOL 3452 or BIOL 3510/BIOL 3520 or BIOC 4540. If major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 3451/BIOL 3452 or BIOL 3510/BIOL 3520 or BIOC 4540 must be completed. If these requirements are not met, department consent is required.

Same as BIOC 4570.

May not be used to satisfy minor requirements in chemistry. Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4580 - Molecular Biology and Biotechnology Laboratory

2 hours (0;5)

Experiments in recombinant DNA techniques, gene regulation and other areas of molecular biology.

Prerequisite(s): BIOL 4570 (may be taken concurrently) or BIOL 3770 (may be taken concurrently), or consent of department.

Same as BIOC 4580.

May not be repeated at the graduate level as BIOL or BIOC 5580.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### BIOL 4590 - Forensic Molecular Biology Laboratory

3 hours (2;6)

Experiments in evidence processing and forensic DNA analysis. Lectures and exercises include DNA extraction techniques, DNA quantification, PCR amplification of polymorphic nuclear and mtDNA loci, and fragment analysis utilizing capillary electrophoresis.

Prerequisite(s): Completion of Foundation requirements for your declared Biological Sciences major and C or higher in BIOL 4570 or BIOC 4570. If major is outside of Biological Sciences, must complete foundation requirements for the Biology BA and C or higher in BIOL 4570 or BIOC 4570. If you do not meet these requirements, Department consent is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4650 - Environmental Science Field Course**

6 hours (3;8

Advanced field course primarily emphasizing the biological, ecological, natural history and philosophical attributes of various habitats or ecoregions. Topics and field experience may vary from desert river systems to alpine limnology to coastal estuaries.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May be repeated as topics vary. The same topic may not be repeated at the graduate level as BIOL 5650 or BIOL 5670.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## **BIOL 4700 - Research Methods for Secondary Science Instruction**

3 hours (2;4)

Techniques used to solve and address scientific inquiry. Design of experiments. Use of statistics to interpret experimental results and measure sampling errors. Ethical treatment of human subjects. Laboratory safety. Mathematical modeling of scientific phenomena. Oral and written presentation of scientific work.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required. EDCI 3500 and EDCI 4000 are highly recommended.

Students seeking secondary certification in mathematics or computer science who have completed the other science requirements of their majors may also enroll. Does not count as an elective toward a major or minor in biology, except for students seeking teacher certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4720 - Sediment Toxicology**

3 hours

Mechanisms of contaminant transport and fate in freshwater marine sediments and pollutant effects at the individual, population and biotic community levels. Sediment contaminant bio-availability and bioaccumulation into food webs and the scientific aspects of legal control and remediation of hazardous sediments.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5720.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4751 - Neuroscience I: Cells and Circuits**

#### 3 hours

Neuroscience research strategies, neurons and glia, synaptic transmission, neurotransmitters, developmental brain anatomy, sensory and motor systems.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

May not be repeated at the graduate level as BIOL 5751.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4752 - Neuroscience II: Brain and Plasticity

#### 3 hours

Brain basis of motivation, sex, emotion, sleep, mental illness, memory; plasticity in developing and adult brain.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required. BIOL 4751 recommended.

May not be repeated at the graduate level as BIOL 5752.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4760 - Neurobiology Laboratory**

1 hour (0:3)

Vertebrate neuroanatomy and experimental neurobiology using electrophysiological and behavioral methods.

Prerequisite(s): BIOL 4751 (may be taken concurrently).

May not be repeated at the graduate level as BIOL 5760.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4800 - Biological Sciences Seminar Series**

1 hour

A weekly seminar series covering a broad range of biological research topics. Invited speakers are prominent local, regional or national researchers.

Prerequisite(s): Completion of foundation requirements for the declared biological sciences major. If the major is outside of biological sciences, foundation requirements for the biology BA must be completed. If these requirements are not met, department consent is required.

Maximum of 2 hours may be used toward advanced biology electives in the BS Biology degree, but not the BA degree with a major in biology. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4801 - Microbial Genetics**

3 hours

Genetic structure, inheritance and gene expression in microorganisms and their viruses.

Prerequisite(s): Completion of foundation requirements for a declared biological sciences major and C or higher in BIOL 2041/BIOL 2042 and CHEM 2380. If the major is outside of biological sciences, foundation requirements for the biology BA and C or higher in BIOL 2041/BIOL 2042 and CHEM 2380 must be completed. If these requirements are not met, department consent is required.

Meets with BIOL 5800.

Genetics course is recommended. May not be repeated at the graduate level as BIOL 5800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4805 - Biological Sciences Capstone Seminar**

#### 3 hours

Students read, present, and discuss scientific papers related to a weekly topic in the biological sciences. Students will also attend a weekly seminar on the same topic given by invited speakers who are prominent local, regional or national researchers.

Prerequisite(s): Senior standing and completion of foundation requirements for a declared biological sciences major. If the major is outside of biological sciences, student must hold senior standing and complete foundation requirements for the biology BA. If these requirements are not met, department consent is required.

May be used toward advanced biology electives for the BS in biology, but may not be used toward advanced biology electives for the BA with a major in biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4810 - Biocomputing**

3 hours

Introduction to computational problems inspired by the life sciences and overview of available tools. Methods to compute sequence alignments, regulatory motifs, phylogenetic trees and restriction maps.

Prerequisite(s): Consent of instructor.

Same as MATH 4810 and CSCE 4810.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4820 - Computational Epidemiology**

3 hours

Application of computational methods to problems in the fields of public health. Design and implementation of disease outbreak models.

Prerequisite(s): CSCE 3850 or consent of instructor.

Same as CSCE 4820; taught with CSCE 4820/CSCE 5820.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4850 - Biology Laboratory Instruction**

3 hours (1:4)

Introduces undergraduate students to laboratory instruction. Select students participate in laboratory instruction under the supervision of a faculty member and graduate teaching assistant. Successful completion of the course gives the student valuable teaching experience. Students are required to attend the weekly lab meetings and assist in the instruction of two lab sections per week and to lead instruction of one laboratory class during the semester.

Prerequisite(s): Successful completion of the laboratory and companion lecture course to be taught with a grade of A or B, completion of the biology/biochemistry premajor, consent of laboratory coordinator in charge of the specific laboratory course, and minimum UNT and overall GPA of 2.5.

#### **BIOL 4900 - Special Problems**

1-3 hours

Individual readings and laboratory research projects in biological sciences.

Prerequisite(s): Approval of supervisory faculty member, proposal filed in department advising office prior to registration and junior or senior standing.

Three hours may be applied to advanced biology electives for the BS degree, but not the BA degree in biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4910 - Special Problems**

1-3 hours

Individual readings and laboratory research projects in biological sciences

Prerequisite(s): Approval of supervisory faculty member, proposal filed in department advising office prior to registration and junior or senior standing.

Three hours may be applied to advanced biology electives for the BS degree, but not the BA degree in biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.47

#### **BIOL 4920 - Cooperative Education in Biological Sciences**

1-3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): BIOL 1710 or BIOL 1711; BIOL 1720 or BIOL 1722; BIOL 1760 or BIOL 1761; BIOL 2041/BIOL 2042 or BIOL 2140 or BIOL 2241 or BIOL 2251 or BIOL 2302/BIOL 2312; student must meet employer's requirements and have consent of department.

May not count toward a major or minor in biological sciences. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **BIOL 4930 - Special Problems**

1-3 hours

Individual study.

Prerequisite(s): Junior or senior standing and approval of supervising faculty member and/or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4940 - Honors Research in Biology

3 hours

Advanced original independent research supervised by a faculty member in the biological sciences.

Prerequisite(s): 3.25 GPA or better in the sciences, at least 20 hours of biology and 16 hours of chemistry, junior or senior standing and departmental approval.

For students interested in pursuing careers in research or medicine. May not be counted towards advanced biology electives for the Bachelor of Arts degree in Biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### BIOL 4950 - Honors Thesis in Biology

3 hours

Continuation of BIOL 4940 involving advanced original independent research culminating in a written report supervised by a faculty member in the biological sciences. The results are written in standard thesis format and presented orally.

Prerequisite(s): BIOL 4940 and consent of department.

For students interested in pursuing careers in research or medicine. May not count toward advanced biology electives in the Bachelor of Arts with a major in biology.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **BIOL 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Biomedical Engineering**

#### **BMEN 1300 - Discover Biomedical Engineering**

3 hours (2;3)

The course focuses on describing, explaining and predicting natural phenomena using a combination of two, 50-minute lectures and a 3-hour laboratory, every week. Students will learn about the origin and history of healthcare practices. Students will learn about human anatomy and physiology and thus be able to describe and explain natural phenomena that occur in the human body. They will also learn to describe naturally occurring action potentials in muscles and nerve cells, and predict the resulting bio-potentials such as electrocardiogram (ECG) and electromyogram (EMG), with reference to homeostasis or a disturbance to it. Students will learn about various systems in the body and how their working can be enhanced while improving the quality of life.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **BMEN 1400 - Software for Biomedical Engineers**

4 hours (3;3)

Introduction and exposure to common programming languages used in biomedical engineering practice; develop functions and algorithms for analysis of data; develop basic data acquisition functions.

Prerequisite(s): MATH 1650 with a grade of C or better

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **BMEN 2210 - Biomedical Circuits and Data Acquisition Best Practices**

3 hours (2;3)

Data acquisition and quantitative analysis of biomedical and physiological signals using LabVIEW; A/D conversion; basic transforms; power supply consideration for biomedical systems; filtering of biomedical signals; electrical circuits and analog representations of physiological systems.

Prerequisite(s): MATH 1720

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **BMEN 2320 - Biomedical Instrumentation I**

3 hours (2;3)

Introduction to biomedical instrumentation design; design, building and testing of bioinstrumentation circuits including power supplies, analog signal amplifiers and analog filter circuits.

Prerequisite(s): BMEN 1300; BMEN 2210; BMEN 1400 or concurrent enrollment.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 2900 - Special Problems in Biomedical Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems. For elective credit only, may not be substituted for BMEN courses.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary for a maximum of 6 hours. Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### BMEN 2910 - Special Problems in Biomedical Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems. For elective credit only, may not be substituted for BMEN courses.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 3000 - Introduction to Biomedical Engineering

3 hours (2;3)

Exploratory course in Biomedical Engineering for students pursuing a BAAS degree. Covers basic concepts of biomedical engineering and their connection with the spectrum of human activity. Serves as an introduction to the fundamental science and engineering on which biomedical engineering is based.

Prerequisite(s): Consent of instructor.

Not for students pursuing a BMEN major or a minor in BMEN.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **BMEN 3001 - Biomedical Engineering Software**

4 hours (3;3)

Used in biomedical engineering practice; develop functions and algorithms for analysis of data. Specific topics include 3D computer aided design (CAD) modeling, introduction to medical imaging modalities and statistical data analysis using C and/or MATLAB. Applications such as measurements in the cardiovascular system, detection and diagnosis of diseases and monitoring of biomedical devices will be discussed.

Prerequisite(s): MATH 1650 with a grade of C or better.

This course is not for students pursuing a BMEN major or a minor in BMEN. It is open to only students pursuing a BAAS degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## BMEN 3310 - Engineering Measurements from Human Systems

3 hours (2;3)

Builds upon the concepts of human anatomy and physiology and explains how biomedical engineers can enhance the working of various systems in the body. Presents a number of organ systems including cardiovascular, respiratory, renal, among others. Concepts of cellular bioengineering are also presented.

Prerequisite(s): BMEN 1300 and BMEN 2320.

May not be applied to biology majors.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **BMEN 3311 - Biomedical Signal Analysis**

3 hours (2;3)

Design and application of analog and digital signal analysis in biomedical engineering; characteristics of biomedical signals; design considerations for analog-to-digital and digital-to-analog circuitry; biomedical signal transformation methods; analog and digital filter design for biomedical signals.

Prerequisite(s): BMEN 2320.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **BMEN 3312 - Introduction to Biomechanics**

3 hours (2,3)

Introduction into the mechanics of deformable media in biomechanics, including biomaterials and biological tissues with an emphasis in mechano-biology within the context of 1) kinematics, 2) the concept of stress, 3) equilibrium, 4) constitutive relations and 5) boundary conditions.

Prerequisite(s): PHYS 1710, BMEN 2320 - Biomedical Instrumentation IBMEN 3310.

#### **BMEN 3321 - Biomaterials**

3 hours

Introduction to the properties of natural and man-made materials commonly encountered in biomedicine and biomedical engineering; the basics of material structures, including crystalline and chemical structure, and microstructure; and characteristics of the materials are developed from the microscopic origins.

Prerequisite(s): PHYS 1710, CHEM 1410, BMEN 3310

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **BMEN 3350 - Biomedical Transport Phenomena**

3 hours

Quantitative analysis of transport phenomena in physiological systems. Introduction to bio-fluid mechanics, mass and heat transfer across biological system. Topics covered include fluid statics, mass, heat and momentum conservation, laminar and turbulent flow, microscale and macroscale analytical methods, mass transport with biochemical reactions, applications to transport in tissue and organs.

Prerequisite(s): BMEN 1300, CHEM 1410, PHYS 1710, MATH 3410

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### BMEN 4212 - Senior Design I

1 hour

Team biomedical engineering design project involving development of problem statement, alternative approaches for solution, product portfolio, specific system analysis and design.

Prerequisite(s): BMEN 3310, BMEN 3350, BMEN 3311, BMEN 3312, BMEN 3321; senior classification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 4222 - Senior Design II

3 hours (2;3)

Continuation of BMEN 4212. Team biomedical engineering design project involving development of alternative approaches for solution, implementation of design techniques and error analysis.

Prerequisite(s): BMEN 4212.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **BMEN 4310 - Biomedical Modeling**

3 hours (2;3)

Introduction to equations and numerical analysis techniques important to the description of living systems and medical devices; solution alternatives and limitations; compartmental modeling; use of finite element modeling; mathematical models of physiological control systems and devices; the behavior or physiological control systems using both time and frequency domain methods.

Prerequisite(s): BMEN 3321 and senior standing.

BMEN 5315.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **BMEN 4311 - Biomedical Instrumentation II**

3 hours

Design of medical systems using graphics programming language of LabVIEW including the designing and programming of three virtual systems as follows: cardiac monitor, electromyogram system for biomechanics, and sleep stage analyses from electroencephalograms.

Prerequisite(s): BMEN 3311, BMEN 3312 and senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## BMEN 4312 - FDA Regulations and Quality Control of Biomedical Systems

3 hours

Introduction to regulations and best practices recommended by the US Food and Drug Administration (FDA) that pertain to testing and marketing of biomedical devices and systems. Discussion on implementation of best practices for pre-clinical and clinical studies. Introduction to total quality engineering and total quality management as related to medical devices and systems. Building quality into design of products and systems in biomedical engineering.

Prerequisite(s): BMEN 3311, BMEN 3321; and senior classification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **BMEN 4313 - Cellular Engineering**

3 hour

Cell-based technologies are emerging to support biomedical applications. By modifying DNA, RNA, proteins, and other biological components, bioengineers have created new cellular behaviors that can be harnessed for disease preventions, diagnostics, and treatments. To continue exploring the use of cell-based approaches for solving biomedical problems, bioengineers are required to gain a molecular understanding on cellular systems. In this course, we will learn about how biological pathways have been targeted for engineering new cellular functions, including transcription, translation, post-translational modification, and regulatory mechanisms for controlling these processes. Additionally, we will discuss a range of examples on using engineered cells as medical tools for therapies and diagnostics.

Prerequisite(s): BMEN 3310.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 4314 - Tissue Engineering

3 hours

Tissue engineering provides new therapies for patients with severe injuries or chronic diseases. The successful development of tissue engineered replacements depends on complementary advances in biomedicine, cell biology, material science, and engineering. Comprehensive course designed for senior level study. Covers the fundamental concepts, multidisciplinary approaches, and clinical applications of tissue engineering and regenerative medicine. Students gain the fundamental understandings of structure-function relationship in normal and pathological mammalian tissues. Principles of tissue engineering; biological mechanisms; experimental, analytical and computational approaches; animal models, as well as their respective clinical applications are integrated to address problems in current tissue regeneration field.

Prerequisite(s): BMEN 3321 and senior classification.

meets with BMEN 5314.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### BMEN 4319 - Cardiovascular Flows

3 hours (2;3)

Blood flow is essential for normal body function. The dynamics of blood flow and the heart functioning as a pump are regulated by, and in turn regulate many physiological processes in, the human body. Understanding the flow of blood in the human body provides valuable insights into human physiology and the interdependence of various organ systems. Cardiovascular diseases disrupt normal blood flow in the human body, affecting many essential processes and organs (giving rise to a plumbing problem!). Students learn about the nature of blood and regulation of blood flow in normal and diseased situations using fundamental principles including physiology, engineering, analytical and computational models, mechanistic approaches and clinical viewpoints. State-of-the-art therapeutic techniques and medical devices currently used by clinicians for detecting and treating cardiovascular diseases also are discussed.

Prerequisite(s): BMEN 3310 and BMEN 3350.

Meets with BMEN 5319.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **BMEN 4320 - Biomedical Microelectromechanical Systems**

3 hours (2,3)

Comprehensive introduction to the science and technology of miniaturization and its applications in biomedical engineering. Methods and tools to create submicron electromechanical and fluidic architectures, with hands-on lab practice and software modeling. Different types of lithography methods will be presented and different techniques such as chemical etching and reactive ion etching will be discussed. Applications in bio micro-electromechanical systems (BioMEMS) will also be discussed in different subjects, such as biosensor, microfluidics, and BioMEMS for diagnosis and tissue engineering.

Prerequisite(s): BMEN 3311, BMEN 3321.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **BMEN 4321 - Biophotonics**

3 hours

Fundamentals of biomedical optics; basic engineering principles used in optical therapeutics, optical diagnostics and optical biosensing.

Prerequisite(s): BMEN 3311, BMEN 3312 and senior standing.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### BMEN 4325 - Biomedical Nanotechnology

3 hours

This course provides an overview of structure and functions of DNA, protein and cell, micro-/nanoengineering technology and characterization methods and serves as an introduction to major areas in biomedical sectors influenced by developments in nanotechnology.

Prerequisite(s): BMEN 3321, senior classification.

Same as BMEN 5325.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### BMEN 4326 - Principles of Biomolecular Engineering

3 hours

To engineer biological systems, it is essential to develop biomolecular components with novel, desirable functions. These components include enzymes, structural proteins, receptors, and other macromolecules. Recent advances in biomolecular engineering open many new possibilities in protein design and protein construction. Discusses a wide range of strategies in designing macromolecules, generating libraries of these parts, and screening desirable candidates. Additionally, trains students in reading, analyzing, and discussing materials from academic research articles.

Prerequisite(s): BMEN 3310.

**BMEN 5326** 

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## BMEN 4900 - Special Problems in Biomedical Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems. For technical elective credit only.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary for a maximum of 6 hours, but a maximum of 3 credit hours apply to major from BMEN 4900 or BMEN 4910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 4910 - Special Problems in Biomedical Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems. For technical elective credit only.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary for a maximum of 6 hours, but a maximum of 3 credit hours apply to major from BMEN 4900 or BMEN 4910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### BMEN 4950 - Topics in Biomedical Engineering

3 hours

Selected topics of contemporary interest in Biomedical Engineering. May be repeated for credit as topics vary.

Prerequisite(s): Senior classification, Consent of Instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **Business**

## BUSI 1200 - Professional Development I-Strategies for Business

1 hour

The first of three required classes in the UNT College of Business through which students are introduced to the process of career planning and decision-making. Introduces students by integrating knowledge of self with business concepts and business career opportunities. Introduces students to professional development with a particular emphasis on communication skills, strategic thinking and teamwork.

Prerequisite(s): Open to business majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BUSI 1340 - Managing the Business Enterprise**

3 hours

Study of managing the business enterprise with an emphasis on leadership with integrity. Overview of managing business organizations and what is needed to succeed in local, domestic, and global markets.

Prerequisite(s): Freshman or sophomore standing. Cannot be used to meet business foundation, business professional field, or business supporting field requirements.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

#### **BUSI 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **BUSI 3100 - Professional Development II-Critical Thinking** and Decision Making in Business

1 hour

The second of three required 1 hour professional development courses for the BBA programs. Focuses on crucial desired skills in managers and business leaders.

Prerequisite(s): Open to declared business majors only. Must have completed all pre-business prerequisites. Restricted to College of Business majors.

Corequisite(s): DSCI 3710 or DSCI 3870, depending on major requirement.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BUSI 3200 - Professional Development III**

1 hour

Provides skills and knowledge in several broad areas that are desired by employers. Helps students understand that technical competence in the work environment is not the only important aspect of professional responsibility. Provides informative insights and tools for enhancing career opportunities. In addition to faculty instructions, topics are covered by using former students and other guest lecturers from business, industry and government to expose students to valuable insights from first-hand experiences.

Prerequisite(s): Open to declared business majors only. Must have completed all pre-business prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BUSI 3660 - Professional Speaking, Writing, and Presentation in a Global Environment

3 hours (3;0;1)

Mastery of the writing process, public speaking and professional presentations. Designed to provide students with the knowledge and skills necessary for effective oral and written communication in domestic as well as international professional settings. Students learn to write professional documents, develop public presence skills, and gain experience developing and delivering structured presentations. Addresses inter-cultural competence. Contains a 3-hour lecture and a required 1-hour recitation component. The recitation provides a smaller environment for practical application of skills introduced during the lecture.

Prerequisite(s): Open to business majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BUSI 4700 - Topics in International Business Practices and Policies

3 hours

Topics include analysis of issues in accounting, marketing, management, finance, the legal environment, or information systems between international companies and U.S. companies. Students are introduced to the business practices and the role culture plays in transacting business internationally. Taught internationally, focusing on a specific country or region.

Prerequisite(s): ACCT 2010 and ACCT 2020; MGMT 3330 or MKTG 3010 or BCIS 3615.

May be repeated for credit as topics vary, for up to 9 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BUSI 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BUSI 4940 - Business Policy**

3 hours

Enterprise management integrating the functional areas of business administration into a realistic approach to business problems; applying principles to complex problems at the executive level.

Prerequisite(s): Completion of all other business foundation courses with a grade of C or better and senior standing.

To be taken during the last term/semester of course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BUSI 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Business Computer Information Systems**

#### **BCIS 2610 - Introduction to Computers in Business**

(BCIS 1305 or BCIS 1405)

3 hours

Study of the introductory concepts of computing in business; basic computer components, computer history and programming.

Prerequisite(s): MATH 1100 or higher (MATH 1180 preferred).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 3610 - Basic Information Systems**

3 hours

Theory, capabilities, applications, benefits, liabilities and economics of business computer information systems. Using the computer to solve business problems. Management information systems and computer-based decision support emphasized. Use of standard support application packages.

Prerequisite(s): BCIS 2610 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 3615 - Visual Display of Business Information**

3 hours

Enhances personal development and discovery fulfilling the standard, functional requirements of communication commonly deemed necessary for professional business performance while combining forward-looking content, ethics application, and creativity--all targeted to the 21st-century business environment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BCIS 3620 - Mainframe Concepts**

3 hours

Introduction to COBOL programming in the business environment. Emphasis on the fundamentals of structured program design, development, testing, implementation and documentation of common business-oriented applications using COBOL. Coverage of language syntax, data and file structures editing, report generation, data validation, basic file processing and an introduction to batch and interactive JCL.

Prerequisite(s): BCIS 2610 or equivalent; a grade of C or better in each previously taken BCIS course, or consent of department; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 3630 - Object-Oriented Programming for Business**

3 hours

Introduction of abstract data types, inheritance, object identity, polymorphism as they relate to building business objects and business classes; use of Java programming language depicting the object orientation concepts; use of class libraries and Java packages for business object construction.

Prerequisite(s): BCIS 2610 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 3680 - Enterprise-Oriented Programming**

3 hours

Concepts of enterprise-level Java development such as graphical interfaces, JavaBeans, database services, and distributed systems as they relate to building object-oriented applications at the enterprise-level.

Prerequisite(s): BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 3690 - Advanced Mainframe Concepts**

2 hours

Concepts of advanced COBOL programming: computer utilization, business applications, data structures, information systems research potential and software design on interactive systems. Topics include structured designs, software development tools, advance file processing, utilities, OS and interactive JCL, report writer, debugging, sorting and other advanced COBOL language features.

Prerequisite(s): BCIS 3620. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### BCIS 4610 - Analysis of Business Information Systems

3 hours

An integrated perspective of the problems in today's information systems environment, concentration on contemporary design methodologies and considerations unique to users of computers and information systems. Topics include current systems analysis, modular design, development and implementation, documentation, project planning and task definition, and other systems analysis topics.

Prerequisite(s): BCIS 3610 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BCIS 4620 - Introduction to Database Applications**

3 hours

Analysis of file organization techniques and data structures. Consideration of the management of data as a resource. Design of data models and databases in business organizations. Use of database management systems and user-oriented data languages.

Prerequisite(s): BCIS 3610, BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

#### BCIS 4630 - Fundamentals of Information Technology Security

3 hours

Introduction to the security systems development life cycle and its effects on application development, software engineering, traditional systems analysis and networking. Examines the various components of information privacy and security.

Prerequisite(s): BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4640 - Administrative Problems in Information Systems

3 hours

Advanced analysis of business information systems. An integrated investigation of business computer information systems programming and systems development concepts. Use of project management methodologies, concentration on tools and techniques, formal presentations and group dynamics.

Prerequisite(s): BCIS 4610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4650 - Visual Programming for Business Applications

3 hours

Business application design and development from the perspective of visual programming technologies. Emphasis on performance characteristics and user interface design considerations.

Prerequisite(s): BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### BCIS 4660 - Introduction to Data Warehousing

3 hours

Investigates model-based approaches to the design of data warehouses. Examines their critical role in decision systems for business and industry.

Prerequisite(s): BCIS 3610; DSCI 3710 or DSCI 3870; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4670 - Continuing Seminar in Computer-Based Information Systems

3 hours

Seminar on current topics in business computer information systems. Examines state-of-the-art issues associated with the design, development, implementation, control and management of business computer information systems.

Prerequisite(s): BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4680 - Business Data Communications and Networking

3 hours

Development of an understanding of 21st-century data communications and networking technologies; solid conceptual and practical understanding of how current network technologies operate and their relationships with the business enterprise; background for analysis, design, selection and evaluation of hardware, software and support required for a data communications and networking environment.

Prerequisite(s): BCIS 3630. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 4690 - Information Technology Management**

3 hours

Overview of the management of an organization's information assets. Emphasizes techniques and issues specific to information systems department management; the development, implementation and operation of computer-based information systems; as well as personnel, career management, assessment, legal, ethical, global and societal issues.

Prerequisite(s): BCIS 4610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department; completion of all other business foundation courses with a grade of C or better and senior standing.

BCIS degree majors must take this course within 12 hours of graduation.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4700 - Problem Solving and Decision Making Process

3 hours

Study of the process of decision making, and the information requirements of decisions; decision support system tool selection and DSS applications development.

Prerequisite(s): BCIS 3610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### BCIS 4720 - Web-Based Information Technologies

3 hours

Provides tools, skills, and an understanding of technology, business concepts and issues that surround the use of web-based information systems. In addition to acquiring basic skills for development of web-based information systems, the student develops an understanding of the current practices and opportunities in electronic publishing, electronic commerce, electronic distribution and electronic collaboration. The student explores several problem areas in electronic commerce such as security (authentication, privacy), encryption, safeguarding of intellectual property rights, acceptable use policies, and legal liabilities.

Prerequisite(s): BCIS 3630. BCIS 4620 (may be taken concurrently); 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

## BCIS 4730 - International Issues of Information Technology

#### 3 hours

Addresses contemporary information systems topics with emphasis on the organizational, economic and technological impacts of information systems in a global business environment. Designed to be both interesting and informative for all business students who want to better understand important international IT management issues and their impact on business.

Prerequisite(s): BCIS 3610 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## BCIS 4740 - Administration and Policy in Information Security

#### 3 hours

Investigates the major concepts and techniques used in client-server systems architecture and information security, beginning with a strategic planning process for security. Subjects include security practices, security architecture and models, continuity planning and disaster recovery planning.

Prerequisite(s): BCIS 3610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### BCIS 4750 - Blockchain for Business

#### 3 hours

The course offers an introduction to Blockchain for business. Much like the internet in its early days, blockchain seems difficult to understand and forecast, but it could become pervasive in the exchange of payments, goods, services, information, and interactions between organizations. Beginning with the history of blockchain and it antecedents, we will explore the significance of blockchain in the marketplace starting with existing implementations like bitcoin and other cryptocurrencies, emerging and probable applications, as well as the possibilities for the expanded use of blockchain in business, government, and not-for-profit organizations. Topics will include the strengths, weaknesses, and technical limitations of blockchain; its legal, regulatory, and governance implications; its potential to disrupt industries and organizations; and much more.

Prerequisite(s): None.

Meets with BCIS 5750.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BCIS 4800 - Cooperative Education**

#### 1-3 hours

Supervised work in a job related to the student's career. A maximum of 3 hours may be applied to elective work in the professional field with departmental approval.

Prerequisite(s): BCIS 3620 or BCIS 3630; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); student must meet the employer's requirements, and have consent of the department chair or BCIS undergraduate coordinator.

Repeatable for up to 9 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BCIS 4900 - Special Problems**

#### 1-3 hours

Prerequisite(s): ECON 1100, ECON 1110, MATH 1100. BCIS 2610 or equivalent; ACCT 2010 and ACCT 2020 with a grade of C or better; MATH 1190 or equivalent; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken BCIS course or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BCIS 4951 - Honors College Capstone Thesis**

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

#### **Business Law**

#### **BLAW 2000 - Personal Law**

3 hours

Consumer-oriented study of the principles of personal law. Student participation required in resolving problems associated with the family, home and vehicle ownership, crimes, negligence, employment, death (including wills and estates), taxation and an individual's rights as a consumer. Recommended for all students, regardless of major field of interest.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **BLAW 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of the Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BLAW 3430 - Legal and Ethical Environment of Business**

3 hours

Historical, economic, political and ethical bases of contracts and sales, including the Uniform Commercial Code, and the impact of regulatory agencies on business enterprise.

Prerequisite(s): PSCI 2306 and PSCI 2305, or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **BLAW 3996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BLAW 4450 - Corporation Law**

3 hours

A course developing the law concerning the powers, duties and responsibilities of corporate managers to their organizations, to investors, to creditors, to the state, and to the general public under state corporation codes and state and federal securities legislation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BLAW 4480 - International Business Law**

3 hours

Examination of selected aspects of the international legal environment affecting transnational commerce. Consideration of relevant U.S. constitutional, treaty and statutory provisions; international conventions and agreements; sovereign immunity and act of state doctrines, nationalization and expropriation.

Prerequisite(s): BLAW 3430.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BLAW 4600 - Current Topics in Business Law**

3 hours

Designed to provide information on the legal environment of specified functional areas as required by developing trends and/or changes in the law.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **BLAW 4770 - Real Estate Law and Contracts**

3 hours

Study of the legal principles governing real estate transactions with an emphasis on promulgated contracts. Topics include contract law, estates in land, types of ownership, deeds, mortgages, title insurance, agency and homestead.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### **BLAW 4790 - Property Management Law**

3 hours

Study of the local, state and federal laws, regulations and cases that impact the professional management of real property. Particular emphasis is given to the legal and ethical issues relative to residential property management. The landlord/tenant relationship is analyzed as well as issues concerning employees, tort liability, risk management, various types of government regulation, fair housing and eviction. Texas Apartment Association lease contracts and other forms are reviewed.

Prerequisite(s): BLAW 3430.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## **BLAW 4900 - Special Problems**

1\_3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

### **BLAW 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

### **Chamber Music**

#### MUCM 3510 - String Chamber Music

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCM 3520 - Woodwind Chamber Music

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCM 3530 - Brass Chamber Music

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCM 3540 - Percussion Chamber Music

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCM 3550 - Jazz Chamber Music

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCM 3617 - Percussion Ensemble**

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUCM 3621 - Guitar Ensemble

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCM 3630 - Harp Ensemble

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### Chemistry

#### CHEM 1360 - Context of Chemistry

3 hours

Fundamentals of chemistry for students who are not science majors. Applications of chemistry to its role in the world. Topics include historical and philosophical development of modern chemistry, the environment, energy, industrial and economic development, modern materials, and popular perspectives of chemistry.

Prerequisite(s): None.

May not be counted toward a major or minor in chemistry.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### CHEM 1400 - First Year Seminar in Chemistry

1 hour

A First Year Experience course that aims to help chemistry students make a successful transition to the collegiate academic environment. Covers general expectations and strategies for student success as well as topics specific to chemistry coursework and career development.

Prerequisite(s): Recommended for students interested in the chemistry major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 1410 - General Chemistry for Science Majors

(CHEM 1311)

3 hours (3;0;1\*)

Fundamental concepts, states of matter, periodic table, structure and bonding, stoichiometry, oxidation and reduction, solutions, and compounds of representative elements.

Prerequisite(s): C or better in MATH 1100 or equivalent.

Corequisite(s): CHEM 1430.

\*This hour is a problem-solving session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## CHEM 1412 - General Chemistry for the Honors College

3 hours (3;0;1\*)

Nature of chemistry, states of matter, periodic table, structure and bonding, stoichiometry, oxidation and reduction, solutions, compounds of representative elements, historical context, practical consequences.

Prerequisite(s): C or better in MATH 1100 or equivalent, admission to Honors College.

Corequisite(s): CHEM 1430.

\*This hour is a discussion session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## **CHEM 1413 - Honors General Chemistry**

3 hours (3;0;1\*)

Fundamental concepts, states of matter, periodic table, structure, solutions and compounds of representative elements.

Prerequisite(s): C or better in MATH 1100 or equivalent. High school chemistry or equivalent is strongly recommended.

Corequisite(s): CHEM 1430.

\*This hour is a problem-solving session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### CHEM 1415 - General Chemistry for Engineering Majors

3 hours (3;0;1\*)

Fundamental concepts, atomic structure, periodic table, stoichiometry, states of matter, chemical bonding, new materials, solutions, thermodynamics, reaction rates, equilibrium, electrochemistry, polymers and nuclear reactions.

Prerequisite(s): C or better in MATH 1650 or equivalent.

Corequisite(s): CHEM 1435.

\*This hour is a problem-solving session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### CHEM 1420 - General Chemistry for Science Majors

(CHEM 1312)

3 hours (3:0:1\*)

Thermodynamics, reaction rates, equilibrium, electrochemistry, organic chemistry, polymers, radioactivity and nuclear reactions.

Prerequisite(s): C or better in CHEM 1410 or CHEM 1413 or consent of department.

Corequisite(s): CHEM 1440.

\*This hour is a problem-solving session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## CHEM 1422 - General Chemistry for the Honors College

3 hours (3;0;1\*)

Thermodynamics, reaction rates, equilibrium, electrochemistry, organic chemistry, polymers, radioactivity and nuclear reactions, historical context, practical consequences.

Prerequisite(s): C or better in CHEM 1412 or CHEM 1410 (or CHEM 1413 with grade B or better and permission of the department), MATH 1100 or equivalent, admission to Honors College.

Corequisite(s): CHEM 1440.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## CHEM 1423 - Honors General Chemistry

3 hours (3;0;1\*)

Thermodynamics, reaction rates, equilibrium, electrochemistry and nuclear chemistry. This course is strongly advised and may be required for students planning to engage in undergraduate chemical research.

Prerequisite(s): C or better in CHEM 1413 or consent of department.

Corequisite(s): CHEM 1440.

\*This hour is a problem-solving session.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### CHEM 1430 - Laboratory Sequence for General Chemistry

(CHEM 1111)

1 hour (1;3)

Laboratory techniques, weighing, errors and significant figures, identification and purification of substances, and elementary quantitative analysis.

Prerequisite(s): None.

Corequisite(s): CHEM 1410 or CHEM 1412 or CHEM 1413.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 1435 - General Chemistry Laboratory for Engineering Majors

1 hour (1;3)

Laboratory techniques; application of statistical methods to laboratory data; chemical and physical property measurements; stoichiometric analysis; measurement of thermodynamic, electrochemical and kinetic data.

Prerequisite(s): CHEM 1415 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### CHEM 1440 - Laboratory Sequence for General Chemistry

(CHEM 1112)

1 hour (1:3)

Quantitative, gravimetric and volumetric analyses; coordination compounds.

Prerequisite(s): C or better in CHEM 1430.

Corequisite(s): CHEM 1420 or CHEM 1422 or CHEM 1423.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 2370 - Organic Chemistry

(CHEM 2323)

3 hours (3;0;1\*)

Structure, nomenclature, occurrence and uses of main classes of organic compounds; functional groups and their interconversion; character of chemical bonding; stereochemistry; structure and reactivity; acid/base reactions, resonance, inductive and steric effects; reaction mechanisms.

Prerequisite(s): "C" or better in CHEM 1415, CHEM 1420, CHEM 1422, or CHEM 1423.

Corequisite(s): CHEM 3210

\*This hour is a problem-solving session.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 2380 - Organic Chemistry

(CHEM 2325)

3 hours (3;0;1\*)

Nucleophilic and electrophilic reaction mechanisms; molecular rearrangements; radical reactions; organic synthesis; absorption spectra of organic compounds of biological interest.

Prerequisite(s): CHEM 2370 with a grade of C or better.

Corequisite(s): CHEM 3220.

\*This hour is a problem-solving session.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## CHEM 2900 - Introduction to Chemical Research

1-3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): CHEM 1430 (should be taken concurrently) and consent of instructor.

For elective credit only; may not be substituted for required chemistry courses.

#### CHEM 2910 - Introduction to Chemical Research

1-3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): CHEM 1430 (should be taken concurrently) and consent of instructor.

For elective credit only; may not be substituted for required chemistry courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 3010 - Opportunity and Responsibility in Chemistry

3 hours

The course is designed to introduce you to chemistry-centered opportunities in the workplace, by exploring different applications of chemistry, areas of research, professionalism and ethical considerations in scientific pursuits. It will prepare you for pursuing the myriad opportunities available to you as an undergraduate chemistry major.

Prerequisite(s): C or better in CHEM 1420/CHEM 1440.

Corequisite(s): Concurrent enrollment in CHEM 2370 is preferred, but not required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 3210 - Organic Chemistry Laboratory

1 hour (1;3)

Separations and Synthesis. Organic preparations; techniques of recrystallization, distillation, solvent extraction, separation of mixtures, chromatography and spectroscopic methods.

Prerequisite(s): "C" or better in CHEM 1420 and CHEM 1440.

Corequisite(s): CHEM 2370 or completed prior with a "C" or better

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

### CHEM 3220 - Organic Chemistry Laboratory

1 hour (1;3)

Synthesis and Analysis. Organic syntheses and systematic identification of unknown organic compounds utilizing classical "wet" and spectroscopic analytical methods.

Prerequisite(s): CHEM 2370 with a grade of C or better, and CHEM 3210

Corequisite(s): CHEM 2380 or completed prior with C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

## CHEM 3230 - Physical Chemistry Laboratory Sequence

1 hour (1;3)

Physical Measurements. Treatment of experimental data. Calorimetry, gases, vacuum line techniques, phase and chemical equilibria, polarimetry, and kinetics.

Prerequisite(s): CHEM 3510 (may be taken concurrently). C or better in CHEM 1420 /CHEM 1440 ; MATH 1710 ; and PHYS 1420 / PHYS 1440 or PHYS 1520 /PHYS 1540 or PHYS 2220 /PHYS 2240

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 3240 - Physical Chemistry Laboratory Sequence

1 hour (1:3)

Advanced Physical Measurements. Spectrophotometry, lasers, atomic and molecular spectroscopy.

Prerequisite(s): CHEM 3520 (may be taken concurrently). C or better in CHEM 3510 /CHEM 3230.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3330 - Forensic Science Analysis

4 hours

This course is designed to provide the student with a comprehensive understanding of today's

crime laboratories and investigative techniques used in the proper collection, preservation, and analysis of evidence.

Prerequisite(s):

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 3451 - Quantitative Analysis

3 hours

Statistical treatment of data; theory and principles of sampling and transfer techniques, gravimetric, and volumetric methods; introductory instrumental analysis.

Prerequisite(s): C or better in CHEM 1420.

Corequisite(s): CHEM 3452.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3452 - Quantitative Analysis Laboratory

1 hour (0:4

Statistical treatment of data; sampling and transfer techniques; selected gravimetric and volumetric methods; introductory instrumental analysis.

Prerequisite(s): C or better in CHEM 1420/CHEM 1440.

Corequisite(s): CHEM 3451.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

#### CHEM 3510 - Physical Chemistry

3 hours (3:0:1\*)

Thermodynamics, kinetic theory, solutions and phase equilibria, chemical equilibrium, photochemistry and chemical kinetics.

Prerequisite(s): C or better in CHEM 1420, CHEM 1422 or CHEM 1423; and C or better in MATH 1720; and C or better in PHYS 1420 or PHYS 1520 or PHYS 2220.

\*This hour is a problem-solving session.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3520 - Physical Chemistry

3 hours (3;0;1\*)

Quantum mechanics: atomic structure and molecular orbital theory. Spectroscopy: microwave, infrared, electronic, photoelectron, electron spin and NMR.

Prerequisite(s): C or better in CHEM 3510.

\*This hour is a problem-solving session.

#### CHEM 3530 - Physical Chemistry for Life Science

4 hours

Fundamental principles of physical chemistry applied to biological systems; thermodynamics, equilibrium and bioenergetics, ionic equilibria, pH, buffers, ionic strength, and electrical properties of amino acids and proteins; kinetics, enzyme catalysis and inhibition; physical properties of biological macromolecules and transport properties in living systems.

Prerequisite(s): C or better in one of the following: CHEM 1420, CHEM 1422 or CHEM 1423.

For chemistry (BA) and life science majors, and preprofessional students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3601 - Organic Chemistry

3 hours (3;0;1\*)

Survey of organic chemistry; types of chemical bonding, functional groups, synthesis and reactions; aliphatic, aromatic and heterocyclic compounds; carbohydrates, lipids and proteins.

Prerequisite(s): CHEM 1420 or CHEM 1423.

For medical technology, merchandising and hospitality management, and secondary education students. \*This hour is a problem-solving session

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3602 - Laboratory for Organic Chemistry

1 hour (0:3)

Prerequisite(s): CHEM 3601 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 4110 - Chemistry Laboratory Instruction

3 hours (1:4)

Introduces undergraduate students to laboratory instruction. Select students participate in laboratory instruction under the supervision of a faculty member and graduate teaching assistant. Successful completion of the course gives the student valuable teaching experience. Students selected are required to attend the weekly lab meetings and assist in the instruction of two lab sections per week and are required to lead instruction of one laboratory class during the semester.

Prerequisite(s): Successful completion of the laboratory and companion lecture course to be taught, with a grade of A or B. Must have a minimum UNT and overall GPA of 2.5. Approval from the laboratory coordinator in charge of the specific laboratory course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 4351 - Forensic Chemistry

3 hours (2;6)

Analytical chemistry applied to forensic science. Statistics and error analysis of drugs and physical evidence. Identification and analysis of forensic evidence through absorption and transmission spectroscopy, chromatography (TLC, HPLC, GC), electrophoresis, mass spectrometry, and atomic emission and analysis.

Prerequisite(s): C or better in each of the following: CHEM 2380, CHEM 3451 and CHEM 3452.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 4360 - Principles of Forensic Science

3 hours (3;1)

This course is designed to reinforce knowledge of forensic techniques and skills critical to evidence preservation and collection. It will also provide students with an understanding of professional ethics in forensic science and courtroom techniques.

Prerequisite(s): CHEM 3330.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### CHEM 4530 - Materials Chemistry

3 hours

Application of chemical principles to understanding the general behavior of materials. Course includes semiconductors, metals, catalysts and "nano-designed" materials (e.g. quantum wells).

Prerequisite(s): Concurrent enrollment in CHEM 3520 or equivalent, or consent of department.

May not be repeated at the graduate level as CHEM 5530.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 4610 - Advanced Inorganic Chemistry

3 hours (1:3)

Electronic structure of atoms and molecules; structure and thermodynamic properties of binary compounds; inorganic nomenclature; introductory survey of bonding, stereochemistry and reactivity of inorganic and organometallic complexes.

Prerequisite(s): CHEM 3520 with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 4620 - Advanced Inorganic Chemistry Laboratory

1 hour (1:3)

Inorganic and organometallic preparations and multistep syntheses; spectroscopic characterization of diamagnetic and paramagnetic compounds; actual laboratory time to vary depending on the nature of the assignment; students may need to return to the laboratory at unscheduled times to complete experimental projects.

Prerequisite(s): CHEM 4610 with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 4631 - Instrumental Analysis

3 hours

Principles and theory of chemical analysis utilizing absorption spectroscopy in ultraviolet, visible and infrared regions, nuclear and electron spin resonance, mass spectrometry, chromatography, polarography and other advanced instrumental techniques.

Prerequisite(s): C or better in CHEM 3451 and CHEM 3452.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 4632 - Instrumental Analysis Laboratory

1 hour (0;4)

Identification and analysis of compounds through absorption spectroscopy in ultraviolet, visible and infrared regions, nuclear and electron spin resonance, mass spectrometry, chromatography, polarography and other advanced instrumental techniques.

Prerequisite(s): None.

Corequisite(s): CHEM 4631

# **CHEM 4660 - Introduction to Computational Chemistry**

3 hours (2;3)

Introduction to the use of modern computational methodologies for the study of physical properties and chemical reactions of importance in chemistry, biochemistry, molecular biology and environmental sciences.

Prerequisite(s): C or better in CHEM 3520 (may be taken concurrently) or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4670 - Introduction to Medicinal Chemistry

3 hours

Fundamentals of medicinal chemistry. General aspects of drug action and rational drug design. Drug development, antibacterial agents, analgesics, antidepressants and anticancer agents.

Prerequisite(s): C or better in CHEM 2380 or CHEM 3601 (with consent of department).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4700 - Research Methods for Secondary Science Instruction

3 hours (2:4)

Techniques used to solve and address scientific inquiry. Design of experiments. Use of statistics to interpret experimental results and measure sampling errors. Ethical treatment of human subjects. Laboratory safety. Mathematical modeling of scientific phenomena. Oral and written presentation of scientific work.

Prerequisite(s): 16 hours of chemistry, completion of freshman and sophomore science courses required for certification and consent of department. EDCI 3500 and EDCI 4000 are highly recommended.

Students seeking secondary certification in mathematics or computer science who have completed the other science requirements of their majors also may enroll. Does not count as an elective toward a major or minor in chemistry, except for students seeking teacher certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### CHEM 4900 - Special Problems

1-3 hours

A written report is required each term/semester.

Prerequisite(s): CHEM 3220 or equivalent, and consent of directing professor.

May be repeated for credit, not to exceed 3 hours each.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

### CHEM 4910 - Special Problems

1-3 hours

A written report is required each term/semester.

Prerequisite(s): CHEM 3220 or equivalent, and consent of directing professor.

May be repeated for credit, not to exceed 3 hours each.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$9.03

# **CHEM 4912 - Undergraduate Research Capstone Experience**

3 hours

Undergraduate students conduct research in a laboratory under the direction of a graduate research group. A written report and an oral presentation are required.

Prerequisite(s): CHEM 3220 or equivalent, and consent of directing professor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### CHEM 4920 - Cooperative Education in Chemistry

1-3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 semester hours of credit in chemistry; student must meet employer's requirements and have consent of the department chair.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4930 - Selected Topics in Chemistry

3 hours

Topics of current interest, which vary from year to year.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4940 - Chemistry Seminar

1 hou

Colloquia covering current topics in chemistry.

Prerequisite(s): Chemistry major with senior standing.

May be repeated for credit. May not be used to meet degree requirements for chemistry major or minor. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4960 - Science Institute (Chemistry)

1-6 hours

For students accepted by the university in special institute courses.

Prerequisite(s): None.

May be repeated for credit, not to exceed 6 hours in each course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# CHEM 4970 - Science Institute (Chemistry)

1-6 hours

For students accepted by the university in special institute courses.

Prerequisite(s): None.

May be repeated for credit, not to exceed 6 hours in each course.

# Chinese

# **CHIN 1010 - Elementary Chinese**

(CHIN 1411)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

Academic (Ar) per nour. \$11.0

# CHIN 1020 - Elementary Chinese

(CHIN 1412)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): CHIN 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### CHIN 2040 - Intermediate Chinese

(CHIN 2311)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): CHIN 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### CHIN 2050 - Intermediate Chinese

(CHIN 2312)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): CHIN 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# CHIN 3030 - Contemporary Chinese Society and Culture

3 hours

Exploration of the contemporary cultures and societies of the Chinese-speaking world through readings and films.

Prerequisite(s): CHIN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### CHIN 3040 - Advanced Topics in Culture

3 hours

Focus on deepening students' understanding of Chinese culture and society today through a study of Chinese history, social dynamics, business practices and advanced readings from sources in contemporary and mainstream Chinese media.

Prerequisite(s): CHIN 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# CHIN 3050 - Chinese Pop Culture

3 hours

Survey of pop culture of the Chinese-speaking world through readings and films.

Prerequisite(s): Chin 2050 or equivalent

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### CHIN 3060 - Advanced Topics in Language

3 hours

Focus on Chinese grammar and intense practice to develop fluency in reading, writing and comprehension of modern Chinese beyond the intermediate level.

Prerequisite(s): CHIN 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### CHIN 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### CHIN 4910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# College of Science

# COS 1100 - Science Success Seminar

1 hour

COS 1100 is a first-year seminar course designed to support and enhance success in the College of Science and UNT by teaching and practicing healthy academic habits, connecting students to campus resources, and building a support network of peers, faculty, and staff.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# COS 4100 - Career Competency Development Seminar

1 hour

Lecture-based course built on the competencies used to establish a competitive applicant for professional schools and graduate programs. At the conclusion of the course, students will have identified areas of weakness, as well as strengths, and be able to present themselves in a multitude of formats to these programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# **Communication Studies**

# **COMM 1010 - Introduction to Communication**

(SPCH 1311)

3 hours (1;0;2)

Examination of how communication principles and skills influence our understanding of current social problems such as global climate crisis, health care, and poverty. Focus on communication and community engagement includes experimental learning with community partners. Oral communication skills and collaborative group building skills are emphasized.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# **COMM 1440 - Honors Classical Argument**

3 hour

Uses of argument in rational decision making based on classical theories of reason. Elements of argument, classical foundations of argument and contemporary application of argument principles.

Prerequisite(s): Acceptance to Honors College.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# COMM 2020 - Interpersonal Communication

(SPCH 1318)

3 hours

Introduction to interpersonal communication research results and theories with application in two-person and small group relationships in a variety of human communication contexts.

Prerequisite(s): None.

Core Category: Social and Behavioral Studies

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# COMM 2040 - Public Speaking

(SPCH 1315)

3 hours (1;0;2)

Introduction to principles of and practice in preparing public speaking speeches. Stresses the role of public speaking in democratic decision making.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# COMM 2060 - Performance of Literature

(SPCH 2341)

3 hours (1;0;2)

Performance as a method of textual study. An introduction to the theory and practice of analyzing, rehearsing and performing non-dramatic texts. Recommended for elementary education majors.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# COMM 2140 - Advocating in Public

3 hours (1:0:2)

Introduction to the critical dimensions of rhetoric and argument through presentation and evaluation of public discourse. Balanced attention to the theory and practice enabling students to analyze the persuasive function of public discourse; to discuss the role of audience in the construction of public discourse; and to develop skills for constructing, supporting, and evaluating public discourse.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### **COMM 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# **COMM 3010 - Communication Perspectives**

3 hours (1;0;2)

Intensive research and writing course in which students learn concepts and skills necessary to review communication research, engage in critical research about communication phenomena and write a research proposal. This course must be taken prior to or concurrently with a student's first enrollment in upper-division COMM courses. A student who fails to complete the course successfully after two attempts (either through withdrawal or failure to achieve a grade of C or better) will not be permitted to enroll in subsequent semesters.

Prerequisite(s): Completion of 30 hours college course work with a cumulative grade point average of 2.50 or higher, including the English Composition and Rhetoric portion of the University Core Curriculum, COMM 1010, COMM 2020, COMM 2060 and COMM 2140 all with grade of C or better.

Communication majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 3120 - Nonverbal Communication**

3 hours (1;0;2)

Applications of research and theory in understanding the impact of nonverbal communication in a variety of human contexts.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3220 - Health Communication

3 hours (1;0;2)

Communication in medical settings; origins, nature and impact of communication practices and beliefs in the health-care delivery system; role of interaction on human well-being.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### COMM 3260 - Storytelling, Narrative and Everyday Life

3 hours (1;0;2)

Investigation of the role of story in the formation of identity and culture, as well as exploration of the narrative structure of everyday life.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### **COMM 3320 - Communication and Conflict Management**

3 hours (1:0:2)

Examination of the role of communication in the effective management of conflict and introduction to basic mediation topics such as gender, intercultural and nonverbal communication. Study of conflict in various common contexts: intrapersonal, interpersonal, group and organizational.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020 or PSCI 4821 or PSCI 4822 or PSCI 4825 or PADM 4000 or PADM 4020 or PADM 4060 or MGMT 3720 or MGMT 3721.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 3340 - Methods of Rhetorical Criticism

3 hours (1;0;2)

Survey of significant methodologies available to rhetorical critics. Emphasis on the critical abilities necessary to describe, explain, analyze, and evaluate symbolic influence in the public sphere.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3420 - Communication and New Technology

3 hours (1;0;2)

Examination of communication in technologically mediated environments. Emphasis on how these environments affect impression formation and management, deception and trust, attraction and relationship formation, group dynamics, social support and networking, community building, etc.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3440 - Public Address Studies

3 hours (1;0;2)

Major theories of public address and the critical assessment of selected persuasive addresses in the public arena.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3520 - Advanced Interpersonal Communication

3 hours (1;0;2)

Advanced study of interpersonal communication research, focusing on theory and application in a variety of contexts.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3540 - The Zombie as Rhetorical Figure

3 hours

Explores the rhetorical figure of the zombie, its cultural force, the way it is put into the service of different structural forces, and made to speak for certain causes. Attends to the zombie figure's roots and circulation across film, television, graphic novels, other literature, and even scientific inquiry in order to track its meaning and uses.

Prerequisite(s): COMM 2140.

#### **COMM 3620 - Intercultural Communication**

3 hours (1:0:2)

Knowledge and skills designed to increase intercultural communication competence. Investigation into the ways in which culture interrelates with and affects communication processes. Examines affective, behavioral and cognitive processes involved in intercultural learning.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### **COMM 3720 - Small Group Communication**

3 hours (2;0;1)

Theory, research and laboratory experience in small group communication; problems in group discussion; decision-making techniques.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020 or PSYC 3100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 3760 - Performance Methods**

3 hours (1:0:2)

Advanced topics in individual performance as a method of textual study as well as theory and practice in individual performance as an aesthetic event and as a rhetorical and social act.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 3820 - Social Media Perspectives**

3 hours (1;0;2)

Examination of how emerging communication tools and technologies change the nature of human communication. Provides a sociohistorical understanding of the changing nature of media technology and the rise of social media as well as an exploration of driving factors and future trends in social media technology development.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 3840 - Argumentation and Debate**

3 hours (2;0;1)

Theory, research and practice in developing and presenting arguments on public policy issues; reasoning, strategy and oral advocacy.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 3865 - Adaptation and Staging

3 hours (1;0;2)

Adaptation and staging for performance. Focus on the visual language of stage composition, adaptation and staging non-dramatic materials, examinations of the roles of the director, actor and audience member.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 3880 - Debate Practicum

1-3 hours

Practicum. Instruction and practice in competitive debate. Advanced discussion of argumentation theory and debate practice with an emphasis on contemporary intercollegiate debate. Requires participation in debate tournaments and weekly team meetings.

Prerequisite(s): Participation on UNT Debate Team and consent of instructor.

May be repeated for credit; however, no more than 3 hours total credit for COMM 3880 may be applied to the communication studies major or minor requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **COMM 3920 - Organizational Communication**

3 hours

Principles of communication applied in the organizational environment. Focus upon diagnosis, analysis, and resolution methods related to communication-based problems with organizations.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020 or MGMT 3330 or MGMT 3820 or MGMT 3860 or PSYC 3520.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 4020 - Communication Theory

3 hours (2;0;1)

Process of theory construction with particular emphasis on human communication, elements and types of theories, theoretical logics, metatheoretical perspectives toward communication, and specific content theories of communication.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### COMM 4040 - Rhetorical Theory

3 hours (2:0:1)

A study of rhetorical traditions that provide useful insights into how individuals engage in rhetorical transactions.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4060 - Performance Theory

3 hours (2;0;1)

Examination and comparison of text-centered, performer-centered and audience-centered theories of performance; functions of performance; and methods for evaluating performance.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060.

# COMM 4065 - 20th Century Performance Styles

3 hours (1:0:2)

Examination of the evolution of performance philosophies, techniques and conventions that have provided the foundation for contemporary theory and practice of the academic discipline of performance studies. Students engage 20th century traditions through discussion, analysis and performance.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4120 - Communication and Sport**

3 hours (1;0;2)

Examination of sport communication research from three perspectives: (1) a practical perspective aimed at improving performance, (2) an interpretive perspective addressing how participants make sense of their participation, and (3) a critical perspective interrogating problematic aspects of sport, including issues of gender, race and class.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### **COMM 4140 - Gender and Communication**

3 hours (1;0;2)

Exploration of the connections between gender, rhetoric and public culture. Analyzing rhetorical constructions of gender in American discourses including politics, race and sexuality, in contexts that include public protests, speeches, movies, poetry, television and music.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140 or WGST 2100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4160 - Intertextuality and Performance

3 hours (1;0;2)

Examination of the myriad relationships that exist among texts in both the consumption of existing texts and the production of original texts through the processes of questioning, parodying, rewriting and critiquing these texts through the processes of performance.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4220 - Theories of Crisis Communication**

3 hours

Examines communication within the context of organizational crises from theoretical and practical perspectives.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling. Minors and other majors must complete COMM 2020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4240 - Rhetoric and Popular Culture

3 hours (2;0;1)

Consequences of discourse on popular culture. May include rhetoric in film, music, youth culture, art, social movements, social media or other arenas. Focuses on the rhetorical aspects of popular culture and the grounds for the criticism of culture from a rhetorical perspective.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4260 - Performance and Culture**

3 hours (2;0;1)

Examination of the role of performance in cultures. Research and analysis of texts and performance practices among various ethnic and cultural groups.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4320 - Communications and Virtual Gaming

3 hours (1;0;2)

Exploration of fundamental concepts related to games and gamers from socio-cultural, psychological and technological viewpoints. Explores the role of gaming technologies in communication, focusing on how they change the nature of communication and their impacts on people's lives and on society, and develops analytical abilities for examining games and gaming technology.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 4340 - Rhetoric and Politics

3 hours (2;0;1)

Rhetoric of political campaigns, presidential rhetoric, legal communication, and the rhetorical creation, maintenance, use and legitimization of symbolic power.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4360 - Performance Composition**

3 hours (2;0;1)

Contemporary performance practices as critical and persuasive tools. Develops skills in reading, writing, analyzing and performing a broad range of texts to acquaint students with the variety of methods whereby performances can be composed.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4420 - Communication and Relational Development**

3 hours (2;0;1)

The role of communication processes in initiating, developing, defining, maintaining and dissolving various forms of human relationships. Examines the nature of communication in a variety of relational contexts.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

#### COMM 4460 - Performance Art

3 hours (2:0:1)

Survey of historical and contemporary avant-garde performance art. Examination of historical and contemporary movements to develop a critical lens and vocabulary for composing performances.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060 or THEA 1050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4510 - Communication Capstone**

3 hours (2;0;1)

Capstone study of communication principles and practices. Students examine and practice the knowledge and skill sets that employers have identified as central to the success of college students hired in their organizations: oral presentation, listening, teamwork, critical thinking/problem solving, communication technology application and professionalization.

Prerequisite(s): Senior standing.

Course is open to students in any major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 4520 - Theories of Persuasion

3 hours

Applications of theory and research in persuasive communication; persuasion techniques across a variety of contexts; affective, cognitive, and behavioral responses relevant to persuasion processes.

Prerequisite(s): Communication studies majors must complete COMM 3010 prior to enrolling; minors and other majors must complete COMM 2020 or PSYC 2600.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4540 - Communication Theories of Sexuality

3 hours (1:0:2)

Examines the ways in which sexuality is constituted through (public) discourses. Uses critical theories to investigate rhetorics that sustain multiple and intersecting sexual identities and gender performances, and apply to everyday experiences with popular culture. Topics addressed include the rhetorical construction and disciplining of heteronormativity, homonormativity, heterosexual and queer sexualities, as well as performances of masculinity and femininity.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140 or WGST 2100.

Same as WGST 4300.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4640 - Latin@ Rhetorics

3 hours

Examines the ways in which discourse is created, circulates and constitutes contemporary understandings of "Latin@-ness" in the United States. Uses a critical rhetorical lens to investigate how Latin@ identity, community and politics have come to be meaningful in the contemporary United States. Topics include histories of Latin@ experience in the United States, (intersecting) performances/expressions of Latin@ identity, borders/bordering, and popular representations of Latin@s.

Prerequisite(s): Communication Studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### COMM 4740 - Landscapes of Public Memory

3 hours

Examines contemporary locations and landscapes of public memory. Begins with the fundamental assumption that contemporary rhetoric plays a primary role in shaping individuals' experiences with public (memory) spaces. Explores particularly salient locations of public memory and investigates how one's experience and understanding of such places is rhetorically informed.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4800 - Communication Internship**

1-3 hours (0;0;1-3)

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): Communication studies major; junior or senior classification; minimum GPA of 3.0 on courses taken at UNT; completion of department core plus at least 6 upper-level hours in communication studies at UNT; student must meet employer's requirements and have consent of department internship supervisor.

May be repeated, but a maximum of 3 semesters credit hours of internship credit may be applied to the major in communication studies

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# COMM 4829 - Topics in Interpersonal/Organizational Studies

3 hours (2:0:1)

Rotating topics in interpersonal communication, organizational communication, or communication research methods.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2020.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4849 - Topics in Rhetorical Studies**

3 hours (2;0;1)

Investigation of various topics related to the study of humans using symbolic discourse to influence others. Theory and application using qualitative and historical/critical methodologies.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2140.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4869 - Topics in Performance Studies**

3 hours (2;0;1)

Rotating topics may include: performance of particular genres, including poetry narrative, drama or non-literary texts; performance methods, including thematic approaches to performance or historical styles of performance; or theoretical issues in performance, including narrative theory, intertextuality or New Historicism.

Prerequisite(s): Communication studies majors must complete COMM 3010 with a grade of C or better prior to enrolling; minors and other majors must complete COMM 2060.

May be repeated for credit as topics vary.

# COMM 4900 - Special Problems

1-3 hours

Prerequisite(s): Problem must be approved by department chair.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# **COMM 4910 - Special Problems**

1-3 hours

Prerequisite(s): Problem must be approved by department chair.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# COMM 4950 - Senior Honors Thesis

3 hours

Available to COMM majors having completed at least 90 semester hours with an overall GPA of 3.50 or better.

Prerequisite(s): COMM 4020 and COMM 4021, or COMM 3340 and COMM 4040, or COMM 4060.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **COMM 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# **Computer Science and Engineering**

# **CSCE 1010 - Discovering Computer Science**

3 hours (3:0)

A breadth-first introduction to computer science based upon 7 "Big Ideas," namely: 1) computing is a creative activity, 2) abstraction reduces information and detail to facilitate focus on relevant concepts, 3) data and information facilitate the creation of knowledge, 4) algorithms are used to develop and express solutions to computational problems, 5) programming enables problem solving, human expression and creation of knowledge, 6) the Internet pervades modern computing and 7) computing has global impacts.

Prerequisite(s): None.

May not be counted toward computer science and engineering major or minor.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **CSCE 1020 - Program Development**

(COSC 1315)

4 hours (3:1)

Introduction to problem-solving, algorithms and programming in a high-level language.

Prerequisite(s): High school algebra or equivalent.

May not be counted toward a major in computer science, a major in computer engineering, a major in information technology, or a minor in computer science and engineering.

### CSCE 1030 - Computer Science I

(COSC 1336 or COSC 1436)

4 hours (3:1)

Introduction to computer science and engineering, problem-solving techniques, algorithmic processes, software design and development.

Prerequisite(s): MATH 1650 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CSCE 1035 - Computer Programming I

4 hours (3;1)

Overview of computers and programming. Focus is on problem analysis and techniques used in the development of algorithms and computer programs using a modern programming language. Topics include data types, expressions, statements, and operators, input/output, conditional statements, iteration, functions, lists, and debugging. No prior knowledge of programming is assumed.

Prerequisite(s): MATH 1650 (or higher) with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 1040 - Computer Science II

(COSC 1337 or COSC 1437)

3 hours (2;3)

Continuation of CSCE 1030. Software design, structured programming, object-oriented design and programming.

Prerequisite(s): CSCE 1030.

Corequisite(s): MATH 1710.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CSCE 1045 - Computer Programming II**

3 hours (2;3)

Continues the progression of students' software development skills through programming, designing, and implementing larger software projects and emphasizes more advanced topics such as dynamic data structures and object-oriented paradigms using one or more modern programming languages.

Prerequisite(s): CSCE 1035 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **CSCE 2100 - Foundations of Computing**

3 hours (3:0:1)

Conceptual and formal models, efficiency and levels of abstraction as used in the field of computing, big-Oh notation, combinatorics and conditional probability, basic operations of sets, functions, relations, trees and graphs, regular expressions, deterministic finite automata and non-deterministic finite automata to describe patterns in strings.

Prerequisite(s): CSCE 1040.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 2110 - Foundations of Data Structures**

(COSC 2336 or COSC 2436)

3 hours (3;0;1)

Data structures and formalisms used in computing, such as asymptotic behavior of algorithms, graph, table, relational and set data structures, context-free grammars to describe patterns, assertions in propositional logic form, amortized analysis to evaluate efficiency of data structures such as splay trees and O(1) expansion of tables.

Prerequisite(s): CSCE 1040 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 2610 - Assembly Language and Computer Organization

COSC 2325/2425

3 hours (3;0;1)

Principles of computer systems organization, instruction sets, assembly language programming, computer arithmetic, data and control paths, and introduction to memory hierarchy.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Corequisite(s): CSCI majors: EENG 2710

CMPE majors: EENG 2710 taken concurrently with EENG 2711

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 2900 - Special Problems in Computer Science and Engineering

1-4 hours

Individualized instruction in theoretical or experimental problems.

Prerequisite(s): Students must get instructor consent by email, as well as departmental consent by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Students must upload the instructor consent and all other consent/approval documentation in the form.

For elective credit only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3010 - Signals and Systems

3 hours

Elementary concepts of continuous-time and discrete-time signals and systems. Specific topics include linear time-invariant (LTI) systems, impulse response, convolution, Fourier series, Fourier transforms, frequency-domain analysis of LTI systems, Laplace transforms, z-transforms, and rational function descriptions of LTI systems.

Prerequisite(s): EENG 2610/EENG 2611 and MATH 2730 or MATH 3410 with a grade of C or better in all of the required courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3020 - Communications Systems**

3 hours (3;0;2)

Introduction to the concepts of analysis and design of communication system components using signal analysis techniques. Amplitude and angle modulation for the transmission of continuous-time signals. Introduction to analog and digital filter design and analysis.

Prerequisite(s): CSCE 3010 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3030 - Parallel Programming**

3 hours

Introduction to processing in parallel and distributed computing environments. General concepts of parallel machine models, processes, threads, mutual exclusion, synchronization and message passing. Design and analysis of parallel algorithms for engineering and scientific applications. Parallel programming using message passing and shared memory paradigms.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **CSCE 3055 - IT Project Management**

3 hours

Provides students with the tools and techniques needed to manage a wide variety of IT systems projects, including software design and development, IT systems design and installation, network management and support, and others. Students develop and practice skills through the use of case studies and other project-based exercises.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3110 - Data Structures and Algorithms**

3 hours

Time complexity of algorithms; merge sort and heap sort; data structures for trees and graphs; elementary graph algorithms; breadth-first search; depth-first search; topological sorting; Prim's algorithm and Kruskal's algorithm.

Prerequisite(s): CSCE 2100 and CSCE 2110, each with a C or better.

# CSCE 3201 - Applied Artificial Intelligence

3 hours

Core concepts and terminology in artificial intelligence will be introduced to understand the taxonomy of AI applications - the relationships between the tools and frameworks available for intelligent, data-driven decision making. This will include a demodriven introduction to machine learning, with general principles of powerful predictive models discussed and the role of unsupervised and semi-supervised learning techniques in powering many state-of-the-art decision systems.

Prerequisite(s): MATH 1650 or instructor consent

This course is for non-computer science and engineering majors.

Experience with Python is helpful as it is used extensively in the course, but significant prior programming experience with any language will be sufficient.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3210 - Symbolic Processing

3 hours

Introduction to symbolic processing using LISP, Prolog or related languages; recursion; building abstractions with data; modularity, objects and state; meta-linguistic abstraction.

Prerequisite(s): CSCE 2100 and CSCE 2110. Each with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3214 - Software Development for Artificial Intelligence

3 hours

New paradigms for developing software are needed to create and manage systems with AI capabilities, particularly for practitioners without extensive programming experience. Students in this course will be taught how to leverage available artificial intelligence APIs flexibly and reliably through a series of demo-driven tasks. Additionally, as data management is integral to AI system development, an emphasis will be made to collect and process data for AI system training and testing. Traditional programming concepts and software design principles will be covered in a task-oriented manner to interface with advanced AI libraries and frameworks in order to build and maintain AI infrastructure.

Prerequisite(s): MATH 1650 or instructor consent.

This course is for non-computer science and engineering majors.

Experience with Python is helpful as it is used extensively in the course, but significant prior programming experience with any language will be sufficient.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3220 - Human Computer Interfaces**

3 hours

Human-Computer Interaction (HCI). Methods for designing, prototyping, and evaluating user interfaces for computing applications. Human capabilities, interface technology, interface design methods, and interface evaluation tools and techniques.

Prerequisite(s): CSCE 2100 and CSCE 2110. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3410 - Advanced Programming**

3 hours

Advanced features and topics in modern programming languages and introduction to a variety of languages, and advanced programming concepts and methodologies. Topics vary by section and semester.

Prerequisite(s): CSCE 2100 with a grade of C or better.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 3420 - Internet Programming**

3 hours

Covers Internet programming in depth, including client-server peer-to-peer, and web applications. Primary goal is to help students understand the principles of how distributed applications are built, while also giving them practical experience in creating common Internet applications.

Prerequisite(s): CSCE 2100 and CSCE 2110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 3444 - Software Engineering

3 hours

Modular design and implementation of software systems. Topics include requirements and specifications development, documentation of the design using current design tools such as UML, testing of software implementation, and system and user documentation.

Prerequisite(s): CSCE 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3450 - Global Software Development

3 hours

Students will be provided knowledge of and practical experience in working within a distributed collaborative team to develop a complex software product in an academic environment. Students learn how to use professional collaborative development tools in order to facilitate the completion of a large software product within a scheduled time frame. Students learn how to work in teams and understand the processes that govern the effectiveness of developing software systems in a global setting.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3520 - Data Communications

3 hours

Overview of data communication, communication models and networking. Analog and digital data transmission, transmission impairments, channel capacity, asynchronous and synchronous transmission, error detection and correction, flow control and error control. Multiplexing and de-multiplexing techniques (FDM, STDM, ADSL, and xDSL). Ethernet interfaces, IEEE 802.3 and IEEE 802.11 MAC layer. Interface Standards (RS-232, RS-449 and X.21). Packet switching, Frame Relay and ATM switching, bridges, layer2 and layer3 switches.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3530 - Introduction to Computer Networks

3 hours

Introduction to data communications; asynchronous, synchronous, networks and current technology.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 3550 - Foundations of Cybersecurity

3 hours (3:0:1)

Security goals, threats and vulnerabilities. Cryptography, program security and operating system security issues. Basic network security. Planning, policies and risk analysis.

Prerequisite(s): NONE

Corequisite(s): CSCE 2110

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CSCE 3560 - Computer Systems Security**

3 hours

Introduces theoretical and practical aspects of computer systems security and present ways to protect a computer system. Topics include operating system security, hardware security modules, cryptoprocessors, hypervisors, trusted platform modules, virtualization security, storage security, trusted hardware, application isolation, and cloud and IoT security. Students will also explore emerging security challenges facing computer systems based on recent research papers.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CSCE 3600 - Principles of Systems Programming**

3 hours (3:0:1)

Introduction to the design and operation of systems software. Analysis is made of current system software technology, including operating systems, language translation systems and file systems.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CSCE 3605 - Systems Administration

3 hours

Prepares students with an understanding of virtual machines with universal principles that apply to all operating systems structure and operation including the concepts of processes, resource and file management and performance. Students also develop an understanding of the pervasive use of Unix-based operating systems in the design of various systems such as switches, routers, load balances, wireless controllers and network management platforms to provide various services to support interaction between computer-based systems.

Prerequisite(s): CSCE 3600 with a C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CSCE 3610 - Introduction to Computer Architecture**

3 hours

Design of simple and pipelined processors, introduction to coprocessor design, techniques to improve performance, memory hierarchy, cache memories, input-output system, and interrupts.

Prerequisite(s): CSCE 2610, CSCE 3730. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3612 - Embedded Systems Design

3 hours (3;0;2)

Computer systems as embedded computing elements and microcontrollers. System specification using UML or other high-level abstract models. Issues and constraints on embedded computing systems, including power, performance, memory and size. Use of DSP, ASIC and micro-controllers in a single design.

Prerequisite(s): CSCE 2610; ENGR 2720/ENGR 2730 or EENG 2710/EENG 2711. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 3615 - Enterprise Systems Architecture and Design

3 hours

Introduces upper division IT students to concepts of system architecture, design and software engineering that are needed for career opportunities as software, system and business analysts. Topics include enterprise architecture design, requirements analysis, software and systems lifecycle methodologies, Unified Modeling Language, analysis and design methodologies and other related topics. Project activities expose all students to the full design and specification of IT systems to meet a variety of business and technical problems, as well as prepare them for their capstone course experiences.

Prerequisite(s): CSCE 2100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CSCE 3730 - Reconfigurable Logic

3 hours (3;0;1)

Advanced concepts in Boolean algebra, use of hardware description languages as a practical means to implement hybrid sequential and combinational designs, digital logic simulation, rapid prototyping techniques, and design for testability concepts. Focuses on the actual design and implementation of sizeable digital design problems using representative computer aided design (CAD) tools.

Prerequisite(s): CSCE 2610 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CSCE 3850 - Introduction to Computational Life Science

3 hours

Survey treatment of the applications of computational paradigms in the natural and physical sciences. Designed to have a broad appeal to natural and physical science students as well as computer science students.

Prerequisite(s): CSCE 2100 with a grade of a C or better. Instructor approval for non-CSE students can be obtained by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides.

Same as BIOL 3850.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean. As well as, Departmental Consent by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Please upload documentation of consent in the form.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4010 - Social Issues in Computing

3 hours

The effect of computer science and engineering on the home and workplace, with emphasis on the role of computer professional in modern society.

Prerequisite(s): CSCE 3600 with a C or better. For non-CSE majors, departmental consent can be obtained by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Please upload the instructor consent in the form.

#### **CSCE 4011 - Engineering Ethics**

3 hours

The effect of technology in modern society with emphasis on the role of engineering and technical professionals.

Prerequisite(s): CSCE 3600 with a C or better. For non-CSE majors, Departmental Consent can be obtained by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Please upload the instructor consent in the form.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4050 - Applications of Cryptography

#### 3 hours

Introduces the fundamentals of cryptography and their applications. The knowledge gained from this course will enable students to apply cryptographic algorithms as building blocks for designing security solutions.

Prerequisite(s): CSCE 2100 and CSCE 2110, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4110 - Algorithms

3 hours

Time complexity of algorithms; algorithm design methodologies including divide and conquer, greedy, and dynamic programming; exposure to approximation algorithms for NP-hard problems; performance evaluation of algorithms.

Prerequisite(s): CSCE 3110 with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4115 - Formal Languages, Automata and Computability

3 hours

Introduces students to the formal language theory that underlies modern computer science. Topics include different representational forms for regular languages, context-free grammars, pushdown automata, pumping lemmas for regular and context-free languages, and Chomsky's hierarchy.

Prerequisite(s): CSCE 2100 and CSCE 2110. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4160 - Parallel Programming**

3 hours

Introduction to processing in parallel and distributed computing environments. General concepts of parallel machine models, processes, threads, mutual exclusion, synchronization and message passing. Design and analysis of parallel algorithms for engineering and scientific applications. Parallel programming using message passing and shared memory paradigms.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4200 - Web Search and Information Retrieval

3 hours

Introduction to text-based information retrieval (IR) techniques, i.e. search engines. Examining various IR models such as the Boolean model and vector space model. Study of efficient indexing, processing and querying textual data. Techniques for improving search performance and evaluating systems. Algorithms and information retrieval system implementations.

Prerequisite(s): CSCE 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 4201 - Introduction to Artificial Intelligence

3 hours

Introduction to concepts and ideas in artificial intelligence, including topics such as search techniques, knowledge representation, problem-solving, logic, probabilistic reasoning, learning, perception and natural language processing.

Prerequisite(s): CSCE 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4205 - Introduction to Machine Learning

3 hours

Theory and practice of machine learning. Linear regression, logistic regression, decision trees, neural network learning, support vector machines, kernel methods, bagging, boosting, random forests, ensemble learning, deep learning, unsupervised learning including k-means and hierarchical agglomerative clustering, semi-supervised learning, active learning, and reinforcement learning. Practical applications of machine learning algorithms. Topics in experimental design and computational learning theory.

Prerequisite(s): CSCE 3110 with a grade of C or better. Non-CSE majors must have Instructor consent by email. As well as, departmental consent by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Please upload the instructor consent in the form.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4210 - Game Programming I

3 hours (3;0;1)

Introduction to game programming, including real-time, eventdriven, and multimedia programming techniques. Graphics, sound and input programming. Students learn how to program a billboard game in 3D with constrained camera motion.

Prerequisite(s): CSCE 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4220 - Game Programming II

3 hours

Game engine programming techniques, including real-time 3D graphics programming, shader techniques, terrain rendering, level of detail, collision detection, particle engines, 3D sound and character animation.

Prerequisite(s): CSCE 4210, CSCE 4255. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4230 - Introduction to Computer Graphics**

3 hours

Basic Euclidian geometry and linear algebra, computer graphics algorithms and data structures, OpenGL and its inner workings.

Prerequisite(s): CSCE 2100, CSCE 2110, MATH 2700. Each with a grade of a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4240 - Introduction to Digital Image Processing

3 hours

Covers fundamental knowledge of digital image processing techniques, including image formation, filtering and image enhancement, restoration, region and edge segmentation, and image coding.

Prerequisite(s): CSCE 2100 and CSCE 2110. Each with a grade of C or better.

#### CSCE 4250 - Topics in Game Development

3 hours

Advanced topics in game development, possibly including but not limited to character animation, procedural content generation, shader techniques and graphics special effects. Discussion of articles from the recent academic and technical literature on game development and related material from relevant computer science areas.

Prerequisite(s): CSCE 4210 with a grade of C or better.

Corequisite(s): CSCE 4220.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 4255 - Programming Math and Physics for Games

3 hours

Fundamentals of game math and physics for game development, including linear algebra, matrix math for graphics, quaternions, basic physics equations, game math and physics implementation, physics engines.

Prerequisite(s): MATH 2700, CSCE 3110, PHYS 1710/PHYS 1730, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4290 - Introduction to Natural Language Processing

3 hours

Introduction to natural language processing, modern theories of syntax, context free parsing, transformational syntax and parsing, computational semantics, and survey of natural language processing systems.

Prerequisite(s): CSCE 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4300 - Intro to Big Data and Data Science

3 hours

Introduction to Big Data and Data Science including an overview of the field, technical challenges, computational approaches, practical applications, structured and unstructured data processing, empirical methods in computer science, data analytics and learning, data visualization, privacy and ethics. Emphasis will be on Big Data and its effect on other topics within Data Science, its technical characteristics, and state-of-the-art Big Data analytics architectures and tools.

Prerequisite(s): CSCE 3110 or instructor consent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4350 - Fundamentals of Database Systems

3 hours

Logical and physical database system organization; logical models; design issues; secondary storage considerations.

Prerequisite(s): CSCE 2100 and CSCE 2110. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4355 - Database Administration

3 hours

Database administration skills covering installation, configuration and tuning a database; administering servers and server groups; managing and optimizing schemas, tables, indexes, and views; creating logins; configuring permissions; assigning roles, and performing other essential security tasks, backup and recovery strategies, automation and maintenance.

Prerequisite(s): CSCE 4350 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 4357 - Database Systems Security

3 hours

Provides a strong foundation in the principles, practices, and methodologies of database security and auditing as well as their impact on the design of today's information systems. Introduces the security challenges and threats in databases systems and provides an understanding of current security technologies. Topics include database application security models, security architecture, access controls, database and database auditing, trust management, privacy, threat vectors, and attack methods.

Prerequisite(s): CSCE 4350 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 4380 - Data Mining

3 hours

Fundamental concepts and techniques of data mining, including data attributes, data pre-processing, statistical foundations, association discovery, mining frequent patterns, classification methods, prediction and cluster analysis.

Prerequisite(s): CSCE 3110 wih a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4430 - Programming Languages

3 hours

Syntax, semantics and computation models of programming languages. Formal foundations of major programming paradigms and in-depth study of key features of high-level programming languages from each paradigm.

Prerequisite(s): CSCE 2100 and CSCE 2110, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4440 - Real-Time Software Development

3 hours

Specification of real-time system requirements, timing, synchronization and fault-tolerance issues, construction and validation of real-time software. Mathematical formalisms, design and analyses using real-time UML are also emphasized.

Prerequisite(s): CSCE 3612 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4460 - Software Testing and Empirical Methodologies**

3 hours

Addresses recent advances in the field of software testing, including empirical methodologies that provide a systematic way to investigate various software engineering techniques and methodologies. Students learn various fundamental testing techniques and the state of the art in testing techniques, and understanding how to design, conduct, analyze and write up empirical studies of software engineering technologies.

Prerequisite(s): CSCE 2110 a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4510 - Introduction to Wireless Communications**

3 hours

Fundamentals of wireless communications and networking, with emphasis on first, second, and third generation cellular systems and satellite communication. Topics include point-to-point signal transmission through a wireless channel, cellular capacity, multi-user transmissions, and mobility management.

Prerequisite(s): CSCE 2610 and MATH 2730, each with a grade of C or better.

#### CSCE 4520 - Wireless Networks and Protocols

3 hours

Architecture and elements of a wireless network. Signaling schemes used in wireless networks, network signaling, protocols and standards. Study of functions of network elements such as Radio Access Network (eNodeB), Mobility Management Entity (MME), Packet Data Network Gateway (PG-W) and Serving Gateway (SG-W). Wireless protocols and technologies in interconnecting these elements. Study of 4G and 5G protocols of cellular networks.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 4530 - Computer Network Design

3 hours

Fundamental concepts, requirements and design tradeoffs, particularly as related to scheduling, congestion control, routing, and traffic management. Wireless access, mobility (including WLAN), VoIP and applications. Firewalls, NATs, VPN, high availability and optical rings.

Prerequisite(s): CSCE 3530 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4535 - Introduction to Network Administration

3 hours

Students explore topics in network administration in theoretical and practical ways, study different software platforms, control, shared resources, administration, security, anti-virus procedures and methodologies.

Prerequisite(s): CSCE 3530 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4540 - TCP/IP Protocols

3 hours

Investigation of the TCP/IP protocol suite, components and interaction with operating systems. Topics include special protocols, routing protocols, MobileIP, as well as FTP, TELNET, SMTP, DHCP, HTTP, DNS, etc.

Prerequisite(s): CSCE 3530 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4555 - Computer Forensics**

3 hours (3;0;1)

Fundamentals of computer forensics and cyber-crime scene analysis including laws, regulations, international standards and formal methodology for conducting computer forensic investigations. Topics include advanced computer forensic science capabilities such as target hardening and software, tools for data duplication, recovery and analysis, and development of pre-search or on-scene computer investigative techniques.

Prerequisite(s): CSCE 2110 with a grade of C or better OR consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4560 - Secure Electronic Commerce**

3 hours

Electronic commerce technology, models and issues, with emphasis on security issues. Supporting technology such as cryptography, digital signatures, certificates and public key infrastructure (PKI). Security-conscious programming for web-based applications. Exposure to interaction between technical issues and business, legal and ethical issues.

Prerequisite(s): CSCE 2110, with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 4565 - Secure Software Systems

3 hours

Software-based attacks and the security design principles which foster the design, implementation, and verification/validation of secure software systems and architectures. Studies approaches, mechanisms and tools used to make software systems more secure and cover principles and practices of a secure and high assurance software development process, including architectural approaches to building secure software, security development lifecycle models, and design/verification/validation using languages and tools such as UML. Tools and techniques for code analysis and test as well as evaluation and certification of software are emphasized.

Prerequisite(s): CSCE 3550 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4570 - Information Privacy**

3 hours

Examines popular concepts of privacy and provides an in-depth look into privacy-related technologies, privacy laws, and self-regulatory efforts. In addition to technical aspects, covers other aspects of privacy such as philosophical, historical, cultural, economic, legal and policy perspectives.

Prerequisite(s): CSCE 3550 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4575 - Blockchain and Applications

3 hours

A foundation in principles, practices, and methodologies of blockchaining, including its architecture and operation. Topics include distributed ledgers; block creation and proof of work; mining and incentivizing techniques; transactions; successful private and public blockchains; and barriers to adoption. Also includes setting up and deploying applications of smart contracts in areas such as IoT, networks, healthcare, finance, supply chain and identity management.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4600 - Introduction to Operating Systems

3 hours (3;0;1)

Concepts in operating system analysis and design. General topics of process, resource and file management are presented and analyzed in the context of different system architectures and performance constraints.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CSCE 4610 - Computer Architecture**

3 hours

Study of performance issues and power requirements related to modern computer systems, including Instruction Level Parallelism, out-of-order instruction scheduling, branch prediction, speculative execution, cache memory, and concurrency.

Prerequisite(s): CSCE 2610/CSCE 3600 or CSCE 3610. Each with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4620 - Real-Time Operating Systems

3 hours

Basic real-time operating systems concepts and services, including interrupt processing, process and thread models, real-time software architectures and development environments. Detailed study of the design and implementation of real-time applications using real-time operating systems. Focus on commercial real-time operating systems/development environments, including vxWorks, RTOS and pOSEK/pOSEKSystem.

Prerequisite(s): CSCE 3612 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **CSCE 4650 - Introduction to Compilation Techniques**

#### 3 hours

Topics include parsing, syntax-directed translation, run-time storage management, error recovery, code generation and optimization. A significant project is required.

Prerequisite(s): CSCE 2100, CSCE 2110 and CSCE 3600. Each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **CSCE 4655 - Principles of Compiler Optimization**

#### 3 hour

Design and implementation of modern methods of analysis and optimization within compilers for a variety of target architectures. Topics include intermediate representations, advanced code generation, control- and data-flow analysis, advanced compiler optimization, dynamic compilation, global register allocation and instruction scheduling.

Prerequisite(s): CSCE 3600 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 4665 - Usability Testing in Software Engineering

#### 3 hours

This course will introduce students to usability topics, including HCI style guides, user interface localization, and usability testing. Students will work individually on small homework assignments and in a team on a larger project.

Prerequisite(s): CSCE 3444 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4730 - VLSI Design

### 3 hours

Introduction to VLSI design using CAD tools, CMOS logic, switch level modeling, circuit characterization, logic design in CMOS, systems design methods, test subsystem design, design examples, student design project.

Prerequisite(s): CSCE 2100, ENGR 2720 and ENGR 2730, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4750 - VLSI Testing

### 3 hours

Advanced experience with CAD tools for VLSI design, IC testing. Design project from CSCE 4730 to be fabricated and tested. Implementation and verification of test programs, IC testing and troubleshooting, legal, economic, and ethical design issues. Oral presentations and written reports are required.

Prerequisite(s): CSCE 4730 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4810 - Biocomputing

# 3 hours (3;0;1)

Introduction to computation problems inspired by the life sciences and overview of available tools. Methods to compute sequence alignments, regulatory motifs, phylogenetic trees and restriction maps.

Prerequisite(s): CSCE 3850 or Departmental Consent for non-CSE majors by filling out the Enrollment Assistance request form at www. csc.unt.edu/overrides. Please upload the instructor consent in the form.

Same as BIOL 4810 and MATH 4810; meets with CSCE 5810.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 4820 - Computational Epidemiology

3 hours (3:0:1)

Application of computational methods to problems in the fields of public health. Design and implementation of disease outbreak models.

Prerequisite(s): CSCE 3850 or departmental consent for non-CSE majors by filling out the Enrollment Assistance request form at www. cse.unt.edu/overrides. Please upload the instructor consent in the form

Same as BIOL 4820; meets with CSCE 5820.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CSCE 4890 - Directed Study

1-3 hours

Study by individuals or small groups if faculty supervisor agrees. A plan of study approved by the faculty supervisor along with the study will be graded by the faculty supervisor; must be approved by the coordinator for undergraduate studies.

Prerequisite(s): Junior or senior standing in computer science, computer engineering or information technology, and consent of instructor.

Required instructor consent by email and departmental consent by filling out the Enrollment Assistance request form at www.cse.unt. edu/overrides. Please upload the instructor consent in the form.

May be repeated for credit for a maximum of 6 credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4901 - Software Development Capstone I

### 3 hours

First of a two course sequence in which students develop a complex Software System starting from customer requirements and progressing through the entire analysis, design, implementation, testing and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents, and finally deliver the finished product to the customer. The first course will focus on the analysis and design of the system.

Prerequisite(s): CSCE 3444 and TECM 2700, each with a grade of C or better.

Corequisite(s): CSCE 4110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4902 - Software Development Capstone II

### 3 hours

Second course in the senior capstone sequence. Focus is the application of techniques to the design of software systems and software components. Students apply the theory acquired from numerous engineering courses to solve real-world design problems. The design will consider realistic constraints including economic, environmental, sustainability, manufacturability, ethical, social and safety.

Prerequisite(s): CSCE 4901 with a grade of C or better. CSCE 4902 must be completed in the long term/semester immediately following the completion of CSCE 4901.

#### CSCE 4905 - Information Technology Capstone I

3 hours

First of a two-course sequence in which students develop a complex IT system starting from customer requirements and progressing through the entire analysis, design, implementation, testing and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents, and finally deliver the finished product to the customer. The first course focuses on the analysis and design of the system.

Prerequisite(s): CSCE 3055 and CSCE 3615, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CSCE 4907 - Cybersecurity Capstone I

3 hours

First of a two-course sequence in which students apply cybersecurity principles and techniques to develop a complex information system starting from customer requirements and progressing through the entire analysis, design, implementation and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents, and finally deliver the finished product to the customer. The first course focuses on the analysis and design of the secure system.

Prerequisite(s): CSCE 3550 with a grade of C or better.

Corequisite(s): CSCE 4565 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4910 - Computer Engineering Design I

3 hours

First course in the senior capstone design sequence. Focus is the application of techniques to the design of electronic systems that have digital hardware and software components. Students apply the theory acquired from numerous engineering courses to solve real-world design problems. The design will consider realistic constraints including economic, environmental, sustainability, manufacturability, ethical, social, safety.

Prerequisite(s): CSCE 3612 and EENG 3510 and appropriate area electives, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4915 - Computer Engineering Design II

3 hours

Second course in the senior capstone design sequence. Focus is the application of techniques to the design of electronic systems that have digital hardware and software components. Students apply the theory acquired from numerous engineering courses to solve real-world design problems. The design will consider realistic constraints including economic, environmental, sustainability, manufacturability, ethical, social, safety.

Prerequisite(s): CSCE 4910 with a grade of C or better. CSCE 4915 must be completed in the long term/semester immediately following the completion of CSCE 4910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4920 - Cooperative Education in Computer Science and Engineering

1-3 hours

Supervised field work in a job directly related to the student's major field of study or career objective.

Prerequisite(s): Junior or senior standing in computer science, computer engineering or information technology, consent of instructor, and departmental consent.

Obtain departmental consent.

May be repeated for credit, maximum 6 credit hours.

Pass/No Pass

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4925 - Information Technology Capstone II

3 hours

Second of a two-course sequence in which students develop a complex IT system starting from customer requirements and progressing through the entire analysis, design, implementation, testing and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents, and finally deliver the finished product to the customer. The second course focuses on the implementation, testing and delivery of the system.

Prerequisite(s): CSCE 4905 with a grade of C or better. CSCE 4925 must be completed in the long term/semester immediately following the completion of CSCE 4905.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4927 - Cybersecurity Capstone II

3 hours

Second of a two-course sequence in which students apply cybersecurity principles and techniques to develop a complex information system starting from customer requirements and progressing through the entire analysis, design, implementation and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents and finally deliver the finished product to the customer. The second course focuses on the implementation, testing and delivery of the secure system.

Prerequisite(s): CSCE 4907 with a grade of C or better. CSCE 4927 must be completed in the long term/semester immediately following the completion of CSCE 4907.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4930 - Topics in Computer Science and Engineering

3 hours

Topics vary.

Prerequisite(s): Junior or senior standing in computer science, computer engineering or information technology, and consent of instructor.

Required instructor consent via email and departmental consent by filling out the Enrollment Assistance request form at www.cse.unt. edu/overrides. Please upload the instructor consent in the form.

May be repeated for credit, a maximum of 6 credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4940 - Special Computer Application Problem

1-4 hours

Study defined by the student in applying computer science to another field. Work supervised and work plan approved by one faculty member from computer science and one from relevant application area; one to three students may work together if all faculty advisors concerned agree.

Prerequisite(s): Prior approval of plan by faculty supervisor.

Instructor consent by email and departmental consent required.

Open to advanced undergraduate students capable of developing problems independently.

May be repeated for credit, for a maximum of 6 credit hours.

# CSCE 4950 - Special Problems in Computer Science and Engineering

1-3 hours

Prior approval of plan of study by faculty supervisor.

Prerequisite(s): Junior or senior standing in computer science, computer engineering or information technology, and consent of instructor

Instructor consent by email and departmental consent required.

May be repeated for credit, maximum 6 credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **CSCE 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Required instructor consent, approval of the dean of the school or college in which the thesis is prepared, and approval of the dean of the Honors College by email. As well as, departmental consent by filling out the Enrollment Assistance request form at www.cse.unt. edu/overrides. Please upload all approvals in the form.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CSCE 4999 - Senior Thesis

3 hours

Intended to be a serious exercise in the organization and presentation of written material. Students select their own topics, in consultation with their faculty advisor. The thesis is a research paper and students are responsible, with the advice of their faculty, for the investigation of sources, the accumulation of data, the selection of pertinent material and the preparation of the thesis in acceptable form.

Prerequisite(s): Senior standing.

Students must submit their own topics for thesis, with designated advisor approval, before they are allowed to register for the course.

Instructor consent by email and departmental consent required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **Construction Engineering Technology**

# **CNET 1160 - Construction Methods and Materials**

3 hours (3,0)

Introduction to the materials, systems, methods and procedures of building construction.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 2180 - Building Construction Techniques**

3 hours (1.4)

Contemporary techiques used in the construction industry; nature, use and characteristics of materials; construction methodology, application and sequencing in the building process. Course will include hands-on construction of a scale model of a building.

Prerequisite(s): CNET 1160

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

#### **CNET 2200 - Surveying for Construction**

3 hours (2;3)

Surveying principles, instruments, measurements and calculations fundamentals of surveying for building construction; survey drawings and mapping.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 2300 - Construction Graphics and Modeling**

3 hours (1,4)

Interpretation and creation of construction plans using hand drafting, CAD, and BIM methods.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 2900 - Special Problems**

1–4 hours

Individualized instruction in theoretical or experimental problems.

Prerequisite(s): Consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 3150 - Construction Contract Documents**

3 hours (3,0)

Interpretation of construction drawings; architectural, structural, mechanical, electrical and landscaping documents; development, interpretation and implementation of specifications and other construction documents.

Prerequisite(s): CNET 2180

# **CNET 3160 - Construction Cost Estimating**

3 hours (2:3)

Procedures, techniques and systems of construction cost estimating. Includes work classification, quantity detailing, specification interpretation and bid preparation.

Prerequisite(s): CNET 2180

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CNET 3190 - Construction Scheduling**

3 hours (2:3)

Study of construction scheduling utilizing current techniques including Critical Path Method (CPM), the Precedence Method (PM), the Program Evaluation and Review Technique (PERT) and a probabilistic method.

Prerequisite(s): CNET 3160.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### CNET 3410 - Occupational Safety and Liability

3 hours

Study of basic concepts of accident prevention, safety education, economic impact and environmental hazard control. Includes OSHA regulations and other regulations as they relate to the employer, the employee and the public.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **CNET 3430 - Structural Analysis**

3hours

Analysis of continuous structures using slope-deflection, conjugatebeam, and virtual work methods. Force and stiffness methods of analysis are applied to truss and frame structures. Relevant computer applications are applied.

Prerequisite(s): ENGR 2332.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CNET 3440 - Steel Structures**

3 hours

Principles, analysis and methodologies for conceptual and detailed design of steel structures. Emphasis on the role of mechanics in modern structural engineering design specifications with a focus on load and resistance factor design. Topics include behavior and design of hot-rolled and cold-formed steel, connections, members frames and advanced analysis techniques.

Prerequisite(s): CNET 3430.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CNET 3445 - Steel Structures**

3 hours

Principles, analysis and methodologies for conceptual and detailed design of steel structures. Emphasis on the role of mechanics in modern structural engineering design specifications with a focus on load and resistance factor design. Topics include behavior and design of hot-rolled and cold-formed steel, connections, members frames and advanced analysis techniques.

Prerequisite(s): CNET 3435.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CNET 3450 - Structures I

3 hours

Basic theory of engineering mechanics and relationships among loads placed on structures. Topics include description of loads,

equilibrium in 2 and 3 dimensions, free-body diagrams, resultant stresses, strains and deflections of structures.

Prerequisite(s): CNET 2180

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### CNET 3452 - Structures II

3 hours

A comprehensive introduction to the principles of structural analysis and structural design of steel, concrete, and timber structures.

Prerequisite(s): CNET 3450.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# **CNET 3460 - Soils and Foundations**

3 hours (2;3)

Study of the properties of subsurface materials and the principles of subsurface construction. Topics include soil classification and testing, soil mechanics, and foundation systems.

Prerequisite(s): CNET 2180, ENGR 2332.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **CNET 3465 - Soils and Foundations**

3 hours

Study of the properties of subsurface materials and the principles of subsurface construction. Topics include soil classification and testing, soil mechanics, and foundation systems.

Prerequisite(s): CNET 2180 and ENGR 2302.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CNET 3480 - Structural Design with Concrete, Timber and Other Materials

3 hours (2;3)

Review of current requirements and techniques for design of modern structures using materials such as reinforced concrete, timber, engineered brick and concrete masonry. Relevant design specifications and criteria are included.

Prerequisite(s): CNET 2180, CNET 3430.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CNET 3485 - Structural Design with Concrete, Timber and other Materials

3 hours

Review of current requirements and techniques for design of modern structures using materials such as reinforced concrete, timber, engineered brick and concrete masonry. Relevant design specifications and criteria are included.

Prerequisite(s): CNET 2180 and CNET 3435.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# CNET 3900 - Special Topics in Construction Engineering Technology

1-4 hours

Individualized or group instruction on special topics in construction engineering technology with hands-on activities, experiments and data acquisition, software-based simulations and analysis of results appropriate for rising junior or junior-level students.

Prerequisite(s): Consent of program coordinator.

May be repeated for credit as topics vary up to a maximum of 6 hours.

# CNET 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **CNET 4170 - Construction Management**

3 hours

Planning, organizing, scheduling and managing construction projects. Includes preconstruction planning, cost and quality control, materials procurement, subcontractor management, start-up and close-out.

Prerequisite(s): CNET 3160.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 4180 - Problems in Project Management**

3 hours

Construction project management simulation involving bid preparation, cost control, scheduling, contract preparation, construction documents interpretation, punchlist management and project evaluation.

Prerequisite(s): CNET 4170.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CNET 4190 - Quality Management in Construction

3 hours

Introduction to the principles and techniques associated with quality management and six sigma concepts as practiced in the construction industry.

Prerequisite(s): CNET 2180.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4230 - Introduction to Risk Management in Construction

3 hours

Introduction to risk management strategies by identifying potential risks and assigning mitigation control measures.

Prerequisite(s): CNET 2180.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4620 - Advanced Design in Cold-Formed Steel Structures

3 hours (2;3)

Study of the theories of design and behavior of cold-formed/light gauge steel structural members, connections and systems. Relevant design specifications and computer applications are included.

Prerequisite(s): CNET 3430.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4625 - Advanced Design in Cold-Formed Steel Structures

3 hours

Study of the theories of design and behavior of cold-formed/light gauge steel structural members, connections and systems. Relevant design specifications and computer applications are included.

Prerequisite(s): CNET 3435.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4630 - Construction Management for Mechanical, Electrical and Plumbing (MEP) Systems

3 hours 3

Investigation into the integrated approach of managing and scheduling the installation of MEP systems, including the study and analysis of basic mechanical, electrical and plumbing components in construction and their relationships to the overall building.

Prerequisite(s): CNET 2180.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CNET 4780 - Senior Design I

1 hour

Project teams specify, plan and perform management analysis of an engineering or construction product or process. Oral and written documentation required. Projects to be supplied by the local construction industry whenever possible.

Prerequisite(s): CNET 3190, CNET 3440, CNET 3460; senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### CNET 4785 - Senior Design I

1 hour

Project teams specify, plan and perform management analysis of an engineering or construction product or process. Oral and written documentation required. Projects to be supplied by the local construction industry whenever possible.

Prerequisite(s): CNET 3190, CNET 3445 and CNET 3465.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### CNET 4790 - Senior Design II

3 hours (1;4

Perform design and management analysis of an engineering or construction product or process. Oral and written documentation required. Projects to be supplied by local construction industry whenever possible.

Prerequisite(s): CNET 4780.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4795 - Senior Design II

3 hours

Perform design and management analysis of an engineering or construction product or process. Oral and written documentation required. Projects to be supplied by local construction industry whenever possible.

Prerequisite(s): CNET 4785.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **CNET 4900 - Special Problems**

1–4 hour

Individualized instruction in theoretical or experimental problems. Written report required.

Prerequisite(s): Consent of instructor and program coordinator.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4910 - Special Problems

1-4 hours

Individualized instruction in theoretical or experimental problems. Written report required.

Prerequisite(s): Consent of instructor and program coordinator.

# **CNET 4920 - Cooperative Education Internship**

1 hour

Supervised industrial internship requiring a minimum of 150 hours of work per experience.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 3 semester credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# CNET 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# Counseling

# COUN 2600 - Culture-Centered Social and Emotional Learning in the Schools

1.5 hours

Focuses on the inclusion of social emotional learning (SEL) in school environments, including relevance to cultural factors and individual mental health. Students will be encouraged to consider how educational professionals assess and cultivate preK-12 students' healthy identities, emotional expressions, supportive relationships, and personal/collective goals. Content includes how educators can utilize SEL practices to foster equity and excellence in schools that support students' mental health.

Prerequisite(s): Admission to the teacher education program.

Corequisite(s): LTEC 2600 - Teaching with Digital Tools

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# **COUN 2610 - Principles of Counseling I**

3 hours (3;0;1)

Introduction to the broad range of counseling services and their application to schools and community agencies.

Prerequisite(s): None.

May be taken concurrently with COUN 3630, COUN 3640, and COUN 4620.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### **COUN 2620 - Diversity and Cultural Awareness**

3 hours

Didactic, experiential and applied learning opportunities prepare students to understand differences and commonalities within diverse cultures. Students learn how cultural identity influences personal and world views, perceptions of experience, and styles of communication. With a focus on developing intra- and interpersonal awareness, students cultivate attitudes and practice skills necessary for relating constructively with diverse individuals in a variety of work settings.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# **COUN 3600 - Therapeutic Play**

3 hours

Didactic experience in how to be a therapeutic agent in children's lives. Students are introduced to the fundamental concepts and models of therapeutic play and building therapeutic relationships with children. Students are also introduced to basic child-centered play therapy principles and training requirements. Observations of play therapy sessions are required.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# COUN 3620 - Principles of Counseling II

3 hours

Integrated overview of counseling services through personal self-exploration by the counseling associate. Focus is on the understanding of interpersonal dynamics through self-awareness.

Prerequisite(s): COUN 2610.

# **COUN 3630 - Survey of Career Development and Career Guidance**

3 hours

Overview of current problems and developments in career choices.

Prerequisite(s): COUN 2610 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# COUN 3640 - Group Process in Helping Relationships

3 hours

Group dynamics laboratory: group functions and leadership styles as related to helping relationships.

Prerequisite(s): COUN 2610 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# COUN 4620 - Interpersonal Skills in Helping Relationships

3 hours

Didactic and experiential training in interpersonal relationships; analysis and application of effective counseling activities.

Prerequisite(s): COUN 2610 and COUN 2620.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# **COUN 4900 - Special Problems**

1-3 hours

Individual instruction to cover course content in special circumstances.

Prerequisite(s): Consent of chair or dean.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

# **COUN 4910 - Special Problems**

1-3 hours

Individual instruction to cover course content in special circumstances.

Prerequisite(s): Consent of chair or dean.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# **Criminal Justice**

# CJUS 2100 - Crime and Justice in the United States

(CRIJ 1301)

3 hours

Examines the societal responses to people and organizations that violate criminal codes; discusses the history, development, organization and philosophy of the justice process; and analyzes the complex inter-relationships between the major components of the criminal justice system (police, courts and corrections).

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### CJUS 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### CJUS 2910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### CJUS 3201 - Criminal Law

3 hours

Examines general and statutory bases and theories of criminal law and jurisprudence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### CJUS 3210 - Judicial and Legal Systems

3 hours

Examines the courts, the legal and judicial process and judicial behavior.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3300 - Police Systems

3 hours

Focuses on the role and function of police in contemporary society, the problems arising between citizens and police from the enforcement of laws, the limitations of police in a democratic society and the methodologies used by the police to be a more effective component of the justice system.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3310 - Organized and Consensual Crime

3 hours

The study of the history, structure and governmental responses to organized crime; special emphasis is placed on consensual crimes such as drug abuse and trafficking, prostitution, pornography and gambling.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3320 - Corporate Security and Loss Prevention

3 hours

Overview of loss prevention problems and the security and management strategies designed to protect the private sector from crime, fire, accident, employee dishonesty and natural disaster.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### **CJUS 3330 - Introduction to Criminalistics**

3 hours (3;0;1)

Overview of the field of criminalistics, with a focus on the recognition, collection, preservation and analysis of physical evidence. Introduction to topics such as fingerprint examination, trace evidence analysis and firearm examination. Prerequisite for more advanced criminalistics courses.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3340 - Computer Crime

3 hours

Introduction to computer crime through an examination of the crime and those individuals committing it, as well as the specific laws, investigative techniques, and criminological theories applicable to computer crime.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3400 - Correctional Systems

3 hours

Focuses on prisons and jails. Examines the goals and history of punishment; the death penalty; the composition and social organization of jail and prison populations; bail, detention, sentencing and classification; institutional management and the conflicts between rehabilitation and punishment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### **CJUS 3410 - Correctional Case Management**

3 hours

Study of the basic purposes and techniques of correctional case management with consideration given to the supervision and control of offender activities and the development of interpersonal skills required to enhance communication with and to effect lasting behavioral change in offenders.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 3500 - Diversity Issues in Criminal Justice

3 hours

Critically examines race, gender and other diversity issues within the U.S. criminal justice system. Topics of emphasis include the importance of diversity issues in the development, organization and operation of the criminal justice system. Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### CJUS 3600 - Criminology

3 hours

Provides an overview of the major criminological perspectives and an examination of the social, political and intellectual milieu within which each developed. Focuses on the multi-disciplinary nature of criminological thought.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### CJUS 3610 - Juvenile Justice

3 hours

Examines the juvenile justice system and the handling of juvenile delinquents in the United States. Specific attention is devoted to the history of the juvenile justice system and current police, court and correctional policies and practices pertaining to juvenile offenders.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3620 - Juvenile Delinquency

3 hours

Examines juvenile delinquency in the United States. Specific attention is devoted to the definitions, measurement and correlates of juvenile delinquency. Additional focus is paid to the various theories of juvenile delinquency and what each theory prescribes for preventing, treating and handling juvenile delinquents.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3630 - Drugs, Crime and Society

3 hours

Examines the relationship between drugs, crime and human behavior. Explores the relationship between drug abuse and crime and the policy proposals developed to control drug trafficking, drug abuse, and drug-related crime, as well as the multi-faceted aspects and effects of chemical abuse and dependency.

Prerequisite(s): None.

Same as SOCI 3630.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# CJUS 3700 - Ethical Issues in Criminal Justice

3 hours

Study of ethical issues facing the criminal justice system. Problems confronting police, the courts and the juvenile and correctional systems are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### CJUS 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### CJUS 4200 - Criminal Procedure

3 hours

Examination of the constitutional and statutory bases and judicial interpretations of the procedures governing the administration of criminal justice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### CJUS 4250 - Law and Social Problems

3 hours

Examines the role of law in attempts to address and solve social problems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4330 - Domestic and International Terrorism

3 hours

Provides in-depth knowledge about domestic and international terrorism. Specific focus on strategies designed to address the threat of terrorism from a criminal justice perspective, particularly involving the police assuming new roles in homeland security. Explores ideological theories of terrorism and identifies trends and patterns of terrorism and hate crimes in our world.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4350 - Seminar on Violence

3 hours

An analysis of the incidence, patterns and causes of criminal violence; the characteristics of particular crimes (e.g., murder, robbery, rape, domestic abuse, terrorism); and society's reaction to such violence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4360 - Criminal Investigation

3 hours

Study of methods of obtaining and reporting information from the crime scene, victims, witnesses and suspects. Specific attention is given to investigation of index crimes (homicide, rape, robbery, assault, burglary, arson, motor vehicle theft and larceny).

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4460 - Community Corrections

3 hours

Examines the concept of community corrections from various perspectives. Also examines contemporary practices and trends in probation, parole, and other forms of community corrections.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4500 - Administration of Criminal Justice Agencies

3 hours

Study of principles and practices of administration and their application to criminal justice agencies. Special focus on the relationship of theoretical administrative concepts and practical criminal justice problems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4650 - Victimology

3 hours

Exploration of the scope of victim issues in American society. Review of the programs and services provided victims of crime. The expanding roles of the courts, police, battered women shelters, victim/witness assistance programs, crisis intervention units and legislation are highlighted.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4660 - Offender Behavior

3 hours

Examines the variables that correlate with or lead to criminal behavior, such as the family, schools, personality, economic forces and cultural values. Psycho-social explanations illuminate the factors that cause crime and criminality and suggests solutions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4700 - Research Methods in Criminal Justice

3 hours

Examines research methodology in criminal justice. Special emphasis is placed on methods and techniques for conducting research in criminal justice, including the relationship between theory and research, the nature of causation, research designs and techniques, conceptualization and measurement, operationalization, sampling and ethical issues.

Prerequisite(s): Senior standing and a minimum of 18 hours in criminal justice, with 12 hours from the criminal justice core.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4850 - Internship in Criminal Justice

1-6 hours

Each student is placed as a participant observer in a criminal justice agency for a minimum of 120 hours to provide an opportunity to apply academic training to practical situations.

Prerequisite(s): CJUS 2100 or equivalent and 12 additional hours of criminal justice courses and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4860 - Studies in Criminal Justice

1-3 hours

Individual investigation of selected issues regarding criminal justice.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4870 - Topics in Criminal Justice

3 hours

Seminar class devoted to an investigation, analysis and discussion of significant problems in contemporary criminal justice.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

# CJUS 4901 - Senior Seminar: Criminal Justice and Public Policy

#### 3 hours

Examination of the problems and issues involved in forming and implementing criminal justice policy in the United States. Course represents the final capstone experience for the student and should generally be taken in the semester the student will graduate.

Prerequisite(s): Must take last graduating semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

# CJUS 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### **Dance**

# **DANC 1050 - Dance Performance**

1 hour (0;3)

Introductory laboratory course giving credit to students for their experiences in rehearsal and performance of dance as an art form. The course is fourfold in content, including auditions, studio rehearsals, technical and dress rehearsal, and performances. All students planning to audition for a dance performance in the Department of Dance and Theatre must be enrolled in a performance lab. All students enrolled in the course are provided the opportunity to be in a dance production in the capacities of audition, rehearsal and/or performance.

Prerequisite(s): None.

Corequisite(s): Concurrent in a Modern Dance Technique class Level I-VIII.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 1100 - Stress Reduction Through Movement**

3 hours (3:1)

An introductory course designed to acquaint and equip the student with diverse and global perspectives on wellness and health maintenance. Four basic units of study: 1) varying medical philosophies and disciplines; 2) the mind-body connection; 3) therapeutic massage and bodywork; 4) movement (strength, flexibility, balance, and endurance). Develops an understanding of the power each of us has to affect the immune system and the body's efficiency to promote and maintain health.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1200 - Appreciation of Dance as a Contemporary Art Form

3 hours

Aesthetics of dance as a performing art. Emphasis placed on the development of an appreciation for dance as a form of communication and as a reflection of contemporary society. Lectures, films and field trips.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# DANC 1250 - Choreography I

3 hours

Introduction to the principles and application of dance composition through improvisational exercises; addresses the elements of movement: space, time, and energy. Explores the concepts of abstraction, organic movement, developing a motive, working from a score and musicality.

Prerequisite(s): None.

Corequisite(s): Concurrent enrollment in Modern Technique Level I-VIII.

Required of all dance majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1300 - Dance of the Time: Modern Dance for Non-Majors

1 hour (0;3)

An introduction to the basic principles and foundations of modern dance. Introduces students to technical concepts involved in training for an articulate and expressive body. Includes historical context.

Prerequisite(s): None

# **DANC 1401 - Modern Dance Technique Level I**

2 hours (0;4.5)

Introduction to theory and technique of modern dance. Fundamental exercises and analysis of time, space and dynamics as they apply to elements of dance with emphasis on structural alignment and integration.

Prerequisite(s): Students must audition and be accepted into the Dance program as a Dance Major or Minor in order to take this course.

Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 1402 - Modern Dance Technique Level II**

2 hours (0;4.5)

Introduction to theory and technique of modern dance. Fundamental exercises and analysis of time, space and dynamics as they apply to elements of dance with emphasis on structural alignment and integration. This is a continuation of DANC 1401 Modern Dance Technique Level I.

Prerequisite(s): Students must audition and be accepted into the Dance program as a Dance Major or Minor in order to take this course.

Students must complete each semester with a minimum grade of B to advance to the next level

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1411 - Ballet Technique Level I

1 hour (0:4)

Basic techniques of classical ballet. Emphasis placed on fundamentals of alignment, integration, terminology and simple ballet movement vocabulary.

Prerequisite(s): Students must audition and be accepted into the Dance program as a Dance Major or Minor in order to take this course.

Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1412 - Ballet Technique Level II

1 hour (0;4)

Basic techniques of classical ballet. Emphasis placed on fundamentals of alignment, integration, terminology and simple ballet movement vocabulary. This is a continuation of DANC 1411.

Prerequisite(s): Students must audition and be accepted into the Dance program as a Dance Major or Minor in order to take this course.

Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1500 - Jazz Dance Technique, Level I

1 hour (0;3)

Introduction to jazz dance through a study of its vocabulary, style and technique.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 1710 - Tap Dance Technique, Level I

1 hour (0:3)

Basic technique of tap dance designed for the beginning performing student. Fundamentals of body placement, terminology, simple tap combinations, elements of performance quality and tap dance composition.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### DANC 2060 - Music for Dancers

3 hours (3;1)

An introduction to music and its relationship to dance. Increases musical awareness, listening skills, rhythmic skills, communication skills in the language of music, musicality, and repertoire of music selections for choreography.

Prerequisite(s): DANC 1250 or consent of instructor.

Corequisite(s): Concurrent enrollment in a Modern Dance Technique class

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### DANC 2095 - Stage Production I

1 hour

Introduction to principles and practices governing presentation of stage production. Students participate in support of department laboratory productions. Students complete lab hours assigned to costume shop, scene shop, electrics/sound and ushering to gain an understanding of how each area supports an overall production.

Prerequisite(s): None.

Same as THEA 2095.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

# DANC 2250 - Choreography II

3 hours (3:3)

Theory and practice of movement exploration for use in establishing expressive movement patterns to be structured into short dance compositions. Three hours weekly of lecture and movement plus a minimum of 60 clock hours in a movement laboratory.

Prerequisite(s): DANC 1250 Choreography I

Corequisite(s): Concurrent enrollment with Modern Dance Technique Levels III, IV, V, VI, VII, or VIII

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 2403 - Modern Dance Technique Level III

2 hours (0;4.5)

Emphasis placed on performance of relatively more complex combinations of movement patterns. Technical development of the body for greater range of movement and control. Analysis of time, space and dynamics as they apply to dance.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

#### DANC 2404 - Modern Dance Technique Level IV

2 hours (0;4.5)

Emphasis placed on performance of relatively more complex combinations of movement patterns. Technical development of the body for greater range of movement and control. Analysis of time, space and dynamics as they apply to dance. This is a continuation of DANC 2403.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### **DANC 2413 - Ballet Technique Level III**

1 hour (0;4)

Continuation of DANC 1412. More emphasis is placed on simple adagio and allegro combinations as well as stylistically building the body as a performing instrument within the vocabulary of classical ballet.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 2414 - Ballet Technique Level IV**

1 hour (0;4)

Continuation of DANC 2413. More emphasis is placed on simple adagio and allegro combinations as well as stylistically building the body as a performing instrument within the vocabulary of classical ballet.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 2500 - Jazz Dance Technique, Level II

1 hour (0;3)

Continuation of DANC 1500. Study includes more complex vocabulary, longer movement combinations and more attention to technique and development of jazz dance style.

Prerequisite(s): Placement through proficiency exam.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### DANC 2710 - Tap Dance Technique, Level II

1 hour (0;3)

Continuation of DANC 1710 with an emphasis placed on performance of relatively more complex combinations of movement patterns and increased vocabulary. Attention to performing technically to include more intricate rhythm skills, projection, focus, spatial clarity and overall musicality.

Prerequisite(s): Placement through proficiency exam.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 2800 - Survey of Dance

3 hours

Primitive to contemporary dance both as a reflection of cultures and societies and as a performing and participatory art form.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 2900 - Special Problems**

3 hours

Prerequisite(s): Consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 2910 - Special Problems**

1-3 hours

Prerequisite(s): Consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3050 - Dance Kinesiology

3 hours

Study of the science of movement as it relates to the specific needs of the dancer. Emphasis placed on kinesiological studies within the dance technique class for greater understanding of developing strength, flexibility, balance and endurance as they apply to the mechanics of movement vocabulary in dance. Special attention is given to injury prevention.

Prerequisite(s): Students must have upper division status. Students must have completed Modern Dance Technique at least at Level IV.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3080 - Principles and Techniques of Dance Performance

3 hours

Study of principles and techniques of dance performance through practical application of performing skills. In-depth work in body awareness, development of mental discipline and understanding the psychological aspects involved in non-verbal communication. Experience in working with a choreographer and performing in both laboratory and concert settings. Three-hour weekly lecture and movement plus a minimum of 60 clock hours in a movement laboratory.

Prerequisite(s): DANC 2250, DANC 3050

Corequisite(s): Concurrent enrollment in Modern Dance Technique Level V or higher.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3250 - Choreography III

3 hours

Development of principles and theories involved in composition. Emphasis placed on movement principles. Group and structural forms. Three hours weekly of lecture and movement plus a minimum of 60 clock hours in a movement laboratory.

Prerequisite(s): DANC 1250, DANC 2250, DANC 2060

Corequisite(s): Concurrent enrollment in either Modern Dance Technique Level III or higher.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3405 - Modern Dance Technique Level V

2 hours (0:4.5)

Continued development of movement vocabulary with emphasis on processing increasingly complex material. Self-analysis of strengths and weaknesses. Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3406 - Modern Dance Technique Level VI

2 hours (0;4.5)

Continued development of movement vocabulary with emphasis on processing increasingly complex material. Self-analysis of strengths and weaknesses. This is a continuation of DANC 3405.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3415 - Ballet Technique Level V

1 hour (0:4)

Greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina and flexibility. Introduction to pointe work, partnering and more complex movement vocabulary.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### DANC 3416 - Ballet Technique Level VI

1 hour (0:4

Greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina and flexibility. Introduction to pointe work, partnering and more complex movement vocabulary. This is a continuation of DANC 3415.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3600 - Hip-Hop Dance Technique Level I

1 hour (0;3)

Introduction to basic Hip-Hop dance technique designed for beginners presented as a culturally significant dance form. Fundamental techniques and terminology such as popping and locking, simple Hip-Hop combinations, and performance techniques.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3630 - Laban Studies

3 hours

Based on the theories of Laban Movement Analysis, an advanced study of expressive relationships between the inner intent to move, a responding action, and the ways bodies shape to create the action in and through space. Provides a comprehensive vocabulary within an analytic framework for the description of movement and its application to choreography and performance. Facilitates acuity in observing and assessing movement patterns and choices.

Prerequisite(s): DANC 2060, DANC 2250

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 3700 - Social Club Dance**

1 hour (0;3)

An introduction to Ballroom and Latin dancing typical in social settings, the course typically covers American and International styles such as Swing, Lindy Hop, Cha Cha, Waltz, Rumba, Quickstep, Foxtrot, Samba, Mambo, Merengue, Tango, and Salsa. Students will learn proper execution of movements and basic partnering techniques.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### DANC 3800 - History of Concert Dance in the U.S.: 1900– Present

3 hours

Historical study of modern dance and ballet on stage from 1900 to the present with an emphasis on dance in the United States. Examination of the evolution of these two concert dance forms through the lives of choreographers; the historical, political, social and cultural context of significant pieces of choreography; and the aesthetic movements and themes represented by specific dances through time. Skills needed to "read" context, meaning and metaphor in dance are enhanced to a higher level of depth and insight. Learning in this course occurs through multiple forms of intelligence and varied modes of communication.

Prerequisite(s): DANC 1250, DANC 2800 (DANC 2800 may also be used to fulfill a CORE requirement).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### DANC 4046 - Dance and Technology

3 hours (3;3)

Introductory survey of digital media, designed for the basic use of multimedia as it relates to dance creation, education, production and research. Laboratory experience is emphasized.

This is the Capstone Course for the BA in Dance, which includes a Final Showing open to the public.

Prerequisite(s): DANC 2250, DANC 2060

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 4050 - Dance Performance and Production Lab

1 hour (0;3)

Advanced laboratory course giving credit to BFA students who have completed at least two terms/semesters of DANC 1050 or its equivalent and BA students who have completed one term/ semester of DANC 1050. Includes experiences in rehearsal and performance of dance as an art form. The course is fourfold in content, including auditions, studio rehearsals, technical and dress rehearsals, and performances. Students planning to audition for a dance performance in the Department of Dance and Theatre must be enrolled in a performance lab. Students are provided opportunity to seek leadership roles in the audition process, serve as rehearsal assistant to choreographers, and assist in organization of auditions and rehearsals.

Prerequisite(s): DANC 1050 Dance Performance or equivalent.

Corequisite(s): Concurrent enrollment in Modern Dance Technique course.

May be repeated for credit.

# DANC 4070 - Dance Pedagogy: The Teacher Prepares

3 hours

Instructional strategies and responsibilities common to the teaching of dance and conducting rehearsals for children through preprofessional levels.

Prerequisite(s): Students must be within the final two semesters of completing major or by consent of instructor.

**DANC 2060** 

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 4095 - Stage Production II**

1 hour

Advanced study of the principles and practices governing the presentation of stage productions. Students manage or serve as crew heads for front-of-house, backstage, and costume and makeup operations for theatrical productions. Opportunity to seek independent solutions to management or technical problems when qualified. One-hour weekly lecture plus at least 45 clock-hours per term/semester in a production laboratory.

Prerequisite(s): 3 hours of DANC 2095, or the equivalent, or consent of department.

Same as THEA 4095.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### DANC 4407 - Modern Dance Technique Level VII

2 hours (0:4.5)

Continuation of DANC 3406. For the highly accomplished modern dancer giving emphasis to preprofessional training. Introducing more complex work in contemporary styles. May be repeated for credit.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### **DANC 4408 - Modern Dance Technique Level VIII**

2 hours (0;4.5)

Continuation of DANC 4407. For the highly accomplished modern dancer giving emphasis to preprofessional training. Introducing more complex work in contemporary styles. May be repeated for credit.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 4417 - Ballet Technique Level VII**

1 hour (0;4)

Continuation of DANC 3416. For the serious ballet dancer with emphasis on preprofessional preparation. Introducing more complex elements of petit allegro, grande allegro, classical and contemporary ballet repertory. May be repeated for credit.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 4418 - Ballet Technique Level VIII**

1 hour (0;4)

Continuation of DANC 3417. For the serious ballet dancer with emphasis on preprofessional preparation. Introducing more complex elements of petit allegro, grande allegro, classical and contemporary ballet repertory. May be repeated for credit.

Prerequisite(s): Students must complete each semester with a minimum grade of B to advance to the next level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### **DANC 4600 - Movement Topics in World Dance**

1 hour (0;3)

Movement Topics in World Dance is an introduction to the styles and dances from various world cultures. These may include Afro-Caribbean Dance, West African Dance, Afro-Cuban Dance, or Dunham African-Based Modern Dance Technique, Indian Bharatanatyam and Kathak, Brazilian Capoeira, or others. Students learn fundamental movement techniques, terminology, cultural/historic context and performance practices in this style. May be repeated for credit as topics vary.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 4650 - Senior Project

3 hours (3;4)

Students complete a capstone project in either choreography or performance. Serves as the capstone course for the BFA degree in dance and includes a fully produced concert.

Prerequisite(s): Depending upon the final area of specialization (either choreography or performance), the selected 9-12 hours of prerequisites must be approved by the student's academic advisor in the Department of Dance and Theatre.

DANC 2060, DANC 3250, DANC 3080.

Corequisite(s): Concurrent enrollment in an upper level Modern Dance Technique Course.

Meets with DANC 1050/4050

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 4700 - Composer/Choreographer Collaboration

3 hours (3;3)

Interdisciplinary, experiential exploration of collaboration between musician/composers and dancer/choreographers, which provides a framework for the creation of new music/dance collaborative projects. Exploration of music/dance collaboration historically.

Prerequisite(s): DANC 3250 or consent of department. For music-consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### DANC 4800 - Studies in Dance

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# DANC 4850 - Dance and Women's Studies

3 hours

Uses the framework of feminist thought to analyze the choreographic content, style, and meaning in some theatrical, concert dances of the 18th - 21st centuries that are either choreographed by women or have the subject of the female gender. Examines the position, status, and treatment of female dancers as workers in the dance world. Examines published dance criticism and writing vis-a-vis women's studies issues. Open to non-majors.

Prerequisite(s): None.

#### **DANC 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Problems must be approved by the department chair.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Problems must be approved by the department chair.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **DANC 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# **Decision Sciences**

# DSCI 2710 - Data Analysis with Spreadsheets

3 hours

Collection, description and analysis of numerical data. Data presentation, tables, charts and graphs, descriptive statistics, analysis of time series and index numbers, sampling techniques and distributions, estimation, confidence intervals, with applications in quality control and productivity.

Prerequisite(s): Must have completed two years of high school algebra and one year of geometry and be eligible for college level math course.

**Core Category:** Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

# DSCI 2870 - Basic Operations Research

hours

Quantitative methods of analyzing business problems; survey of cost, volume and profit analysis; inventory and production models, and linear programming; game theory; network analysis.

Prerequisite(s): Completion of mathematics requirement.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of the Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 3710 - Business Statistics with Spreadsheets

3 hours

Statistical inference for means and proportions, analysis of variance, correlation, simple and multiple regression. Extensive use of cases and spreadsheets.

Prerequisite(s): DSCI 2710 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### DSCI 3870 - Management Science

3 hours

Introduction to operations research for business decision making. Spreadsheet methods are used to evaluate the following: deterministic models; allocation problems, linear programming, sequencing and scheduling, and network models.

Prerequisite(s): ECON 1100, ECON 1110, MATH 1100. DSCI 2710 or consent of instructor; ACCT 2010 and ACCT 2020 with grades of C or better; MATH 1190 or equivalent.

Corequisite(s): Students majoring in the College of Business must also enroll in BUSI 3100 along with DSCI 3870.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

# DSCI 4330 - Enterprise Applications of Business Intelligence/Analytics

#### 3 hours

Current issues in the utilization of business intelligence/analytics (BI/A) in organizations. Topics include the concepts, methodologies and tools to efficiently and effectively implement BI/A endeavors. The focus is on understanding how BIA is needed and used in organizations today and understanding how to resolve the often conflicting variety of BI/A offerings. Emphasis is placed on current and future directions of BI/A as relevant to projects underway in organizations across all levels of their value chains.

Prerequisite(s): BCIS 2610 or equivalent; DSCI 2710 or equivalent; and 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 4510 - Modeling for Business Intelligence

#### 3 hours

How modeling for business intelligence systems can be utilized as a key element within a managerial decision process. Attention is paid to how and why such a model is used in a BI support system environment. Topics include the use of mathematical, statistical and business models that are both structured and semi-structured decision problems.

Prerequisite(s): DSCI 3870, BCIS 3610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **DSCI 4520 - Introduction to Data Mining**

#### 3 hours

Knowledge discovery in large databases, using data mining tools and techniques. Topics include data exploration, modeling and model evaluation. Decision making in a case-embedded business environment is emphasized.

Prerequisite(s): DSCI 3710, BCIS 3610. 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 4700 - Analytics for Decision Making

### 3 hours

Study of the analytics that underlie the process of decision making and the information requirements of decisions; decision support tool selection, process improvement and applications development.

Prerequisite(s): BCIS 4660 or ACCT 4100 or LSCM 3960; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); a grade of C or better in each previously taken DSCI course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# **DSCI 4800 - Cooperative Education**

### 1\_3 hours

Supervised work in a job related to the student's career.

Prerequisite(s): DSCI 3710 or DSCI 3870; 2.7 UNT GPA (2.7 transfer GPA if no courses taken at UNT); student must meet the employer's requirements and have consent of the department chair or ITDS undergraduate coordinator.

May be repeated for credit. A maximum of 3 hours may be applied to supporting field elective courses with departmental approval.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **DSCI 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# DSCI 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# Design

# ADES 1500 - Introduction to Communication Design

3 hours

Overview of the communication design profession. Terminology, design planning, creative methodological processes, human communication, metaphorical thinking, Gestalt, form analysis, semiotics, ethics and creative teamwork.

Prerequisite(s): None.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 1510 - Typography I

3 hours (0:6)

Teaches students about typography's formal, plastic qualities. Topics covered include typographic anatomy and vocabulary, character manipulation, typographic semiotics and the relationship existing between type and color. Participation in the mid-point review is required to pass the course.

Prerequisite(s): ADES 1540.

Corequisite(s): ADES 2515.

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Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ADES 1513 - Contextual Research Methods

3 hours

Introduction to foundational contextual research methods for use in discovery and definition of interactive design systems.

Prerequisite(s): ADES 1543.

Corequisite(s): ADES 2518.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 1540 - Foundations for Communication Design

3 hours (0;6)

Computer hardware and software and their application in communication design.

Prerequisite(s): ART 1600 and ART 1700. Acceptance into the program through the Communication Design Entry Portfolio Review.

All students are required to have their own laptop with the specified software for this course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 1543 - Foundations of User-Centered Design

3 hours (2;4)

Computer hardware and software and their application in User-Experience (UX) design.

Prerequisite(s): ART 1600 and ART 1700. Acceptance into the program through the Communication Design Entry Portfolio Review.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 1550 - Introduction to Fashion Design

3 hours

Overview of fashion as art and as an industry, including manufacturing processes, terminology and line organization. Principles and elements of design as applied to fashion.

Prerequisite(s): Course restricted to PFAS majors only.

Offered fall and spring semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 1560 - Fashion Design: Introduction to Industrial Sewing Techniques

3 hours (0;6)

Introduction to machinery and construction techniques used in the mass production of apparel. Student projects focus on unlined garment construction.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and ADES 1550, all with a minimum grade of C or better; minimum 2.5 GPA on required art courses; and minimum 2.25 UNT grade point average.

Corequisite(s): ADES 2550.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 1625 - Introduction to Interior Design

3 hours

Basic understanding of concepts, principles and elements as they relate to the interior design profession.

Prerequisite(s): None.

Offered fall and/or spring semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 2500 - Design Thinking

3 hours (0;6

Introduces students to creative methodologies, research processes, ethnographic study, teamwork, ideational drawing for communication, iterative exploration, semiotics and branding. Students encapsulate the processes they learn in this class into a capstone visual artifact.

Prerequisite(s): ART 1510, ADES 1510, ADES 1500 (may be taken concurrently).

Corequisite(s): ADES 2510.

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Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2510 - Typography II

3 hours (0;6)

Teaches students about typography hierarchy and systems. Building on the skills learned in Type I, students engage with: grid, hierarchical relationships, formal typographic variables, and their effect on typographic systems.

Prerequisite(s): ADES 1510, ADES 2515. Must have successfully passed Mid-Point Portfolio Review.

Corequisite(s): ADES 2520.

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# ADES 2513 - Typographic Systems

3 hours (2;4)

Introduction to typography, hierarchy, and systems with an emphasis on digital applications and the impact of type on usability.

Prerequisite(s): ADES 1543. Corequisite(s): ADES 1513.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 2515 - Image Making and Color Theory

3 hours (0:6)

Students develop conceptually-based analog, mixed media and digital illustration skills, as well as study and apply color theory.

Prerequisite(s): ADES 1540. Corequisite(s): ADES 1510.

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Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 2518 - Design Prototyping and User Testing

3 hours (2;4)

Introduction to foundational prototyping and user testing methods for use in the design of products.

Prerequisite(s): ADES 1543.

Corequisite(s): ADES 2513.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 2520 - Graphic Design

3 hours (0;6)

Students design graphic design artifacts such as visual identity development and collateral which may include, but is not limited to, brochures, stationery ensembles and/or poster design.

Prerequisite(s): ADES 1510, ADES 2515. Must have successfully passed Mid-Point Portfolio Review.

Corequisite(s): ADES 2510.

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Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2523 - Digital Patterns and Systems

3 hours (2;4)

Introduction to the design and definition of digital elements, patterns, and systems for application in digital interfaces.

Prerequisite(s): ADES 1513 and ADES 2518

Corequisite(s): ADES 2513

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2530 - Art Direction

3 hours (0;6)

Students learn the strategic planning techniques and methodologies required to successfully develop and produce conceptually-based advertising campaigns. Students are required to conceive and art direct original photography. Participation in the mid-point review is required to pass this course.

Prerequisite(s): ADES 1510 and ADES 2515.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design - completed in residence or transferred to UNT - to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ADES 2550 - Fashion: Patternmaking I

3 hours

Introduction to basic flat patternmaking techniques. Development of bodice, skirt and sleeve variations. Construction of muslin samples. Participation in the fashion design entry portfolio is required to pass this course.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and ADES 1550, all with a minimum grade of C or better; minimum 2.5 GPA on required art courses; minimum 2.25 UNT grade point average.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2555 - Fashion: Patternmaking II

3 hours (0:6)

Intermediate flat patternmaking. Development of pant, intermediate bodice, skirt, sleeve and collar variations. Construction of muslin samples.

Prerequisite(s): ADES 1560, ADES 2550.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 2560 - Fashion Design: Advanced Industrial Sewing Techniques

3 hours (0;6)

Advanced construction methods; professional techniques of garment construction utilizing modern industrial equipment; tailoring and finishing.

Prerequisite(s): ADES 2550, ADES 1560.

Corequisite(s): ADES 2555, ADES 2570.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2570 - Fashion Drawing

3 hours (0:6)

Drawing the fashion figure from the live model. Various media. Concentration on developing a personal style and proper presentation of designs for industry.

Prerequisite(s): ADES 2550, ADES 1560.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2630 - Drawing for Interior Design

3 hours (0:6)

Introduction to foundational understanding of 3-dimensional form and space, composition, drafting equipment, mechanical drawing, architectural graphics and lettering. Emphasis on fundamental abilities to communicate design process/thinking and design solutions using 2- and/or 3- dimensional representation skills by means of digital/hand drawings, sketching, drafting, and/or modeling.

Prerequisite(s): Student must have completed or be concurrently enrolled in ART 1700, ART 1800 and ADES 1625.

Not offered every term/semester. With faculty approval for the completion of the prerequisite(s) during the summer prior to ADES 2640 enrollment.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 2640 - Interior Design: Space Planning I

3 hours (0;6)

Introduction to space planning; emphasis on interior space, lighting, fabrics and color as applied to interior design.

Prerequisite(s): ADES 2630; must have been selected in the interior design entry portfolio review.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 2700 - Design Thinking

3 hours

This participatory lecture course will provide students with a working knowledge of Design Thinking. Design Thinking is a term that describes a collection of theories, methods and habits of mind employed by individuals and groups interested in the power of responsible and responsive change. Arising out of the broad but interrelated spectrum of modern design disciplines, these practices can help those employing them to alter unruly systems, enable positive human behavior, understand diverse cultures, and manage debilitating complexity.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3500 - Publication Design

3 hours (0;6)

Students learn how to create verbal/visual narratives by integrating disparate components into conceptually-driven sequential print and interactive page layouts. Students begin to resolve the hierarchical, informational and expressive relationships existing between text and image in order to enhance communication.

Prerequisite(s): ADES 2510, ADES 2520.

Corequisite(s): ADES 3510.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3503 - Planning and Developing Interactive Systems

3 hours (2;4)

Introduces students to the processes, methods, and technologies used in designing and developing complex interactive systems with an emphasis on user-centered design approaches.

Prerequisite(s): ADES 2513 and ADES 2523

Corequisite(s): ADES 3513

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3510 - Interaction Design I

3 hours (0;6)

Students learn planning, research and production methods specific to the discipline of interaction design. Principles covered relate to information hierarchy, user/information interactions, user-experience and usability. Students receive exposure to relevant interaction design trends as means to analyze how technology can be used to solve complex problems.

Prerequisite(s): ADES 2510, ADES 2520.

Corequisite(s): ADES 3500.

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Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3513 - The Design of Visual Information

3 hours (2;4)

Introduces students to the design of complex data and information. An emphasis on how visual design and interaction principles impact users' ability to understand and navigate the information.

Prerequisite(s): ADES 2513 and ADES 2523.

Corequisite(s): ADES 3503.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3520 - Packaging and Brand Design

3 hours (0;6)

Students build on skills learned in previous design courses to conceive and produce identity marks and multifaceted package designs for new core brand extensions and brand usage books. Brand extensions may include artifacts that are appropriate for each student's unique client. These artifacts may be 3-dimensional, 2-dimensional, or interactive.

Prerequisite(s): Students must have successfully completed ADES 3500 and ADES 3510.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design - completed in residence or transferred to UNT - to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3530 - Art Direction II

3 hours (0;6)

Students build on skills and processes learned in previous design courses to conceive and produce multifaceted advertising campaigns. Campaigns include artifacts that are appropriate for each student's unique client. These artifacts could be 2-dimensional, 3-dimensional or interactive.

Prerequisite(s): ADES 3500, ADES 3510.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design - completed in residence or transferred to UNT - to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3540 - Interaction Design II

3 hours (0;6)

Students elaborate on skills acquired in Interaction Design I. In addition to reinforcing conceptual and formal interaction design skills, students solve complex problems across a range of digital platforms with an emphasis on user-centered solutions.

Prerequisite(s): ADES 3500 and ADES 3510.

Corequisite(s): ADES 3520 or ADES 3530.

# ADES 3545 - Communication Design Studio

3 hours (0;6)

Developing additional competence in specialized areas.

Prerequisite(s): ADES 3500, ADES 3510.

May be repeated for credit as topics vary.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3548 - Topics In User-Experience Design

3 hours (2:4)

Developing additional competencies in specialized areas related to User-Experience Design.

Prerequisite(s): ADES 3503 and ADES 3513

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3550 - Fashion: Draping

3 hours

To prepare the student for a career in the field of fashion design; draping method of creating patterns, advanced design, and garment construction are instructed. Fitting and professional construction methods are also taught.

Prerequisite(s): ADES 2555, ADES 2560 and ADES 2570.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### ADES 3555 - Fashion: Industry Techniques

Category design and group development. Industry team and CAD

Prerequisite(s): ADES 3550, ADES 3570.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3560 - Technical Design in Fashion

3 hours (2:4)

Surveys the many facets of a technical designer in the fashion industry including terminology, fabrication, construction methods, specification sheets and technical packets for apparel.

Prerequisite(s): ADES 3550, ADES 3570; MDSE 2650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3565 - Fashion Accessories

3 hours (2:4)

Exploration of design process, product development, market research and production of fashion accessories.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3570 - Computers in Fashion: Presentation

Practical use of computers in development of apparel design. Presentation formats, development of fabric groups and merchandising of a fashion line utilizing commonly used, industry standard computer graphics software.

Prerequisite(s): ADES 2555. ADES 2560. ADES 2570.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3575 - Computers in Fashion: Concept to Product

3 hours (0;6)

To learn how current technology is utilized in the design and manufacturing of apparel and to examine ongoing developments in technology which may affect the future of the fashion and apparel industry.

Prerequisite(s): ADES 3550 and ADES 3570.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3580 - History of Fashion to 1865

Examination of fashion history through western culture from early civilization through 1865. Emphasis on research and critical thinking.

Prerequisite(s): ADES 2555 or consent of instructor.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3585 - History of Twentieth-Century Fashion

In-depth examination of significant 20th-century designers. Development of couture in fashion and related art trends. Texas Fashion Collection used as a major resource.

Prerequisite(s): ADES 2555 and ADES 3580 or consent of instructor.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### ADES 3610 - Interior Design: Presentation Techniques

3 hours (0:6)

Rendering methods; design board layout; graphics.

Prerequisite(s): ADES 2640.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 3620 - Interior Design: AutoCAD

3 hours (2;4)

Basic AutoCAD software used in drafting and design applications. Software control for the production of industry standard drawings for both design presentation and construction documentation.

Prerequisite(s): ADES 2630, ADES 2640.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 3630 - Interior Design: Space Planning II

Architectural elements of residential interiors — wall and floor space, reflected ceiling plans, lighting, surface materials and treatments; furnishing interior spaces.

Prerequisite(s): ADES 2640.

Not offered every term/semester.

#### ADES 3635 - Interior Design: Detailing

3 hours

Introduction to methods and materials of basic detailing techniques for interior design. Emphasis on detailing and specification for interior products and finishes.

Prerequisite(s): ADES 3610, ADES 3620, ADES 3630.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 3640 - Interior Design: Space Planning III

3 hours (2;4)

Residential interiors, developed floor plans, reflected ceiling plans, elevations and details including schedules and furniture specifications.

Prerequisite(s): ADES 2640, ADES 3620.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 3645 - Interior Design: Building Systems

3 hours

Study of building systems, including lighting, plumbing, HVAC, fire detection/suppression and acoustics. Special emphasis placed on lighting technology, design and specifications.

Prerequisite(s): ADES 3610.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4515 - Cause-Based Design

3 hours (0:6)

Exploring the role of communication design in addressing societal and cultural issues.

Prerequisite(s): 6 credit hours of ADES 3545.

Corequisite(s): ADES 4520.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 4518 - Cause-Based User-Experience Design

3 hours (2;4)

Exploring the role of User-Experience Design in addressing complex societal and cultural issues.

Prerequisite(s): 6 credit hours ADES 3548.

Corequisite(s): ADES 4523

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4520 - Graphic Design Advanced Campaigns

3 hours (0;6)

Students spend the semester conceiving, developing and producing a capstone project in graphic design. Students leverage all appropriate and available media to solve the communication challenges posed by their unique clients.

Prerequisite(s): 6 credit hours of ADES 3545.

Corequisite(s): ADES 4515.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design-completed

in residence or transferred to UNT-to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4522 - Graphic Design Media-Based Campaigns

3 hours (2;4)

Students in the tandem courses (ADES 4520 and ADES 4522) spend the semester conceiving, developing and producing a capstone project in graphic design. Students leverage all appropriate and available media to solve the communication challenges posed by their unique clients.

Prerequisite(s): ADES 3520, ADES 3530.

Corequisite(s): Must be taken concurrently with ADES 4520.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4523 - Advanced UX Campaigns

3 hours (2;4)

Guides students through the research, definition, and design phases of an interactive system, producing a capstone project and case study.

Prerequisite(s): 6 credit hours of ADES 3548.

Corequisite(s): ADES 4518.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4525 - Graphic Design Final Portfolio

3 hours (0;6

Students develop a minimum of one new comprehensive graphic design campaign in addition to polishing preexisting campaigns.

Prerequisite(s): ADES 4515, ADES 4520.

Corequisite(s): ADES 4541.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design—completed in residence or transferred to UNT—to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4528 - Final Portfolio in UXD

3 hours (2;4)

Prepares students to pursue career opportunities through the development of a final project case study and a portfolio that presents selected projects from classroom or professional experiences.

Prerequisite(s): ADES 4518 and ADES 4523

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4530 - Art Direction Advanced Campaigns

3 hours (0;6)

Students spend the semester conceiving, developing and producing a capstone project in art direction. Students leverage all appropriate and available media to solve the communication challenges posed by their unique clients.

Prerequisite(s): ADES 3530 and ADES 3540.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design - completed in residence or transferred to UNT - to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

#### ADES 4532 - Art Direction Media-Based Campaigns

3 hours (2;4)

Students in the tandem courses (ADES 4530 and ADES 4532) spend the semester conceiving, developing and producing a capstone project in art direction. Students leverage all appropriate and available media to solve the communication challenges posed by their unique clients.

Prerequisite(s): ADES 3520, ADES 3530.

Corequisite(s): Must be taken concurrently with ADES 4530.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4535 - Art Direction Final Portfolio

3 hours (0;6)

Students prepare for entry into the profession by polishing their portfolio's content, form and presentation. Students must integrate both the print and interactive media presentations of their work. In addition, basic job research, interview and networking are essential components of this course. Students must successfully pass the communication design final portfolio review in order to pass the class.

Prerequisite(s): ADES 4530.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4540 - Communication Design Studio

3 hours

Developing additional competence in special areas.

Prerequisite(s): Advanced standing and consent of instructor; specific studio courses may require additional prerequisites.

May be repeated for credit up to a total of 12 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4541 - Portfolio Development

3 hours (0;6)

Students develop a suite of portfolio presentation and selfpromotional materials spanning both print and interactive media. Basic job research, interview and networking skills are essential components of this course.

Prerequisite(s): ADES 4515, ADES 4520.

Corequisite(s): ADES 4525.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4545 - Communication Design Lecture Topics

3 hours

Developing additional competence in special areas.

Prerequisite(s): Advanced standing and/or consent of instructor; specific courses may require additional prerequisites.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ADES 4550 - Fashion: Target Market

3 hours (2;4)

Design patternwork and construction of garments. Emphasis on fit, professional construction methods, research and appropriateness for a target market.

Prerequisite(s): ADES 3555. ADES 3575.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ADES 4555 - Fashion: Collection

3 hours (2;4)

Design, patternwork and construction of senior collection.

Prerequisite(s): ADES 4550. ADES 4560.

Corequisite(s): Concurrent enrollment in ADES 4580 required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### ADES 4560 - Fashion Design Concepts

3 hours

Design process, research, conceptual ideation and creative interpretation of fundamental garment components and features while acknowledging function and production constraints. Emphasis is on creative design, sketching and development of a design process notebook.

Prerequisite(s): ADES 3555.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4580 - Fashion Design: Professional Practice

3 hours

Presentation boards, interview and job search techniques. Design portfolio development.

Prerequisite(s): ADES 4550. ADES 4560.

Corequisite(s): Concurrent enrollment in ADES 4555 required.

Nor offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4590 - Fashion Design Studio

3 hours

Developing additional competence in special areas.

Prerequisite(s): Advanced standing and consent of instructor; specific studio courses may require additional prerequisites.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4595 - Exploration: Fashion Design

3 hours

Research on selected topics or projects in fashion design. Includes field trips and classroom lectures.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

# ADES 4615 - Topics in Interior Design

3 hours

Research on selected topics or projects in interior design. The course includes field trips and classroom lectures.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### ADES 4625 - Interior Design: Professional Practice

3 hours

Business and office practice, fees and commissions, preparing estimates, contracts, professional ethics and job opportunities. Student must pass the senior portfolio review.

Prerequisite(s): ADES 4630.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ADES 4630 - Interior Design: Space Planning IV

3 hours (2;4)

Design of public and non-residential spaces; systems furniture; ergonomics; lighting; building systems; and concept development. Preparation of design presentation boards and design development drawings.

Prerequisite(s): ADES 3620, ADES 3635, ADES 3640, ADES 3645.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 4640 - Interior Design: Space Planning V

3 hours (2:4)

Application of comprehensive problem-solving techniques, including research, programming, concept development, space planning, building code review, design, detailing and systems integration for a large commercial space.

Prerequisite(s): ADES 4630.

Not offered every term/semester.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

### ADES 4660 - Seminar in Design Management

3 hours

Research and study in the relationship between design, products, services, and the interdisciplinary relationships of design practice.

Prerequisite(s): Must be accepted into Design Management concentration with a degree plan on file.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ADES 4662 - Design Management Integrative Capstone

3 hours

Exploration of the overlap between business and design integrating content from previous courses to prepare prototypical briefs outlining appropriate applications for innovative solutions for selected companies.

Prerequisite(s): ADES 4660 or consent of instructor or department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ADES 4700 - Professional Internship

3 hours

In-training programs offered in cooperation with approved professional businesses in communication design, fashion design, and interior design. Students must receive faculty approval prior to the start of the job experience. Term reports are required of students and employers.

Prerequisite(s): Interior design students must have completed ADES 3640; communication design students must have junior standing; Fashion design students must have approval of instructor.

May be repeated once for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## **Development and Family Studies**

## DFST 4250 - Grant Writing in Human Development and Family Studies

3 hours

Hands-on experience in writing successful grants. Interactive learning focused on planning, researching, budgeting, and implementing a request for funding.

Prerequisite(s): Junior or senior standing, HDFS 2042 or equivalent; or consent of instructor.

## **Digital Retailing**

## DRTL 2080 - Digital Platforms and Web Site Development in Digital Retailing

3 hours

A study of fundamentals, key concepts and practices of ecommerce platforms in digital retailing.

Prerequisite(s): None.

## DRTL 2090 - Introduction to Digital Retailing

3 hours

Survey of electronic merchandising and its application to consumer products and services for business to business and business to consumer. Introduction to electronic merchandising theory, terminology, resources, industry participants and career opportunities.

Prerequisite(s): None.

#### DRTL 3090 - Consumer Engagement in Digital Channels

3 hours

Students examine emerging digital technologies and their impact on the consumer experience. Emphasis is on exploration of new technologies and critical evaluation of their influence on merchandising and hospitality management strategies.

Prerequisite(s): Junior or senior standing.

## **DRTL 3190 - Digital Retailing Strategies**

3 hours

Survey of omni-channel retail strategies and their impact on consumer experience in digital markets. Emphasis is on understanding of digital technologies (e.g., customer relationship management, SEO, social media metrics) and critically evaluating their influence, particularly on digital merchandising strategies.

Prerequisite(s): DRTL 2090

## DRTL 4000 - Digital Study Tour

3 hours

Experience eCommerce retail and digital industries through visits to leading eCommerce retail, social media and digital corporate headquarters, retail technology consumer testing store environments and technology work campuses. Includes field study in industry centers for ecommerce and digital technology in selected U.S. or international destinations. Designed to engage students in an intense study of an area pertinent to the field of digital retailing. Pre-trip and post-trip classes required.

Prerequisite(s): None.

## **DRTL 4070 - Digital Retail Analytics**

3 hours

A study of key concepts, diagnostic approaches, techniques and practices of web analytics used to create measurable value for the digital retailing channel.

Prerequisite(s): A grade of C or better in DRTL 2090; major in digital retailing; junior standing or consent of instructor.

## **DRTL 4090 - Digital Merchandising**

3 hours

Study and application of visual merchandising in a virtual format. Emphasis on merchandising processes that convey product characteristics to the consumer from production through distribution. Development of web site using computer software.

Prerequisite(s): DRTL 2080 and DRTL 2090 with a grade of C or better; major in digital retailing.

## **DRTL 4860 - Digital Branding in Practice**

3 hours

Understands, analyzes and develops digital brand strategies by utilizing digital brand cases. Emphasis on brand mix, brand community, brand positioning, brand extension, and brand evaluation with contemporary brand tactics and metrics.

Prerequisite(s): None.

### **DRTL 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

#### **DRTL 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

## DRTL 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Early Childhood Education**

## EDEC 1010 - Learning With and From Children

3 hours

Introduction to early childhood education and care as a field of study that centers on young children's play, experiences, and identities. Focuses on observation to account for children's knowledge-production within their everyday social practices. Students engage in material and intellectual inquiry that explores the relationships between children's experiences and their human and more-than-human (e.g. technology, the natural world, material objects, etc.) worlds.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDEC 2900 - Special Problems**

1-3 hours

Open to freshman and sophomore students. Students explore problem independently. Problems are chosen by the student and developed through conferences with the instructor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEC 3613 - Childhoods Across Time, Space and Place

3 hours

Introduction to the study of children and childhoods. Centered on the sociology of childhood and will explore the study of children and childhoods across time, space and place in order to better understand complexity of young children. Topics to be explored include play, children and popular culture, peer cultures, and issues impacting childhood.

Prerequisite(s): EDEC 1010

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDEC 3700 - Pedagogies and Practices of Early Childhood

3 hours

Considers the significant role that environments and aesthetics play in children's experiences, learning, and development and will examine the range of local and global environments that children inhabit, as well as the children and childhoods produced in and through the policies, practices, and pedagogies of those spaces.

Prerequisite(s): Admission to teacher education program; EDEC 3613

Corequisite(s): EDEC 3750

Must be taken in Block A. Course serves as a centering course for Block A and requires attendance in seminars.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEC 3750 - Young Children in Schools, Families and Communities

3 hours

Focuses on children's relationships with their peers, adults, and environments using dynamic ecological frameworks that account for children's local and global contexts. Through case studies, explores the ways that children's sociocultural identities and funds of knowledge play a role in their negotiations of their social environments.

Prerequisite(s): Admission to teacher education program; EDEC 3613

Corequisite(s): EDEC 3700

Must be taken in Block A. Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### EDEC 4243 - Environmental Processes and Assessment

3 hours (3;3;0)

Considers early childhood learning processes as well as implications for individual, group, and program assessment. Focus areas include formal, informal and holistic assessment instruments as well as learning environment materials and resources. Implications for technology in assessment and management are discussed. Laboratory experiences (20–25 hours) required.

Prerequisite(s): HDFS 4233 (for DFST majors); EDEC 3613 (for all EC–6 certification students).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEC 4633 - Nurturing Children's Social Competence

3 hours

Facilitating the social and emotional skills of young children. Incorporates an ecological approach to significant influences on self-esteem and self-concept including diversity, family, creativity and individual differences. Includes analysis of play theory and research. Field experience required.

Prerequisite(s): EDEC 3613.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDEC 4800 - Studies in Development, Family Studies and Early Childhood Education

1-3 hours

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDEC 4810 - Studies in Development, Family Studies and Early Childhood Education

1\_3 hour

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### **EDEC 4900 - Special Problems**

1-3 hours

Open to junior and senior students. Students explore a problem independently. Problems are chosen by the student and developed through conferences with the instructor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **EDEC 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **Economics**

## **ECON 1100 - Principles of Microeconomics**

(ECON 2302)

3 hours

Business organization and market economy; theory of the firm; techniques of economic analysis in current economic problems; comparative economic systems.

Prerequisite(s): None.

Prerequisite for most upper-level ECON courses.

Core Category: Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

## **ECON 1110 - Principles of Macroeconomics**

(ECON 2301)

3 hours

Principles of economic organization and growth in modern, industrial society; money and banking, monetary and fiscal policy; determinants of national income and business fluctuations.

Prerequisite(s): None.

Prerequisite for most upper-level ECON courses.

Core Category: Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

## **ECON 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### ECON 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 3000 - Current Economic Issues**

3 hours

Economic implications of current issues and problems using basic economic reasoning. Issues and problems may include defense, public debt, trade deficit, illegal drugs, education, technology, agriculture, poverty, crime, pollution, taxes, income distribution, recession, government regulation, competition, government spending, inflation, conservation, unemployment, subsidies and health.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### ECON 3050 - The Economics of Consumption

3 hours

Consumer decision making and consumer issues in American economy. Application of economic theory to consumer decision making in higher education, net earnings and real income, financial planning, home ownership and personal investment; consumer information; government policies.

Prerequisite(s): ECON 1100, ECON 1110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ECON 3150 - Economics of Discrimination

3 hours

Examines the differences in economic status by gender, race and ethnicity. Intergroup differentials in income, unemployment, wages, education and housing are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### **ECON 3200 - Behavioral Economics**

3 hours

Examines how psychological, cognitive, emotional, social, and cultural factors affect individual and institutional decisions. Compares traditional economic models to newer models that take into account human behavior.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### **ECON 3250 - Industrial Relations**

3 hours

Employer/employee relations in the United States; structure, methods and objectives of labor unions and employer associations in an industrial system and changing institutional pattern.

Prerequisite(s): ECON 1100, ECON 1110.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

## ECON 3550 - Intermediate Micro-Theory

3 hours

Demand and supply analysis, consumer choice theory, production and cost theory and market equilibrium under different market structures.

Prerequisite(s): ECON 1100 with a grade of C or better; MATH 1190 or MATH 1710, with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 3560 - Intermediate Macro-Theory

3 hours

Factors affecting income level, employment and output; national income concepts and measurements; application of economic policy to current problems.

Prerequisite(s): ECON 1100 and ECON 1110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

## ECON 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4020 - Money and Financial Institutions

3 hours

Nature and functions of money; modern banking institutions and central banks; credit control and monetary stabilization.

Prerequisite(s): ECON 1100, ECON 1110.

### ECON 4030 - Economic Cycles and Forecasting

3 hours

Focuses on time series analysis and forecasting methodologies applied to problems typically encountered in economics and finance. Computer applications will be used to reinforce the theoretical models.

Prerequisite(s): ECON 1100 and ECON 1110; ECON 4630 with a grade of C or better.

ECON 4630 can be replaced with MATH 3680 or DSCI 3710 with a grade of C or better.

May not be repeated at the graduate level as ECON 5080.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **ECON 4100 - Comparative Economic Systems**

3 hours

Examination of the theoretical foundations, structure and performance of various economies of the world. Theoretical coverage emphasizes decision making, price systems, planning, information and motivation, rather than an ideological approach. Topics of modern capitalism are covered as well as the non-Western economies of the former Soviet Union, Eastern Europe and China.

Prerequisite(s): ECON 1100 or ECON 1110 or consent of department.

May not be repeated at the graduate level as ECON 5070.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### **ECON 4140 - Managerial Economics**

3 hours

Integrates microeconomic theory with accounting, finance, marketing and production management. Demand and cost estimation and forecasting; pricing; business strategy; case studies.

Prerequisite(s): ECON 3550 and MATH 1190.

May not be repeated at the graduate level as ECON 5140.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4150 - Public Economics**

3 hours

Analysis of theoretical foundations, structure and performance of the public sector. Includes issues of public choice theory, market failures, taxing, spending, borrowing and subsidies.

Prerequisite(s): ECON 3550.

May not be repeated at the graduate level as ECON 5150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ECON 4180 - The Economics of Health Care

3 hours

Application of economic theory and analysis to the financing and delivery of medical care. Emphasis on the use of economic concepts to understand health care markets and public policy issues.

Prerequisite(s): ECON 3550.

May not be repeated at the graduate level as ECON 5180.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4290 - Labor Economics**

3 hours

Unemployment, industrial injuries, industrial old age, ill health and substandard employment; remedial program evaluation.

Prerequisite(s): ECON 3550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **ECON 4420 - Open Economy Macroeconomics**

3 hours

Macroeconomic policy options and impacts in the open economy; international monetary reforms; examinations of the impact of balance of payments adjustments under different monetary systems; role of foreign investment in economic growth.

Prerequisite(s): ECON 3560.

May not be repeated at the graduate level as ECON 5420. Usually offered in spring.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4440 - Economics of Natural Resources and Environment

3 hours

Natural resource management and use: problems of renewable and non-renewable resources, including scarcity and market responses, role of property rights, externalities, benefit-cost analysis and energy policy with emphasis on Texas, analysis of environmental problems and policy formulation.

Prerequisite(s): ECON 1100 or consent of department.

May not be repeated at the graduate level as ECON 5440.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4450 - Strategic Behavior Across Market Structures

3 hours

Examines the role of market structure on firm behavior, including profit maximization through strategic behavior. Additional topics addressed include the role of regulatory agencies and governments in markets, and non-price issues (such as social and environmental concerns). Empirical and theoretical models as well as case studies are used to analyze firm interactions within market structures.

Prerequisite(s): ECON 3550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4460 - Industrial Organization and Public Policy**

3 hours

Emphasizes relationships between structure, conduct and performance of industries. Topics include concentration, barriers to entry, pricing, mergers, product differentiation, technical change, antitrust and regulation. Case studies of selected American industries illustrate theory and public policy.

Prerequisite(s): ECON 3550 and MATH 1190.

May not be repeated at the graduate level as ECON 5460.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4500 - The Economics of Sports**

3 hours

Examination of public policy questions about professional and college sports using economic models of sports industries.

Topics include theory of the firm, the organization of sports and entertainment industries, sports labor markets, racial discrimination and pricing schemes specific to sports markets.

Prerequisite(s): ECON 3550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4510 - History of Economic Thought

3 hours

Economic thought since the Middle Ages.

Prerequisite(s): ECON 1100-ECON 1110.

May not be repeated at the graduate level as ECON 5090.

#### ECON 4550 - Law and Economics

3 hours

Introduction to the mutual interaction between legal systems and economic activity. Topics include an introduction to legal systems and institutions, legal analysis, application of economic concepts to various legal doctrines, contracts, torts, criminal law, constitutional law, regulation and antitrust. Emphasis is placed on using economic theory to develop and test hypotheses regarding the effects of laws on incentives and economic behavior, the allocation of resources, and the distribution of income.

Prerequisite(s): ECON 1100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4560 - Economic Damages in Litigation

2 hours

The growing role of economics in assessing damages in corporate litigation proceedings—typically termed forensic economics. Particular emphasis is given to case studies developed from recent industry activity in which students serve as the residing economic experts and are responsible for issuing an expert report setting forth their damages estimates and analyses.

Prerequisite(s): ECON 3550, ECON 3560, ECON 4630.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4600 - Economic Development**

3 hours

General analysis and survey of development theories, and problems and policies involved with those countries that have not yet attained the level of economic well-being and integration observed in the United States

Prerequisite(s): ECON 1100 and ECON 1110, or consent of department.

May not be repeated at the graduate level as ECON 5700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4630 - Research Methods for Economists

3 hours

Research methodology for business and the social sciences. Topics include descriptive statistics, basic probability theory, discrete and continuous probability distributions, hypothesis testing and introductory regression techniques. Emphasis is placed on economics applications. A lab experience provides students with real world experience with topics they are exposed to in the lectures. Designed to prepare economics students for econometrics course work.

Prerequisite(s): ECON 1100; MATH 1100 or MATH 1180.

May not be repeated at the graduate level as ECON 5630.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4650 - Urban Economics**

3 hours

Uses economic analysis to understand the development of cities and regions and how economic activity in the areas is organized. Explores the economics of transportation and urban problems such as poverty, segregation, crime and congestion.

Prerequisite(s): ECON 3550.

May not be repeated at the graduate level as ECON 5750.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4850 - International Trade**

3 hours

Examines the nature and theoretical foundations of modern trade between nations. Topics include patterns of international trade and production, welfare implications of trade, impacts of tariffs and quotas, balance of trade and balance of payments issues. Analysis of trade implications of international monetary systems, multinational corporations, exchange rates and economic implications of political action.

Prerequisite(s): ECON 1100 and ECON 1110, or consent of department.

May not be repeated at the graduate level as ECON 5850.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### ECON 4855 - U.S.-Mexico Economic Relations

3 hours

Examines the vital economic relationship between the U.S. and Mexico with a particular emphasis on the Texas-Mexico relationship. Among the topics covered are goods and services trade, migration, remittances, border economy, contraband (including drugs), environmental issues and the North American Free Trade Agreement.

Prerequisite(s): ECON 1100 or ECON 1110 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **ECON 4870 - Introduction to Econometrics**

3 hours

Focus on simple and multiple regression using ordinary least squares (OLS). Topics include linear and intrinsically linear regression models; estimation under ideal and non-ideal conditions; linear hypothesis testing; multicollinearity and models with dummy variables.

Prerequisite(s): ECON 4630 or MATH 3680 or DSCI 3710; MATH 1190 or MATH 1710.

Usually offered fall and spring semesters. May not be repeated at the graduate level as ECON 5640.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4875 - Empirical Linear Modeling

3 hours

Develops the tools necessary to analyze, interpret and develop empirical applications of econometric estimation procedures. Exploration of an assortment of applied problems that are typically encountered in quantitative research with particular attention given to the examination of real-world, economic and other business-related phenomena. Particular attention is given to developing proficiency in the following four areas: organizing and manipulating data, estimating linear regression models, interpreting econometric results and computer output, and working with computer software.

Prerequisite(s): ECON 4870.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## ECON 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **ECON 4920 - Cooperative Education in Economics**

1-3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 semester hours credit in economics; student must meet employer's requirements and have consent of department chair.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **ECON 4951 - Honors College Capstone Thesis**

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## **Educational Curriculum and Instruction**

## EDCI 3400 - Decolonizing Language and Literacies in the Classroom

#### 3 hours

Students will use theory centered on ethnic studies to reimagine classroom practices across multiple content areas in EC-12 classrooms. Critically examines colonized ways of thinking about languages and literacies in the classrooms that have historically harmed children and communities of color. Special emphasis will be placed on pedagogical practices that resist multiple and intersecting forms of oppression, and focus on matrices of resistance in various contexts.

Prerequisite(s): EDEE 1010.

Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **EDCI 3450 - Critical Global Perspectives in Education**

#### 3 hours

Introduces students to the cosmopolitan tradition, focusing on developing global competence and critical cosmopolitan habits of mind for future teachers and their students. Topics include: Global connectedness and interculturality; interplay of local and global connections; conceptions of citizenship; cosmopolitan literacies; pedagogy and cultural creativity; the impact of international organizations, policy and economics on education; and critical perspectives on globalization.

Prerequisite(s): EDEE 1010

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDCI 3500 - Knowing and Learning in Mathematics, Science and Computer Science

3 hours

Psychological foundations of learning. Problem solving in mathematics, science and computer science education, including utilization of technology. Principles of expertise and novice understanding of subject matter. Implications of high-stakes testing. Foundations of formative and summative assessment.

Prerequisite(s): Admission to the Teach North Texas program, a university grade point average of at least 2.50 and TNTX 1100 (may be taken concurrently) or consent of a Teach North Texas advisor in the College of Science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 3600 - Critical Ethnic Studies in Education

#### 3 hours

Identifies and discusses the social and historical positioning of social justice movements (from Civil Rights to Human Rights to Black Lives Matter) and its connection to the creation of abolitionist educators. Unapologetically highlights what it means to be Black, Latinx, Indigenous, queer, dis/abled and marginalized throughout U.S. history and within educational spaces. The overall purpose is to educate students to be politically, socially, and economically conscious about their personal connections to local and national history and to take action as abolitionists in the classroom by promoting and advocating for social justice in the curriculum, instruction, assessment, and discipline. Course serves as the centering course for Block A and requires attendance in seminars.

Prerequisite(s): EDCI 3400 Corequisite(s): EDCI 3900

Must be admitted to teacher education program; Must be taken in Block A; Course serves as a 'centering' course for Block A and requires attendance in seminars

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### **EDCI 3650 - Migration and Transnational Students**

3 hours

Addresses migration across borders and its impact on students in grades pre-K through 12. The educational needs of transnational students are marked by the crossing and re-crossing of borders. Consequently, instructional pedagogical practices need to be centered on the notions of culturally responsive pedagogy and transformational curriculum. Drawing upon the experiences of transnational students and their teachers, this course will examine educational policies and practices grounded on asset-based approaches to the education of transnational youth. Special emphasis is given to the Texas-Mexican context.

Prerequisite(s): Admission to teacher education program; EDCI 3450

Corequisite(s): EDCI 3750

Must be taken in Block A. Requires field hours at an offsite location; Course serves as a centering course for Block A and requires attendance in seminars.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 3750 - Immigration, Language and Culture

3 hours

Discusses migration as a social phenomenon in the world, and how it affects the education and well-being of immigrant and migrant children and families whose languages and cultures are minoritized in their host country. Approaches to immigrant assimilation vs integration vs interculturalism will be discussed, including how they are reflected in language policies and the Pre-K-12 curriculum. Students will investigate from a sociocultural and historical perspective how language and culture have been and continue to be used in Western societies as tools of oppression.

Prerequisite(s): Admission to teacher education program; EDCI 3450

Corequisite(s): EDRE 3650

Must be taken in Block A

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **EDCI 3800 - Professional Issues in Teaching**

3 hours

Overview of American education, including history, purposes, legal bases, school organization, education as a profession and analysis of characteristics required for professional success.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 3830 - Teaching/Learning Process and Evaluation

3 hours

Examines the processes of human learning and development as they relate to teaching in diverse EC-12 classroom settings. Understanding of these processes is applied to lesson design, instructional strategies and assessment.

Prerequisite(s): Junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDCI 3900 - Special Topics in Ethnic Studies**

3 hours

Provides an in-depth analysis of selected special topics in ethnic studies. Emphasis on the advance of knowledge and skills for the development of a culturally sustaining curriculum that facilitates student and teacher empowerment. Specific content will be determined by the particular interest and expertise of the instructor and specific needs and interests of students.

Prerequisite(s): Admission to teacher education program; EDCI 3400

Corequisite(s): EDCI 3600

Must be taken in Block A.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDCI 4000 - Classroom Interactions**

3 hours (3:1)

Principles of delivering effective instruction in various formats (lecture, lab activity, collaborative settings). Examination of gender, class, race and culture in mathematics, science and computer science education. Overview of policy related to mathematics, science and computer science education. This course requires approximately 10 hours of fieldwork in schools. Candidates must be able to pass a criminal background check.

Prerequisite(s): TNTX 1200, EDCI 3500. Admission to the Teach North Texas Program, a university grade point average of at least 2.50.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDCI 4010 - Classrooms as Communities**

3 hours

Guides preservice teachers in cultivating a reflective, professional teacher identity while building and sustaining a classroom learning community that effectively serves all students. Also covers culturally responsive, anti-racist, ethical teaching practices as well as orientations to classroom organization viewed through an equity lens. Throughout this course, preservice teachers will position themselves as practice-based researchers in a clinical field experience, and plan the initial stages of a research project that will be completed in the final semester of the EC-6 program.

Prerequisite(s): Admission to teacher education program.

Corequisite(s): EDSP 4350, EDEE 4350, EDRE 4850, EDRE 4860

Must be taken in Block B. Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4060 - Content Area Reading

3 hours (0;0;3)

Provides an overview of the reading process with emphasis on reading to learn in the content area. Provides knowledge and skills for identifying reading problems, modifying instructional materials and processes, and using writing to promote learning and thinking in the content areas.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDCI 4070 - Teaching Diverse Populations**

3 hours (0;0;3)

Provides knowledge and skills required for developing and implementing challenging instruction for students who are culturally different, students who receive special education services and students who are identified as gifted and talented.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4108 - Student Teaching in the Secondary School

3 hours

Teaching under supervision.

Prerequisite(s): With the exception of student teaching, all course work on the degree plan must be complete. Senior standing and admission to teacher education are required. The student must be able to pass a criminal background check.

Corequisite(s): EDCI 4118

Required for those seeking secondary or all-level certification. See Student Teaching Program for details. Pass/no pass only.

Core Category: Capstone

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDCI 4118 - Student Teaching in the Secondary School

3 hours

Teaching under supervision.

Prerequisite(s): With the exception of student teaching, all course work on the degree plan must be complete. Senior standing and admission to teacher education are required. The student must be able to pass a criminal background check.

Corequisite(s): EDCI 4108

Required for those seeking secondary or some level certification. See Student Teaching Program for details. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4138 - Student Teaching Secondary School - Art

3 hours

Teaching art in secondary schools under supervision. Student must be able to pass a criminal background check.

Prerequisite(s): ARTE 3753, ARTE 3770, ARTE 4750, ARTE 4760, ARTE 4795, ARTE 4780, ARTE 4790, EDCI 4060, EDCI 3800. Admission to the visual art studies program, the teacher education program, senior standing, 2.75 GPA in reading and professional development courses.

Corequisite(s): Concurrent enrollment in EDEE 4101 is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### **EDCI 4148 - Student Teaching for Music Education**

3 hours

Teaching under supervision. For music education majors only. Required for those seeking all-level or secondary certification. See Student Teaching program for details. Must be able to to pass a criminal background check. Pass/no Pass only.

Prerequisite(s): EDCI 3800, HDFS 3123, MUED 3200. EDRE 4820 or EDCI 4060, MUED 4109 or MUED 4103, MUED 4203 or MUED 4209, secondary piano proficiency, theory proficiency, concentration proficiency, computer proficiency and senior standing.

Corequisite(s): Concurrent enrollment with EDME 4103.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4500 - Project-Based Instruction in Math, Science and Computer Science

3 hours (3;2)

Principles of delivering effective instruction in various formats (lecture, lab activity, collaborative settings). Examination of gender, class, race and culture in mathematics, science and computer science education. Overview of policy related to mathematics, science and computer science education. This course requires approximately 20 hours of fieldwork in schools. Candidates must be able to pass a criminal background check.

Prerequisite(s): TNTX 1200, EDCI 3500. Admission to the Teach North Texas Program, a university grade point average of at least 2.50.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4608 - Apprentice Teaching I in Mathematics, Science and Computer Science

3 hours (0;0;6)

Teaching under supervision. Required for students seeking secondary certification. See the Teach North Texas program for details. Must be able to pass a criminal background check.

Prerequisite(s): Concurrent enrollment in EDCI 4628; and senior standing.

Corequisite(s): EDCI 4618 and EDCI 4628.

Required for students seeking secondary certification. See the Teach North Texas program for details.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4618 - Apprentice Teaching II in Mathematics, Science and Computer Science

3 hours (0:0:6)

Teaching under supervision. Required for students seeking secondary certification. See the Teach North Texas program for details. Student must be able to pass a criminal background check.

Prerequisite(s): TNTX 1100, TNTX 1200; EDCI 3500, EDCI 4000, EDCI 4500. Concurrent enrollment in EDCI 4628; and senior standing.

Corequisite(s): Concurrent enrollment in EDCI 4608, EDCI 4628; and senior standing.

Required for students seeking secondary certification. See the Teach North Texas program for details.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4628 - Apprentice Teaching Seminar in Science, Math and Computer Science

1 hour

Discussions include apprentice teaching experience. Contemporary critical issues in education. Preparation for the state certification exam. Must be taken in the same semester as EDCI 4608 and EDCI 4618. Must pass EDCI 4608 and EDCI 4618 in order to receive credit for the seminar. Must be able to pass a criminal background check.

Prerequisite(s): TNTX 1100 and TNTX 1200; EDCI 3500; EDCI 4000 and EDCI 4500; concurrent enrollment in EDCI 4608 and EDCI 4618; satisfactory completion of the preliminary portfolio; and senior standing.

Corequisite(s): Concurrent enrollment in EDCI 4608 and EDCI 4618 and senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDCI 4800 - Studies in Education

1-3 hours

Organized classes for program needs and student interest.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDCI 4810 - Studies in Education

1-3 hours

Organized classes for program needs and student interest.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

## EDCI 4840 - Instructional Strategies and Classroom Management

3 hours (0;0;3)

Taken during the semester immediately preceding student teaching, this course provides knowledge and skills required for organizing and directing various instructional strategies in the secondary classroom. Content includes teaching strategies, approaches to classroom management and discipline, student motivation, student and teacher assessment and evaluation, and the use of media and technology in the classroom. Instruction, assignments, directed field experience and other class activities may take place on site in a school setting. Must complete 55 hours of field experience in assigned middle and high schools.

Prerequisite(s): Junior standing, admission to Teacher Education, and completion of or concurrent enrollment in all education course work excluding student teaching.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **Educational Foundations**

## **EDUC 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDUC 4910 - Special Problems**

1\_3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **Educational Leadership**

## **EDLE 2010 - How Schools Work**

1.5 hours

Prepares teachers for an understanding of how schools work and the influences by the local, state, and federal levels. Content is covered through a social justice lens that ensures all students—especially those from historically marginalized communities and Communities of Color—learn, succeed, and thrive in school and beyond. Particular attention will be given to topics such as community; school funding; assessment; curricular programs; policy; roles of people in schools; professional learning; professional associations; and school safety.

Prerequisite(s): None. Corequisite(s): EPSY 2010

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **Educational Psychology**

## **EPSY 2010 - How People Learn**

1.5 hours

Examines the processes of human learning and development within and across the multiple contexts of our daily lives, including home and school. Considers the role of social context and culture in shaping learning processes; the various ways learning is demonstrated; and the implications of these processes for the design of learning environments.

Prerequisite(s): None.

Corequisite(s): EDLE 2010

This course is 1.5 credit hours. For full 3.0 credit hours students must also enroll in EDLE 2010 .

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **EPSY 3000 - Foundations of Educational Psychology**

3 hours

Provides an overview of psychological principles as applied to teaching and learning. Topics include learning theories, self-perception, motivation, development and assessment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EPSY 3013 - Reading and Understanding Research

3 hours

Students learn how to identify and critique elements of quantitative, qualitative, and mixed-methods research designs as well as recognize and interpret basic measurements and statistics commonly reported in educational and psychological research.

Prerequisite(s): Junior or senior standing; or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **Electrical Engineering**

## **EENG 1910 - Introduction to Electrical Engineering**

3 hours (2;2)

Learning to Learn (L2L) is based on sound cognitive and pedagogical techniques that improve learning outcomes and make lifelong learning habitual. Students develop an understanding of how engineering is learned and how they can facilitate and develop the lifelong learning process, both individually and in teams. Topics covered include consciousness and self-awareness, knowledge representation, cognition, learning styles, memory, language, reading, effective verbal and written communication, project-based learning, critical thinking, problem solving and creativity, design process, globalization and contemporary issues, professionalism, and ethics.

Prerequisite(s): Electrical Engineering major or permission of department.

Electrical Engineering majors must attain a C or better in this course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 1920 - Project II: Introduction to Electrical Engineering

3 hours (2;2)

Provides students the foundation necessary for the successful execution of electrical engineering design projects. The design process embodies the steps required to take an idea from concept to successful design. These steps include the requirements specification, architectural model, concept generation and evaluation, feasibility study, functional decomposition, design, testing, an overview of ethical and legal issues, and maintenance. Technical design tools such as MATLAB, VHDL and Spice software, critical to designing a project, are introduced. Small projects using these design tools are implemented. A final project requires team work, an oral presentation and a written project report.

Prerequisite(s): MATH 1710 and EENG 1910, each with a grade of C or better in each course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **EENG 2610 - Circuit Analysis**

3 hours

Introduction to electrical elements, sources and interconnects. Ohm's law, Kirchoff's law, superposition and Thevenin's theorems are introduced. The resistive circuit, OP Amp, RL, RC circuits, Sinusoidal analysis.

Prerequisite(s): MATH 1720 with a C or better

Corequisite(s): PHYS 2220/PHYS 2240 (MATH 3410 and EENG 2611 for Electrical Engineering students) with a C or better in each course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 2611 - Circuit Analysis Lab

1 hour

Supplements the material of Circuit Analysis EENG 2610 providing practical hands-on experience with circuit implementation as well as analysis using PSpice and MATLAB. Practical verification and testing of fundamental laws and analysis methods. Includes practice safety in the laboratory, using test equipment, implementing and testing electric circuits on breadboards and prototype boards.

Prerequisite(s): None.

Corequisite(s): EENG 2610 (must also be completed with a grade of C or better).

Lab must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

#### EENG 2620 - Signals and Systems

3 hours

Elementary concepts of continuous-time and discrete-time signals and systems. Linear time-invariant (LTI) systems, impulse response, convolution, Fourier series, Fourier transforms and frequency-domain analysis of LTI systems. Laplace transforms, z-transforms and rational function descriptions of LTI systems.

Prerequisite(s): EENG 2610 (and EENG 2611 for Electrical Engineering students). Both must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 2621 - Signals and Systems Lab

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Designed to supplement the contents of EENG 2620 and to provide students hands-on and practical experience with signals and systems and their properties. Using the MATLAB tool, students will explore concepts including signal transformations such as shifting, scaling, and time-reversal, sampling of signals, and signal transforms such as the Fourier Transforms.

Prerequisite(s): EENG 2610 and EENG 2611; must complete or be co-enrolled in either MATH 2730 or MATH 3410 (all courses must be completed with a C or better).

Corequisite(s): EENG 2620 (which must be completed with a C or better).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## EENG 2710 - Digital Logic Design

3 hours

History and overview; switching theory; combinational logic circuits; modular design of combinational circuits; memory elements; sequential logic circuits; digital system design; fault models and testing.

Prerequisite(s): Engineering or engineering technology majors.

Corequisite(s): EENG 2711 for Electrical Engineering majors (which must be completed with a C or better).

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 2711 - Digital Logic Design Lab

1 hours

Provides the students an opportunity to design and debug digital circuits using logic gates and flip-flops, SSI, MSI integrated circuits and PLA's. The course also reinforces the concepts they learn in combinational and sequential logic and enhances report writing skills of the students.

Prerequisite(s): This class is restricted to College of Engineering students.

Corequisite(s): EENG 2710 (which must be completed with a C or better).

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## EENG 2900 - Special Problems

1-3 hours

Individualized instruction in theoretical or experimental problems in electrical engineering.

Prerequisite(s): Consent of instructor and must be completed with a C or better.

May be repeated for credit. For elective credit only.

## EENG 2910 - Project III: Digital System Design

3 hours (2;2)

Digital system design projects that provide students substantial experience in logic analysis, design, logic synthesis in VHDL, and testing. Project documentation including all the phases of project cycle from requirement analysis to testing as well as a project presentation providing the students an opportunity to enhance their communication and presentation skills, are essential components of this course. Instructor may choose to include a mini-project for breadboard implementation with discrete components as a part of this course.

Prerequisite(s):

EENG 2710 which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 2920 - Analog and Digital Circuit Design Project

3 hours (2;2)

Students learn to use basic electrical engineering lab equipment, to build and test simple circuits in the lab and to design and analyze circuits using CAD software tools. Includes simulation and design experiments and a final comprehensive design project to complement the circuit analysis course.

Prerequisite(s): EENG 1910, EENG 2610 (and EENG 2611 for Electrical Engineering students), and EENG 2710 (and EENG 2711 for Electrical Engineering students), each of which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 3410 - Engineering Electromagnetics**

3 hours

Electromagnetic theory as applied to electrical engineering: vector calculus; electrostatics and magnetostatics; Maxwell's equations, including Poynting's theorem and boundary conditions; uniform plane-wave propagation; transmission lines – TEM modes, including treatment of general, lossless line and pulse propagation; introduction to guided waves; introduction to radiation and scattering concepts.

Prerequisite(s): EENG 2610 (and EENG 2611 for electrical engineering students) which must be completed with a C or better.

Corequisite(s): EENG 3411 for electrical engineering students which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 3411 - Engineering Electromagnetics Lab**

1 hour

This course is designed to supplement the material of EENG 3410 and provide practical, hands-on experience with measuring instruments related to fundamental electromagnetics and onto transmission lines. Lab experiments will cover acoustic waves beginning with the speed of sound in air, traveling waves, and determination of the wavelength of light and the permittivity of free space. Other areas covered include the role of wavelength on transmission lines and the concept of VSWR. The use of Smith chart in impedance measurements and matching techniques is also covered.

Prerequisite(s): None.

Corequisite(s): EENG 3410 which must be completed with a C or better.

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

### EENG 3510 - Electronics I (Devices and Materials)

3 hour

Introduction to contemporary electronic devices, terminal characteristics of active semiconductor devices, and models of the BJT and MOSFET in cutoff and saturation region are introduced. Incremental and DC models of junction diodes, bipolar transistors (BJTs), and metal-oxide semiconductor field effect transistors (MOSFETs) are studied to design single and multistage amplifiers.

Prerequisite(s): EENG 2610 (and EENG 2611 for electrical engineering students) which must be completed with a C or better.

Corequisite(s): EENG 3511 for electrical engineering students which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 3511 - Electronics I Lab

1 hour

Designed to supplement the material of EENG 3510 and provide practical, hands-on experience with electronic devices, circuits, and PSpice. Experiments cover diodes, MOSFET, BJT, and op-amps. Students will explore the design, construction, and debugging of analog integrated circuits using these devices.

Prerequisite(s): None.

Corequisite(s): EENG 3510 (must be completed with a C or better).

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## EENG 3520 - Electronics II

3 hours

Concepts, analysis and design of electronic circuits and systems are introduced. Topics include principle of DC biasing, small signal analysis, frequency response, feedback amplifiers, active filters, nonlinear op-amp applications and oscillators.

Prerequisite(s): EENG 3510 (and EENG 3511 for Electrical Engineering students) which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 3710 - Computer Organization**

3 hours

Principles of computer system organization, instruction sets, computer arithmetic, data and control paths, memory hierarchies.

Prerequisite(s): CSCE 1030, EENG 2710 (and EENG 2711 for Electrical Engineering students), all of which must be completed with a C or better.

#### **EENG 3810 - Communications Systems**

3 hours

Introduction to the concepts of transmission of information via communication channels. Amplitude and angle modulation for the transmission of continuous-time signals. Analog-to-digital conversion and pulse code modulation. Transmission of digital data. Introduction to random signals and noise and their effects on communication. Optimum detection systems in the presence of noise.

Prerequisite(s): EENG 2620 (and EENG 2621 for Electrical Engineering students), EENG 3510 (and EENG 3511 for Electrical Engineering students), and MATH 1780 or MATH 3680 all of which must be completed with a C or better.

Corequisite(s): EENG 3811.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 3811 - Communication Systems Lab**

1 hour

This course provides laboratory materials for EENG 3810 Communication Systems. Topics include amplitude modulation, frequency modulation, pulse coded modulation, and communication system design with Simulink.

Prerequisite(s): None.

Corequisite(s): EENG 3810 which must be completed with a C or better.

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## EENG 3910 - DSP System Design Project

3 hours (2:2)

To study basic theory and applications of modern digital signal processing, to learn basic theory of real-time digital signal processing, and to develop ability to implement and simulate digital signal processing algorithms using MATLAB and on real-time DSP platform.

Prerequisite(s): EENG 2620 (and EENG 2621 for Electrical Engineering students), and EENG 2920, all of which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 3920 - Modern Communication System Design Project**

3 hours (2;2)

Students are required to design electronic communication systems with electronic devices such as MOS transistors, capacitors and resistors. Topics include LC circuits and oscillators, AM modulation, SSB communications and FM modulation.

Prerequisite(s): EENG 2920 completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 4010 - Topics in Electrical Engineering

3 hours

Technical elective specifically designed by the instructor each term/semester to cover topics in the latest state-of-the-art technology advancements in electrical engineering.

Prerequisite(s): Consent of the instructor.

Must be completed with a C or better.

May be repeated for credit as topics vary. Maximum total number of repeat hours allowed is 12 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 4310 - Advanced Topics in Control Systems Design

3 hours

Transform domain and state space representations of linear systems. System response, system stability, root locus method, frequency response-based design, and state space system analysis and design.

Prerequisite(s): EENG 2620 (and EENG 2621 for Electrical Engineering students) which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4330 - Environmental Systems

3 hours

Foundations and practice of modeling and simulation of ecological and environmental systems; temporal and spatial analysis; dynamical systems; and applications of engineering to environmental problems.

Prerequisite(s): Senior standing.

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 4340 - Environmental Monitoring**

3 hours

Fundamental course on sensors, instruments, and real-time systems to monitor environmental systems. Integration of sensors, instrumentation, informatics, and modeling into a cyber-infrastructure to monitor and forecast environmental changes.

Prerequisite(s): Senior standing.

Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 4350 - Renewable Electrical Power Systems

3 hours

Fundamental course on electrical power systems including efficient and renewable electrical power systems with relationships to environmental systems. Integration of renewable and alternative energy generation to electric power systems.

Prerequisite(s): Senior standing. Must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4410 - Microwave Engineering

3 hours

Introductory course for microwave engineering. Gives a general description of the fundamental microwave circuits and components. Topics include basic electromagnetic wave propagations, RF/microwave transmission lines, Smith Chart, RF matching networks, and fabrication of RF/microwave circuits.

Prerequisite(s): EENG 3410 (and EENG 3411 for Electrical Engineering students) which must be completed with a C or better.

## EENG 4710 - VLSI Design

3 hours

Introduction to VLSI design using CAD tools, CMOS logic, switch level modeling, circuit characterization, logic design in CMOS, systems design methods, test subsystem design, design examples, student design project.

Prerequisite(s): EENG 2710 (and EENG 2711 for Electrical Engineering students) and EENG 3510 (and EENG 3511 for Electrical Engineering students), all of which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **EENG 4760 - Reconfigurable Computing**

3 hours

Focuses on the fundamental architectural aspects of different reconfigurable devices including some of the commercially available FPGAs, and coarse-grained reconfigurable fabrics from academia and industry. Includes both a description of the architectures and discussion of pros and cons of these architectures for different applications and user needs, including the need for run-time reconfiguration. Also covers various low power reconfigurable devices.

Prerequisite(s): EENG 2710 (and EENG 2711 for Electrical Engineering students) which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **EENG 4810 - Computer Networks**

3 hours

History and overview of computer networks, protocols and network layers, application layer, socket programming, transport layer protocols and TCP, network layer protocols and IP, network routing, data link and physical layers, introduction to network security.

Prerequisite(s): EENG 3810 (and EENG 3811 for Electrical Engineering students) which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4850 - Computer Vision and Image Analysis

3 hours

Mathematical principles of computer vision and image analysis. Binary image processing with techniques of mathematical morphology, grey level image processing with various filters, color fundamentals and texture representation and recognition are discussed. Advanced topics such as content-based image retrieval, shape form X-techniques, 2D/3D object recognition and matching are also discussed.

Prerequisite(s): MATH 2700 and MATH 3680, each with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4900 - Special Problems in Electrical Engineering

1–3 hours

Individualized instruction in theoretical or experimental problems in electrical engineering.

Prerequisite(s): None.

Consent of instructor and must be completed with a C or better.

May be repeated for credit. For elective credit only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4910 - Senior Design I

3 hours

The senior design project course is a comprehensive electrical engineering design course providing major design experience. Students form teams of two to three members and work under the supervision of a faculty advisor. Identifying, formulating and solving an electrical engineering design problem of practical value under realistic design and implementation constraints by conforming to the engineering standards wherever appropriate. Development of an awareness of contemporary issues and professional ethics. Each project team is required to submit a proposal, present and submit a mid-term progress report, and present and submit a final report according to a prescribed project schedule.

Prerequisite(s): EENG 3810 and EENG 3811, EENG 3910, EENG 3920, all of which must be completed with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4920 - Cooperative Education in Electrical Engineering

1\_3 hours

Supervised field work in a job directly related to the student's major field of study or career objective.

Prerequisite(s): Junior- or senior-level standing in electrical engineering.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## EENG 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### EENG 4990 - Senior Design II

3 hours

The senior design project course is a comprehensive electrical engineering design course providing major design experience. Students form teams of two to three members and work under the supervision of a faculty advisor. Identifying, formulating and solving an electrical engineering design problem of practical value under realistic design and implementation constraints by conforming to the engineering standards wherever appropriate. Development of an awareness of contemporary issues and professional ethics. Each project team is required to submit a proposal, present and submit a mid-term progress report, and present and submit a final report according to a prescribed project schedule.

Prerequisite(s): EENG 4910 with a grade of C or better.

## **Electrical Engineering Technology**

## **ELET 1720 - Introduction to Electronics**

3 hours (2;3)

Survey of topics fundamental to the electronics industry. Introduction to the hardware and software tools used in industry. Emphasis is on experiential learning through laboratory experiences. Open to anyone interested in learning the fundamentals of electricity, digital logic, and semiconductors.

Prerequisite(s): MATH 1100.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **ELET 2740 - Special Electronic Devices**

4 hours (3;3)

Electronic devices used in industrial applications. Topics include fundamentals of process control and instrumentation using electronic devices for: interfacing, sensing and control.

Prerequisite(s): ELET 1720 and concurrent enrollment in MATH 1710.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **ELET 2900 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **ELET 3220 - Introduction to Power Systems Analysis**

3 hours

Basic concepts of AC systems, single-phase and three-phase networks, electronic power generation, transformers, transmission lines, electric machinery, and the use of power.

Prerequisite(s): ENGR 2405.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 3700 - Advanced Circuit Analysis**

4 hours (3;3)

Application of Laplace transforms and switching functions to the solution of complex electronic circuits and networks in both transient and steady state. Block diagrams and transfer functions are included as well as the use of computer solutions.

Prerequisite(s): ENGR 2405.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 3750 - Embedded C-Programming

4 hours (3;3)

C programming and applications for modern microcontroller architectures. Topics covered include C data types, arrays and pointers, data structures and their uses. Introduction to basic techniques of memory management and programming with dynamic data structures. Interrupt handling, multi-module programming

including applications containing a mixture of C and assembly language modules, and techniques for manipulating hardware registers and special function registers.

Prerequisite(s): ENGR 2750.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 3760 - Design of DSP Systems

4 hours (3;3)

Introduction to digital signal processing, emphasizing digital audio applications. A DSP primer covering important topics such as phasors, the wave equation, sampling and quantizing, feedforward and feedback filters, periodic sound, transform methods, and filter design. The course will use intuitive and quantitative approaches to develop the mathematics critical to understanding DSP techniques.

Prerequisite(s): ELET 3700,

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 3900 - Special Topics in Electrical Engineering Technology

1-4 hours

Individualized or group instruction on special topics in electrical engineering technology with hands-on activities, experiments and data acquisition, software-based simulations and analysis of results appropriate for rising junior or junior-level students.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **ELET 3980 - Digital Control of Industrial Processes**

3 hours (2;3)

Introduction to and use of programmable logic controllers; topics include terminology, basic and advanced relay logic programming, and connection and control of input/output devices. Emphasis is placed on interfacing, operating and programming a wide range of industrial automation devices.

Prerequisite(s): MATH 1650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## ELET 4300 - Embedded System Organization

3 hours

Common architectures and instruction sets for embedded microcontrollers. Detailed study of the software/hardware components and interfaces in embedded systems. Applications of soft cores and custom programming interfaces to embedded system control with emphasis on Field-Programmable Gate Array (FPGA) implementation. Usage of a modern Hardware Description Language (HDL) such as Verilog or VHDL. This course practices ETEC OpenLab Format: at least 30% of the assignments are completed in the lab or at home using proper technology.

Prerequisite(s): ELET 4340.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **ELET 4320 - Electronic Communications II**

3 hours

Digital communication techniques, microwave techniques and systems; measurements in the UHF spectrum, transmission lines, Smith charts, satellite communications. This course practices ETEC OpenLab Format: at least 30% of the assignments are completed in the lab or at home using proper technology.

Prerequisite(s): ELET 4710.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 4330 - Instrumentation System Design**

3 hours

Design and implementation of computerized instrumentation systems for industrial processes using multiple sensors, interface electronics, data acquisition card, and GPIB and serial instruments. This course practices ETEC OpenLab Format: at least 30% of the assignments are completed in the lab or at home using proper technology.

Prerequisite(s): ELET 3760.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 4340 - Digital Logic Design Techniques**

3 hours

Study of modern digital circuit implementation technologies, with emphasis on Field-Programmable Gate Arrays (FPGAs). Traditional and computer-based digital synthesis techniques for combination and sequential circuits are covered. Complex systems, such as reaction timers, processors and buses, are built from simpler circuits. A modern hardware description language, such as Verilog or VHDL, is used throughout the course. This course practices ETEC OpenLab Format: at least 30% of the assignments are completed in the lab or at home using proper technology.

Prerequisite(s): ENGR 2750

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 4710 - Electronic Communications I**

4 hours (3;3)

Receiver and transmitter circuits and systems; antennas, modulation, detection, high frequency oscillators and tuned amplifiers.

Prerequisite(s): ELET 3700, ELET 3740.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 4720 - Control Systems**

3 hours

Classical control theory; block diagrams, applications of Laplace transforms, stability criteria and feedback. Use of computer software to evaluate complex systems. This course practices ETEC OpenLab Format: at least 30% of the assignments are completed in the lab or at home using proper technology.

Prerequisite(s): ELET 3760.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 4780 - Senior Design I

1 hour

Project teams specify, plan and design a product or process. Written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): ELET 3760. Senior standing.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ELET 4790 - Senior Design II

3 hours (2:3)

Implement, test and demonstrate a product or process. Oral and written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): ELET 4780.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **ELET 4900 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ELET 4910 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **ELET 4920 - Cooperative Education**

1 hour

A supervised industrial internship requiring a minimum of 150 hours of work per experience.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 3 semester credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **ELET 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **Elementary Education**

## **EDEE 1010 - Teaching as Advocacy for Equity**

3 hours

Explores the relationships between education, culture, and society. Focuses on structures of social and educational inequality, as they relate to race, class, and gender; processes of power and control in education, as they are expressed in curriculum, policy, and pedagogy; education as a process of social and cultural reproduction; and teaching as a form of intervention in these processes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDEE 2000 - Exploring Diversity Through Social Action**

3 hours (3:0:45)

Exploration of issues related to race and ethnicity, gender, social class, learning differences, and sexual orientation as they impact education in the U.S. Required for students seeking grades 4–8 teacher certification.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDEE 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDEE 3300 - Interdisciplinary Studies in Education**

3 hours

School curriculum and approaches are often constructed by a range of social and physical science disciplines. Students will learn about these disciplinary approaches, their disproportionate impacts, and interdisciplinary approaches in schools. Focus is on similarities and differences between multidisciplinary, transdisciplinary, and interdisciplinary ways of thinking and how those various ways of thinking are instantiated in curriculum and instruction. Issues of equity, diversity, and inclusion centered in schools and society.

Prerequisite(s): Admission to teacher education program; EDRE 3350, EDEE 1010, or EDEC 1010

Must be taken in Block A; Requires field hours at an offsite location. Course serves as a centering course for Block A and requires attendance in seminars.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEE 3320 - Foundations of Education: The School Curriculum

3 hours

Principles and foundations of curriculum for grades EC-8 in public schools. Includes the study of professional ethics/responsibilities, educational philosophies, the history of American education, schools and society, school and community/parent relationships, legal/political control and financial support, school/classroom organizational patterns, and curriculum development/alignment.

Prerequisite(s):

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEE 3330 - Teaching Science EC-6

3 hours (3;0;16)

Introduces students to the scope and sequence of science education in an elementary school setting, to lesson plans and lesson design inside both formal and informal learning settings, and to the contributions of scientists of Color. Focuses on ways to bring social justice and activism into the science classroom.

Prerequisite(s): Admission to teacher education program.

Corequisite(s): EDRE 3350 and EDEE 3340.

Must be taken in Block A.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDEE 3340 - Teaching Social Studies EC-6

3 hours (3:0:16)

Principles of teaching social studies in primary and elementary school. Students observe social studies instruction and materials in real settings, apply principles of social studies instruction in classroom settings and experience first-hand the scope and sequence of the curriculum in a school setting. Course contains a field experience requirement.

Prerequisite(s): Admission to teacher education program.

Corequisite(s): EDEE 3330 and EDRE 3350.

Must be taken in Block A.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### EDEE 3350 - Teaching Mathematics EC-6

3 hours (3;0;16)

This course is designed to prepare preservice teachers to teach mathematics in EC-6 grade classrooms. Students will become familiar with the national and state standards in mathematics that outline the mathematics that students should learn across grade levels and the mathematical processes they should be engaged in while learning them. Most importantly, students in this course will learn methods of teaching mathematics that are equity and assetbased, rigorous, foster children's positive mathematics identity development, and transform math classrooms into spaces that challenge marginality and use mathematics as a tool to critically examine the world.

Prerequisite(s): n/a

Corequisite(s): EDCI 4010; EDSP 4350; EDRE 4850; EDRE 4860

Must be admitted to teacher education program: Must be taken in Block B; Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEE 3380 - Teaching and Learning in Grades EC-6

3 hours

Effective teaching practices through reflective decision making in grades EC-6. Includes the fundamental teaching skills of planning for instruction, implementing appropriate teaching strategies, integrating the curriculum, integrating technology into teaching, grouping children for instruction, acquiring appropriate materials/resources, assessing student learning, and establishing and maintaining a safe and effective learning environment.

Prerequisite(s): Admission to the teacher education program (includes participation in a field-based program), with a child/adolescent/lifespan development course, and an educational-application computer course.

## EDEE 3400 - STEAM Education: Commitments to Equity, Diversity and Inclusion

3 hours

Highlights that, with equitable learning opportunities, students from diverse backgrounds and from traditionally underserved populations in STEAM education can engage in practices and constructing meaning in both formal learning and informal settings.

Prerequisite(s): EDEE 1010

Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDEE 3600 - Teaching with STEAM: Integrated Math

3 hours

Students will explore ways to integrate mathematics concepts with other disciplines, specifically, science, technology, engineering, and the arts in robust and innovative ways in EC-6 classrooms. Much of this will be done through problem-based activities that are both mathematically rigorous and relevant to the lives of children and their communities. Students will also learn ways to advocate for and promote integrated mathematics instruction within their schools and districts as a tool for addressing social injustices.

Prerequisite(s): Admission to teacher education program; EDEE 3400.

Corequisite(s): EDEE 3650

Must be taken in Block A; Course serves as a centering course for Block A and requires attendance in seminars.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEE 3650 - Teaching with STEAM: Integrated Sciences

3 hours

Exploration of science knowledge and pedagogical content knowledge necessary to creating an engaging STEAM focused learning environment in early childhood and elementary classrooms. Delivery of content will be modeled using high engagement handson, minds-on activities that can be easily replicated in the classroom that utilize an exciting, integrated approach that includes engineering, technology, and design principals.

Prerequisite(s): Admission to teacher education program; EDEE 3400.

Corequisite(s): EDEE 3600 Must be taken in Block A

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### **EDEE 4101 - Clinical Teaching**

3 hours

Clinical teaching represents a culmination of each student's academic experience in the EC-6 teacher education program. Students must demonstrate a variety of skills related to teaching, reflective practice, and demonstrate improvement, drawing on feedback from university supervisors, cooperating teachers, and children/youth in their classrooms. Throughout the clinical teaching experience students will be positioned as a co-teachers in the classroom, working collaboratively with their cooperative teacher to co-plan and co-teach, and to create and sustain a classroom community that supports diverse learners using equitable and humanizing pedagogies. This course will allow students to apply the theoretical, philosophical and pedagogical studies introduced in their education program in an elementary, and ultimately develop and enact reflective and transformative teaching practices.

Prerequisite(s): Admission to clinical teaching

Corequisite(s): EDEE 4102 and EDEE 4890

Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### **EDEE 4102 - Clinical Teaching**

3 hours

Clinical teaching represents a culmination of each student's academic experience in the EC-6 teacher education program. Students must demonstrate a variety of skills related to teaching, reflective practice, and demonstrate improvement, drawing on feedback from university supervisors, cooperating teachers, and children/youth in their classrooms. Throughout the clinical teaching experience students will be positioned as a co-teachers in the classroom, working collaboratively with their cooperative teacher to co-plan and co-teach, and to create and sustain a classroom community that supports diverse learners using equitable and humanizing pedagogies. This course will allow students to apply the theoretical, philosophical and pedagogical studies introduced in their education program in an elementary, and ultimately develop and enact reflective and transformative teaching practices.

Prerequisite(s): Admission to clinical teaching

Corequisite(s): EDEE 4101 and EDEE 4890

Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDEE 4350 - Mathematics in Grades EC-8

3 hours (3:0:16)

Principles in mathematics teaching and learning based on national curriculum and assessment standards. The learning process in the development of mathematical thinking and skills in children. Students observe mathematics instruction and materials in real settings and experience firsthand the scope and sequence of mathematics in a primary/elementary/middle school setting. Assignments, directed field experience and other class activities take place on site in a school setting.

Prerequisite(s): Admission to the teacher education program, which includes participation in a field-based program, EDEE 3320, EDEE 3380; all courses in the reading/English/language arts part of the academic major; required core and academic major math courses and DFST classes.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDEE 4800 - Studies in Education

1-3 hours

Organized classes for specific program needs and student interest.

Prerequisite(s): Admission to teacher education and consent of department. Limited-offering basis.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

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EDEE 4810 - Studies in Education

l–3 hours

Organized classes for specific program needs and student interest.

Prerequisite(s): Admission to teacher education and consent of department. Limited-offering basis.

May be repeated for credit.

#### EDEE 4890 - Practice-Based Research

3 hours

This course will provide preservice teachers with the opportunity to synthesize their student teaching experience through research into their own teaching. Through the seminars associated with this course, teacher interns will strengthen their ability to be a reflective practitioner of: content and curriculum knowledge, pedagogy and assessment knowledge, equity for all learners, encouragement of diversity, professional communication, and engaged professional learning as outlined in the conceptual framework.

Prerequisite(s): Admission to clinical teaching.

Corequisite(s): EDEE 4101 and EDEE 4102

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### **EDEE 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### **EDEE 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **EDEE 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **Emergency Administration and Planning**

## **EADP 1010 - Exploring Disasters**

3 hours

Provides an introduction to hazards and disasters and the impacts they have on society. Emphasis is given to the role of culture in shaping risks, vulnerability and resilience. Students will explore the breadth of the emergency management and disaster science fields as well as the causes and consequences of major historical and contemporary disasters.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## EADP 2020 - Images of Disasters in Film and Media

3 hours

This course examines hazards and disasters as they are portrayed in film and various media. The emphasis is on understanding how the portrayals of disasters often depart from scientific understanding, and also on evaluating how the depiction of disasters in various media can shape both public and official awareness of the causes of, management of, and recovery from disaster.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## EADP 2030 - Climate Change Resilience

3 hours

Introduction to the study of how communities adapt to and protect against a changing climate. This course explores the impact of climate change on people, infrastructure, and the environment. Emphasis will be placed on climate-induced hazards and disasters and how individuals and communities can increase their resilience to these threats.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## **EADP 2700 - Current Issues in Emergency Management**

3 hours

In-depth investigation of a contemporary issue of concern to emergency managers. Possible topics include catastrophic events, public health and disasters, volunteer organizations, and emergency medical services.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## EADP 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 3010 - Principles of Emergency Management**

3 hours

Introduction to the theory, principles, phases and processes of emergency and disaster management. Topics include hazard, risk, vulnerability and comprehensive emergency management. Course also examines alternative career paths, the evolution of the field and its future outlook.

Prerequisite(s): None.

### **EADP 3020 - Methods in Emergency Management**

3 hours

Survey of practical management methods in which students should be familiar upon entering the field of emergency management. The methods covered include basic risk and vulnerability assessment methodology, project management, grants management, data collection and basic analysis, and survey design.

Prerequisite(s): None.

Corequisite(s): It is recommended this course is taken concurrently with EADP 3010 or within the student's first year in the program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 3035 - Hazard Mitigation and Preparedness

3 hours

Theoretical examination and practical application of pre-disaster management activities including hazard and vulnerability analysis, structural and non-structural mitigation, capability assessment, planning, training, exercises and public education. Development planning, political advocacy and networking are heavily stressed.

Prerequisite(s): EADP 3010.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### EADP 3045 - Disaster Response and Recovery

3 hours

Theoretical examination and practical application of post-disaster management activities including human behavior in emergency situations, warning, evacuation, sheltering, triage, damage assessment, disaster declaration, debris removal, media relations, crisis counseling, individual and public assistance, and other relevant functions. Decision making, incident command, EOC operations, coordination and service delivery strategies are also discussed.

Prerequisite(s): EADP 3010.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 3055 - EOC Design and Operations

3 hours

Emphasizes the principles of the design and operation of Emergency Operations Centers. In addition to standard EOC functions established in the scholarly literature, course material covers the selection and arrangement of suitable space and equipment, the acquisition and deployment of appropriate communications and information-management technology, crisis decision-making; and the integration of multiple organizations into an emergency management system.

Prerequisite(s): EADP 3010, EADP 3035, EADP 3045.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 3080 - Leadership and Organizational Behavior

3 hours

Study of interpersonal relationships and organizational behavior as they apply to the field of emergency and disaster management. Topics include leadership, management, conflict resolution, influence and motivation.

Prerequisite(s): EADP 3010 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### EADP 4000 - Hazardous Materials Planning and Management

3 hours

Planning for and management of hazardous materials incidents. Attention is given to environmental regulations as they relate to hazardous materials. Defensive strategies for hazardous materials response are identified.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## EADP 4010 - Public Health and Disasters

3 hours

Discussion of the changing and unique role of the public health field in emergency management, paying special attention to epidemiology, integration with emergency services, medical/first responders, public safety, bio-terrorism preparedness and public/professional community education.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### EADP 4015 - Flood Plain Management

3 hours

Identification and assessment of flood related hazards and vulnerabilities. Evaluation of the merit and necessity of implementing various structure and non-structural approaches to reduce flood related disasters. Includes discussion about mapping, containment devices, land use planning, early warning systems and insurance.

Prerequisite(s): EADP 3010 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 4020 - Managing Disasters at the National Level

3 hours

An overview of the historical and evolving role of the federal government in managing events of national significance is provided. Emphasis will be placed on exposing students to the roles, responsibilities, and interactions of local, state, federal governments, and the private and non-profit sectors in managing risks and disasters. Topics will include the National Response Framework, the National Incident Management System, disaster declarations, and other emerging issues.

Prerequisite(s): EADP 3010 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## EADP 4030 - Continuity Planning for Crises

3 hours

Study of continuity and operational resilience following disasters. Topics include, continuity of operations planning for businesses, governments, and organizations during crises, impact analysis, private sector programs, crisis management, and developing continuity plans.

Prerequisite(s): None.

#### **EADP 4040 - International Disasters**

3 hours

Explores issues pertinent to international disasters, including susceptibility of poor countries to natural disasters, the nature of complex emergencies; and the actors involved in humanitarian activities across national borders. Special attention is given to the social, political and economic barriers that perpetuate the vicious cycle of vulnerability, as well as the need for long term solutions that promote beneficent forms of development.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 4050 - Social Vulnerability in Disasters

3 hours

Identification and examination of special populations in disasters. Discussion of their needs and service delivery strategies. Emphasis on relevant response agencies and programs.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 4060 - Emerging Technology and Disasters**

3 hours

Examination of the use of technology and information management in disasters. Topics include social media, unmanned aircraft systems (drones), communication, cybersecurity, geospatial technology, warning systems, and technology adoption.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 4065 - Disaster Exercise Design

3 hours

Study in designing and implementing successful disaster exercise programs. Types of disaster exercises and their purpose are examined. Process of designing exercises is explored in depth. Methods of conducting and evaluating exercises are discussed and analyzed. Each student participates in producing, conducting and evaluating a disaster exercise.

Prerequisite(s): EADP 3010, EADP 3035, EADP 3045.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 4080 - Capstone Course in Emergency Management**

3 hours

Synthesis of emergency and disaster management concepts and perspectives. Case studies of disasters are emphasized to provide real-world examples of applied principles. Discussion of current theoretical approaches and future trends in the field. Topics include sustainable development, resistance, resilience and vulnerability.

Prerequisite(s): EADP 3010, EADP 3035, EADP 3045. Enrollment is restricted to EADP majors who are in the final two semesters of their degree program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## EADP 4090 - Terrorism and Emergency Management

3 hours

In-depth investigation into the ideological forces and groups involved in terrorist activity. Analysis of the effects of terrorism, including the similarities and differences to other types of disasters. Attention is given to weapons of mass destruction and the unique challenges to prevent, prepare for, respond to, and recover from terrorist attacks.

Prerequisite(s):

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 4800 - Emergency Management Internship** Preparation

3 hours

Course prepares students for an internship. Recommended to be taken the term/semester before the student serves the internship. Periodic seminars cover career counseling, resume development, professionalism and interview skills.

Prerequisite(s): Enrollment is restricted to EADP majors who have completed EADP 3010, EADP 3035, EADP 3045, and consent of internship coordinator.

Enrollment in this course is required for pre-career EADP students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### EADP 4810 - Emergency Management Internship

3 hours

Provides practical experiences geared toward the integration of theory and practice in a supervised emergency management setting. Requires a minimum of 240 contact hours within the practicum setting and attendance at scheduled classes.

Prerequisite(s): EADP 4800, 15 hours of EADP course work including EADP 3010, EADP 3035 and EADP 3045, and consent of the internship coordinator.

Enrollment in this course is required for pre-career EADP students. Application for approval of the practicum site occurs in the term/semester prior to enrollment in this course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 4900 - Special Problems**

1-6 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **EADP 4910 - Special Problems**

1-6 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **EADP 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Engineering Fundamentals**

## **ENGR 1030 - Technological Systems**

3 hours

Introduction to technological systems with focus on societal interrelationships; past, present and future trends; and influence and impact on technological literacy.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **ENGR 1060 - Communication and Ethics**

3 hour

Technical/workplace written communication; critique of existing technical documents; preparation and delivery of a professional presentation; introduction to engineering ethics including plagiarism, professional codes of ethics and case studies.

Prerequisite(s): ENGL 1310.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ENGR 1201 - Introduction to Engineering**

(ENGR 1201)

3 hours (2;2;0)

Introduction to the engineering profession with emphasis on technical communication and team-based engineering design.

Prerequisite(s): Pre-engineering status.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **ENGR 1304 - Engineering Graphics**

(ENGR 1204 or ENGR 1304)

3 hours

Fundamentals and principles of engineering drafting practices used in technical processes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ENGR 2301 - Statics

(ENGR 2301 or ENGR 2401)

3 hours

Basic theory of engineering mechanics, using calculus, involving the description of forces, moments and couples acting on stationary engineering structures. Equilibrium in 2 and 3 dimensions, free-body diagrams, friction, centroids, centers of gravity and moments of inertia

Prerequisite(s): PHYS 1710, PHYS 1730.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ENGR 2302 - Dynamics

(ENGR 2302 or ENGR 2402)

3 hours

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems.

Prerequisite(s): ENGR 2301, MATH 1720.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## **ENGR 2304 - Statics and Strength of Materials**

3 hours

This course includes a study of applied engineering mechanics including forces, static equilibrium, and simple truss analysis. An emphasis is placed on the concepts and mathematical calculations of stress, strain, and deflection within structural elements encountered in construction. The rationale and factors of safety for sizing and design of these elements is reviewed.

Prerequisite(s): MATH 1190 and PHYS 1410.

Corequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **ENGR 2332 - Mechanics of Materials**

(ENGR 2332)

4 hours (3:3)

Relationships among loads placed on structural components; shape and size of components; resultant stresses, strains and deflections of components

Prerequisite(s): ENGR 2301.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70; Lab (LF): \$20

## **ENGR 2405 - Circuit Analysis**

3 hours

Introduction to electrical elements, sources and interconnects. Ohm's law, Kirchoff's law, superposition and Thevenin's theorems are introduced. The resistive circuit, OP Amp, RL, RC circuits, Sinusoidal analysis.

Prerequisite(s): MATH 1720.

Corequisite(s): PHYS 2220/PHYS 2240.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### **ENGR 2415 - Circuit Analysis Lab**

1 hour (0;3)

Provides experiences in the analysis and design of DC and AC electrical networks. Fundamentals such as Kirchhoff's Laws, Thevenin and Norton equivalent circuits, RL, RC, and RLC circuits are covered. Experiences include use of computer aided tools for data acquisition, analysis of data, and report generation.

Prerequisite(s): None.

Should be taken concurrently with ENGR 2405.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ENGR 2720 - Digital Logic

3 hours

Digital system design; number systems and codes; Boolean algebra; logic gates; programmable logic devices and hardware description languages; arithmetic operations and circuits; combinational circuits; code converters, multiplexers and demultiplexers; sequential circuits; flip-flops, registers and shift registers; finite state machines; microprocessor fundamentals.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ENGR 2730 - Digital Logic Lab

1 hour (0;3)

Provides experiences in applying the principles and methodologies of digital electronics. Emphasis is placed on design, testing, debugging and implementation using Field Programmable Gate Arrays (FPGAs) and hardware description languages such as VHDL or Verilog. Project documentation and reporting are also included.

Prerequisite(s): None.

Should be taken concurrently with ENGR 2720.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **ENGR 2750 - Introduction to Microprocessors**

4 hours (3;3)

The fundamentals of microprocessor hardware and assembly language interaction are studied in detail. Emphasis is on the use of the processor to control external systems and devices.

Prerequisite(s): ENGR 2720, CSCE 1030 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **ENGR 3000 - Foundations of Manufacturing**

3 hours

Technological knowledge foundation to the principles and practices of manufacturing engineering with the intention of applying this knowledge to product development. Offers an understanding of traditional and emergent manufacturing technologies used in industry and will relate the design requirements of a product to the appropriate manufacturing processes. The global challenges to product performance, quality, environmental, ethics, and economic considerations will be investigated.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### **ENGR 3450 - Engineering Materials**

4 hours (3:3)

Principles of bonding, structure, and structure/property relationships for metals and their alloys, ceramics, polymers and composites. Emphasis on properties and how processes change structure and, consequently, properties.

Prerequisite(s): PHYS 1710. CHEM 1410/CHEM 1430 or CHEM 1415/CHEM 1435.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## ENGR 3451 - Engineering Materials Lab

1 hour (0;3)

Provides students with hands-on experience in materials science and engineering, involving experiments and data acquisition, analysis of results, report writing and oral presentation.

Prerequisite(s): None.

Corequisite(s): ENGR 3450.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## ENGR 4000 - Introduction to Industrial Systems and Analysis

3 hours

Establishes the fundamentals of systems engineering processes and planning. Focus on needs identification, problem definition, generating requirements, system architecting, concept of operations, systems engineering management, and the application of systems engineering in different disciplines. The course material is articulated through examples and case studies. Emphasis is placed on enhancing the effectiveness and efficiency of industrial systems.

Prerequisite(s): None.

## **English**

## ENGL 1310 - First-Year Writing I

(ENGL 1301)

3 hours

Writing as discovery. Introduces essential concepts, knowledge, skills, methods, and conventions for writing. Focuses on practicing writing processes and developing rhetorical knowledge through analysis, observation, and self-reflection.

Prerequisite(s): None.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 1311 - Honors First-Year Writing I

3 hours

Offers intensive practice in writing processes and rhetorical strategies through modes such as analysis, observation, and self-reflection. Introduces essential concepts, knowledge, skills, methods, and conventions for writing.

Prerequisite(s): Acceptance to Honors College.

May be substituted for ENGL 1310.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 1315 - Writing About Literature I**

3 hours

Writing as a means of critical thinking using readings from poetry and drama as sources for essay topics. Emphasis on the process of perfecting the essay through the writing of several drafts.

Prerequisite(s): None.

May be substituted for ENGL 1310.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 1320 - First-Year Writing II

(ENGL 1302)

3 hours

Writing as inquiry. Develops habits of critical thinking, researchbased inquiry, and argument through written engagement with relevant social and cultural issues.

Prerequisite(s): ENGL 1310 or equivalent.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 1321 - Honors First-Year Writing II

3 hours

Offers intensive practice in research-based writing and develops skills in critical thinking, inquiry, research, and argument.

Prerequisite(s): Acceptance to Honors College.

May be substituted for ENGL 1320.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 1325 - Writing About Literature II

3 hours

Study of relationship between writing and research with research topics drawn from readings from prose fiction. Emphasis on the process of perfecting the essay through the writing of several drafts.

Prerequisite(s): ENGL 1315 or equivalent.

May be substituted for ENGL 1320.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 2100 - Introduction to Creative Writing**

(ENGL 2307)

3 hours

Workshop and discussion based. Examines how writers explore their experiences of the larger world using the technical and expressive possibilities available in poetry, fiction and creative nonfiction.

Prerequisite(s): None.

This course is designed as an elective for both non-ENGL majors and for ENGL majors who want to explore multiple genres before taking 3000-level genre-specific creative writing classes.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2210 - Survey of World Literatures from Antiquity to 1700

(ENGL 2332)

3 hours

Comparative and critical reading skills from a global perspective, tracing significant literary themes, texts, movements and genres across a wide range of world literatures and cultures from Antiquity to 1700

Prerequisite(s): 3 semester hours of freshman-level English or equivalent.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 2220 - Survey of World Literatures from 1700 to the Present

(ENGL 2333)

3 hours

Comparative and critical reading skills from a global perspective, tracing significant literary themes, texts, movements and genres across a wide range of world literatures and cultures from 1700 to the present day.

Prerequisite(s): 3 semester hours of freshman-level English or equivalent.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2221 - Survey of World Literatures from 1700 to the Present (Inactive) (Deleted 06/05/2019)

2 hours

Comparative and critical reading skills from a global perspective, tracing significant literary themes, texts, movements and genres across a wide range of world literatures and cultures from 1700 to the present day.

Prerequisite(s): 3 semester hours of freshman-level English or equivalent. Acceptance to Honors College.

#### **ENGL 2321 - British Literature**

(ENGL 2321)

3 hours

Selected works of British literature from the Anglo-Saxon period to the present, including works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisite(s): Completion of one course in the core foundation area of communication.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2326 - American Literature

(ENGL 2326)

3 hours

Selected works of American literature from the wide range of cultures that comprise the nation and over the full range of literary history on the North American continent, including works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors.

Prerequisite(s): Completion of one course in the core foundation area of communication.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 2331 - World Literature**

(ENGL 2331)

3 hours

Selected works of world literature from the ancient world to the present, including works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisite(s): Completion of one course in the core foundation area of communication.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2341 - Forms of Literature

(ENGL 2341)

3 hours

A study of one of more genres including, but not limited to, drama, poetry, creative nonfiction, novels, graphic novels, comics, or film, or the study of a topic or theme as represented in multiple literary forms

 $Prerequisite(s)\hbox{: }3\ hours\ of\ freshman-level\ English\ or\ equivalent.}$ 

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 2351 - Mexican American Literature**

(ENGL 2351)

3 hours

A survey of Mexican American/Chicanx literature from Mesoamerica to the present, including literary works of fiction, poetry, drama, essays, and memoirs in relation to their historical, linguistic, political, regional, gendered, and cultural contexts. Texts will be selected from a diverse group of authors, literary movements, and media forms. Topics and themes may include the literary performance of identity and culture, aesthetic mediation of racialization, struggle and protest, and artistic activism.

Prerequisite(s): Completion of one course in the core foundation area of communication.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 2600 - Introduction to American Studies**

3 hours

History of, and current developments in, the field of American Studies. Provides training in interdisciplinary methodologies. Emphasizes the United States and the complex histories of its various populations; topics may also address the hemispheric, transnational, and/or global dimensions of American culture.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2800 - Introduction to Games and Play

3 hours

Theories of play and how play is expressed in games. Emphasis on game literacy and games as complex cultural and aesthetic objects. Inquiry into the social, political, and ethical issues that inform game design, game genres, game aesthetics, player decision-making, and role-playing and identity within games.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **ENGL 2910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3000 - Introduction to Literary Analysis and Interpretation Skills

3 hours

Prepares majors to understand literature and to articulate their understanding in essays supported by carefully analyzed evidence from assigned works. Covers basic critical vocabulary, the major literary genres (poetry, drama, fiction) and the conventions that govern these genres. Students learn to evaluate multiple interpretations of a text.

Prerequisite(s): 6 hours of first-year writing.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 3110 - Academic Writing in the Humanities**

3 hours

Intermediate-level study in essayistic and academic literacies. Practice-centered approach to writing, with a particular focus on drafting, revision, and research-based academic argument.

Prerequisite(s): ENGL 1320 or equivalent.

Fulfills the requirements for the English concentration in Language Arts, including readiness standards in writing required by the State of Texas.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 3140 - Beginning Fiction Writing**

3 hours

Principles and practices in the writing of fiction.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 3150 - Beginning Poetry Writing**

3 hours

Principles and practices in the writing of poetry.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3160 - Beginning Creative Nonfiction Writing**

3 hours

Principles and practices in the writing of non-fiction.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3200 - Rhetorical History and Historiography

3 hours

Explores the construction of the rhetorical tradition through canonical texts and figures; questions alternatives to the received tradition.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3210 - Studies in Writing

3 hours

Broad-based study of the intersecting social, material, political and institutional discourses that shape the theory, philosophy, history and practice of writing.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 3360 - Classical Literature and Mythology**

3 hours

Selected works of literature from ancient Greece, Rome, Egypt, and global indigenous cultures. Arranged around a common theme, with emphasis on mythology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3430 - British Literature to 1780

3 hours

A broad survey of British literature from the Anglo-Saxon period to the late-18th century; includes the study of a variety of literary genres and traditions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3431 - Introduction to Early Medieval Literature

3 hours

Study of the major works and genres of English and Continental literature from 750–1150 in Western Europe; provides an introduction to these works in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 3432 - Introduction to Late Medieval Literature

3 hours

Masterpieces of late medieval literature from 1150–1500, excluding the Canterbury Tales; provides an introduction to these works in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 3433 - Medieval Women Writers**

3 hours

Study of major women writers and their works in the Middle Ages.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 3434 - British Renaissance Drama

3 hours

Study of Tudor and Jacobean drama, focusing on major writers other than Shakespeare, including Lyly, Marlowe, Kyd, Jonson, Webster, Middleton, and Ford; provides an introduction to these works in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3435 - British Renaissance Poetry

3 hours

Study of major poets of the British Renaissance, such as Wyatt, Surrey, Sidney, Spenser, Shakespeare, Jonson, Donne, Wroth, Milton, Marvell, and Herrick; provides an introduction to these works in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 3436 - Introduction to Eighteenth-Century British Literature**

3 hours

Introduction to the major literary genres, authors, and ideas of the British eighteenth century.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3440 - British Anglophone Literature 1780 to the Present

3 hours

A broad survey of British and Anglophone literature from the Romantic period to the present; includes the study of a variety of literary genres, movements and traditions.

Prerequisite(s): None.

#### **ENGL 3441 - Introduction to Romantic Literature**

3 hours

A survey of English-language texts written by Romantic writers (early to mid-19th-century British writers) such as William Wordsmith, Mary Shelley, Samuel Taylor Coleridge, Percy Shelley, George Gordon, Lord Byron, John Keats, Maria Edgeworth, William Blake, Mary Wollstonecraft, and others.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **ENGL 3442 - Introduction to Victorian Literature**

3 hours

A survey of English-language texts written by Victorian writers (midto late-19th-century British writers) such as Charles Dickens; Alfred, Lord Tennyson; Robert Browning; Charlotte Bronte; Oscar Wilde; Walter Pater; John Ruskin; and others.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### ENGL 3450 - Short Story

3 hours

Comparative survey of the short story from its inception in the 19th century to the present day, comprising representative works by African, Asian, British, Russian, North and South American, and European writers, in English or in translation.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3500 - Narrative and Story Development in Game Writing

3 hours

An introduction into major concepts in story development for game writing and an online workshop for student writing focused on game-specific characterization and narrative structures.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 3830 - American Literature to 1870

3 hours

A broad survey of early American literature from the colonial period through the Civil War; includes the study of a variety of literary genres, movements and traditions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3831 - Introduction to the Literature of the Colonial Americas

3 hours

A study of the American literature associated with the colonization and settlement of the New World; readings cover selections from colonization to the early national period.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3832 - Nineteenth-Century American Poetry**

3 hours

A study of nineteenth-century American poetry, including Dickinson, Whitman, and other significant poets; provides an introduction to nineteenth-century poetic forms in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **ENGL 3833 - The American Renaissance**

3 hours

A study of American cultural and literary expression from approximately 1830 to 1860, including works by major authors such as Ralph Waldo Emerson, Emily Dickinson, Herman Melville, and Frederick Douglass, as well as other literary and visual texts.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 3840 - American Literature 1870 to the Present

3 hours

A broad survey of American literature from the late-19th century to the present; includes the study of a variety of literary genres, movements and traditions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3843 - Twentieth- and Twenty-first-Century American Poetry

3 hours

A study of 20th-century American poetry; provides an introduction to 20th-century poetic forms in their literary and cultural context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 3847 - American Realism

3 hours

Study of realism in American literature and culture from 1860–1900, along with related literary movements (e.g., naturalism, regionalism). Provides coverage of such major authors as Mark Twain, Sarah Orne Jewett, Charles Chesnutt, and Henry James.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3850 - The Literature of Texas and the Southwest

3 hours

Study of the poetry, prose and drama of Texas and the Southwest and their relation to the cultural history of the region.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3900 - Career Advancement for English Majors

3 hours

Demonstrates how skills from the discipline of English can be leveraged into careers in the private sector and nonprofit organizations. Identify strengths and preferences to guide job activity and career choices. Emphasis on developing digital literacy and shaping work into a writing portfolio.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3910 - Special Studies in Literature**

1-3 hours

Selected major authors, significant literary periods, thematically related literary works or topics of interest.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3911 - Topics in British Literature**

3 hours

Consideration of genres, themes, movements, authors and their relationship to the cultural contexts of the age. May be repeated for credit as topics vary.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3912 - Topics in American Literature**

3 hours

Consideration of genres, themes, movements, authors and their relationship to the cultural contexts of the age. May be repeated for credit as topics vary.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3913 - Topics in World Literature**

3 hours

Consideration of genres, themes, movements, authors and their relationship to the cultural contexts of the age. May be repeated for credit as topics vary.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3920 - Ethnic American Literatures**

3 hours

Study of the literatures of several ethnic communities, including, but not limited to, African-American, Chicano (Mexican-American), Latino, Native American and Jewish-American. Comparison of divergent worldviews and ideologies articulated in ethnic literatures.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 3924 - Women's Literature

3 hours

Studies in literature written by or about women.

Prerequisite(s): None.

Same as WGST 3720.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 3996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **ENGL 4100 - Advanced Fiction Writing**

3 hours

Advanced study and practice of fiction writing in a workshop setting.

Prerequisite(s): ENGL 3140.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4110 - Advanced Poetry Writing**

3 hours

Advanced study and practice of poetry writing in a workshop setting.

Prerequisite(s): ENGL 3150.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4120 - Advanced Creative Nonfiction Writing**

3 hours

Advanced study and practice of non-fiction writing in a workshop setting.

Prerequisite(s): ENGL 3160.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4130 - Literary Editing and Publishing**

3 hours

Introduction to the procedures of editing and publishing a literary journal. Includes research and discussion of nationally recognized literary magazines and covers topics such as a publication's mission statement, its aesthetic vision, and its editorial practices.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4150 - Literary Criticism

3 hours

Principles based on representative readings from major critics; essays and class exercises in forming independent critical judgment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4195 - Advanced Grammar and Usage**

3 hours

Covers basic and advanced concepts of grammar; usage and punctuation; and techniques and practices for effective writing and publishing in the humanities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### ENGL 4200 - Studies in Modern Rhetoric

3 hours

Study of theories, practices and questions raised after the "rhetorical turn" of the 20th century.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4210 - Advanced Studies in Writing**

3 hours

Intensive study of writing theory, philosophy, history and practice in dialogue with emerging research in humanities, the sciences and the arts.

Prerequisite(s): ENGL 3210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4220 - Contemporary North American Indigenous Literature

3 hours

Study of literature and other writings by indigenous peoples of North America from 1900 to the present (including works in translation). Provides an introduction to these works in their historical, literary, and cultural contexts.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4230 - Special Topics in Rhetoric and Writing Studies

3 hours

Specialized, focused study of a particular topic, theme, figure, practice and/or theory within the field of rhetoric and writing studies.

Prerequisite(s): ENGL 3200, ENGL 4200.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **ENGL 4240 - Writing Center Theory and Practice**

3 hours

Writing-intensive seminar designed to provide theoretical background, research training, and practical strategies to prepare students for writing center work.

Prerequisite(s): Employment as a tutor in the UNT Writing Center or instructor permission.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 4245 - Postcolonial Literature and Theory**

3 hours

An introduction into the major concepts in postcolonial theory and a study of postcolonial writers from a number of regions, including Africa, South Asia, the Caribbean, or Latin America.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4250 - Latinx Literature

3 hours

Study of historical as well as contemporary Latinx literature, including a preponderance of Mexican American and Chicanx literature and cultural production. Works may range from the local to the national and global, and may include indigenous American, Spanish colonial and writings from a range of Latin American nations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **ENGL 4255 - Mexican American Non-Fiction and Criticism**

3 hours

A review of key non-fiction essays and criticism by influential Mexican American writers and scholars. The readings span the twentieth century and extend into the twenty-first, exploring matters of folkloric identity, history, race, gender and globalization.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4260 - African American Literature

3 hours

Study of the cultural and historical specificity of African American literature. Works may range widely in their chronological and geographic origin, ideological perspective, and relation to mainstream European and/or U.S. literary traditions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4270 - Modern Jewish Literature

3 hours

Study of modern Jewish literature and its historical contexts. Works may take national perspectives such as American or Israeli or transnational, global perspectives. May investigate topics such as diaspora and homelands, secularism and tradition, or gender and sexuality.

Prerequisite(s): None.

May be used to fulfill a requirement for the Jewish studies minor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4290 - World Drama

3 hours

Comparative study of Greek, Latin, Spanish, French, Russian, Japanese, Indian and English masterpieces; drama as a reflection of changing ideologies, customs and dramatic conventions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4300 - Modern Drama

3 hours

Comparative survey of literary drama from the late-19th century to 1960. Playwrights studied may include Henrik Ibsen, August Strindberg, Anton Chekhov, George Bernard Shaw, Bertolt Brecht, Oscar Wilde, Jean Genet, Noel Coward, Clifford Odets, Arthur Miller, Susan Glaspell, Jean-Paul Sartre, Sean O'Casey, Lillian Hellman, Yukio Mishima, and J. M. Synge.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 4310 - Contemporary Drama

3 hours

Comparative survey of literary drama from 1960 to the present. Playwrights studied may include John Osborne, Edward Albee, Harold Pinter, Lorraine Hansberry, Caryl Churchill, Tom Stoppard, Yasmin Reza, August Wilson, Tomson Highway, Luis Valdez, Suzan-Lori Parks, Martin McDonagh, and Quira Allegría Hudes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 4400 - American Fiction**

3 hours

Reading and analysis of American novels and short stories by important authors such as Herman Melville, Henry James, Willa Cather, William Faulkner, Toni Morrison and Leslie Marmon Silko, among other possibilities.

Prerequisite(s): None.

#### ENGL 4410 - Chaucer

3 hours

The Canterbury Tales and other works as a picture of medieval life and illustration of various literary types; the language of Chaucer and its development into modern English.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 4420 - Poetry

3 hours

Methods of reading and analyzing poetry; techniques of explication. Includes poetry from a variety of cultures.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4430 - Shakespeare

3 hours

Representative comedies, histories and tragedies; survey of Shakespeare's life; his relation to his predecessors and contemporaries.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 4431 - Studies in Medieval Literature**

3 hours

In-depth study of Medieval literature, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ENGL 4432 - Studies in Renaissance Literature

3 hours

In-depth study of Renaissance literature, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4433 - Studies in Restoration and 18th Century British Literature

3 hours

In-depth study of literature from the Restoration period to the early 19th century, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4434 - Studies in Romantic Literature

3 hours

In-depth study of literature from the English Romantic period (early-to mid-19th-century British writers), from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4435 - Studies in Victorian Literature

3 hours

In-depth study of English-language texts written by Victorian writers (mid-to late-19th-century British writers) from a particular critical, historical, cultural, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 4440 - Milton

3 hours

Prose and poetry of Milton; political and religious thought of his day; his relation to his predecessors and his contemporaries and his legacy to later writers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4450 - Special Studies in a Single or Dual Author(s)

3 hours

In-depth study of the works of a major author or of two related authors

Prerequisite(s): Upper-division status.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 4470 - British Drama

3 hours

May be offered as a survey from the origins into the 20th century or as a study of any of the major periods in the survey: medieval, Renaissance, Restoration and modern.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### ENGL 4480 - American Drama

3 hours

Offered as a historical survey of American drama or as a study of major authors and schools. Authors may include O'Neill, Miller, Williams, Hansberry, Albee.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### ENGL 4500 - British Fiction

3 hours

Reading and analysis of British novels and short stories by Defoe, Austen, Fielding, Dickens, Lawrence, Burgess, Hardy and others.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4610 - Children's and Young Adult Literature

3 hours

In-depth study of children's and young adult literature and its roots in nineteenth century folklore and fairy tales. Course texts will be examined from a particular critical, cultural, historical or philosophical perspective. Readings may include the works of such authors as J. K. Rowling, Suzanne Collins, Rick Riordan, Philip Reeve, Mark Haddon, and others.

Prerequisite(s): None

### ENGL 4620 - Studies in Literature and Film

3 hours

Interdisciplinary exploration of the relationships between literature and film (or other closely related media). Possible areas of focus include adaptation/remediation studies, genre studies and narrative studies.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4630 - Studies in Literature and Medicine

3 hours

Interdisciplinary exploration of the relationships between literature and medicine in any historical period.

Prerequisite(s): None.

May be repeated for credit for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 4640 - Studies in Literature and Science

3 hours

Interdisciplinary exploration of the relationships between literature and science in any historical period.

Prerequisite(s): None.

May be repeated for credit for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### ENGL 4650 - Literature and the Environment

3 hours

Explores a variety of philosophical, aesthetic and cultural traditions of representing the natural world and its relation to human societies. In addition to literature, readings may extend into natural science, environmental philosophy, cultural criticism, and artistic theory.

Prerequisite(s): Upper-division standing.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4660 - Literature and the Holocaust

3 hours

Study of literary responses to the Holocaust. "Canonical" Holocaust authors such as Primo Levi, Eli Wiesel and Anne Frank are read alongside criticism, theory, graphic novels, film and the works of lesser-known authors. Topics of discussion include the relationship between Holocaust literature and film, language and trauma, literature and genocide, storytelling and history, art and ethics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### **ENGL 4665 - Studies in Science Fiction**

3 hours

In-depth study of science fiction, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 4670 - Gender and Sexuality in Literature

3 hours

Interdisciplinary exploration of how literary works represent the complex ways in which human beings experience gender and sexuality. Topics of study may include social or psychological conflicts involving gender and sexuality; changing definitions of masculinity and femininity; and the impact of economic, political, medical, and historical forces on the development of gender identity and sexual norms.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ENGL 4680 - Game Narratives as Literature

3 hours

A survey covering the implementation of and experimentation with narrative in video games, from the late 1960s to the present, with emphasis on psychological realism, the ethics implied in world-building, and game narrative as a form of literary experience.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ENGL 4700 - Instruction and Assessment in English Language Arts

3 hours

Study of English Language Arts curriculum, instruction, and assessment designed for students in the Language Arts teacher preparation program.

Prerequisite(s): Admission to College of Education Secondary Teacher Certification program.

Must be taken during the last term of course work before student teaching.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4800 - Special Seminar in Literature or Language

3 hours

Study of a major author, topic or genre in literature or language that extends the scope of traditional offerings. May be repeated for credit as topics vary. May be used to fulfill a requirement for the Jewish studies minor when taught as "The Bible as Literature."

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4831 - Studies in the Literature of the Eighteenth-Century Americas

3 hours

In-depth study of 18th-century literature from the British, French, and/or Spanish Americas, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4832 - Studies in 19th-Century American Literature

3 hours

In-depth study of 19th-century American literature, including fiction, poetry, and drama, from a particular critical, cultural, historical or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

#### ENGL 4841 - Studies in Modern Irish Literature

3 hours

An in-depth study of English-language texts written by modern Irish writers such as Samuel Beckett, Augusta Gregor, James Joyce, Bernard Shaw, W.B. Yeats, Oscar Wilde, and others.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4842 - Studies in British Modernism

3 hours

An in-depth study of British literary modernism as practiced by such writers as T.S. Eliot, James Joyce, Marianne Moore, Wallace Stevens, W.B. Yeats, Virginia Woolf and others. May also involve the study of such non-literary materials as painting, music, film and architecture.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **ENGL 4844 - Studies in American Modernism**

3 hours

An in-depth study of American literary modernism as practiced by such writers as Gertrude Stein, Ernest Hemingway, Zora Neale Hurston, William Carlos Williams, Eugene O'Neill and others. May also include the study of such non-literary materials as painting, music, film and architecture.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 4845 - Studies in Contemporary American Literature**

3 hours

In-depth study of contemporary American Literature (1945–Present), including fiction, poetry, and drama, from a particular critical, cultural, historical, or philosophical perspective.

Prerequisite(s): None.

May be repeated as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4850 - Literature in Context

3 hours

Study of a topic, period or genre in relation to social, historical, intellectual and/or religious context(s). Takes an interdisciplinary approach to literature.

Prerequisite(s): Junior or senior standing.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ENGL 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### ENGL 4920 - Internship in English

1\_3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 semester hours credit in English. Student must meet employer's requirements and have consent of the department chair

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **ENGL 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Ethnomusicology

## **MUET 2000 - Global Perspectives in Popular Music**

3 hours

Addresses popular music—broadly defined as music produced and consumed through mass media technologies—from different industries, genres and sites throughout the world. Students do not require any formal training or background in music to participate fully in this course.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUET 3020 - Popular Music in American Culture

3 hours

Historical development of popular musical styles, including Tin Pan Alley, Blues, Country and Western, Big Band Swing, 1950s Rock and Roll, Rhythm and Blues, Soul, the British Invasion, Art Rock, Punk, Reggae and Heavy Metal. These musical styles are explored as part of the sociocultural complex in which they developed.

Prerequisite(s): None.

For non-music majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUET 3030 - Music Cultures of the World

3 hours

Survey of music cultures of Africa, the Americas, Asia and Oceania. Music traditions are studied from a perspective that emphasizes music as an integral part of society and culture.

Prerequisite(s): None.

Open to students in any major.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUET 3040 - Ethnomusicology Studies Abroad

3 hours

Study and experience music cultures in their traditional settings. Field school locations include Africa, India and China. On-site visits to celebrations, ceremonies and rituals are combined with instruction by traditional musicians and guest lectures by cultural bearers. Musical traditions are studied from a perspective that emphasizes participant observation.

Prerequisite(s): None.

Taught with MUET 5040.

Open to majors from all fields of study. No formal musical training required. May be repeated for credit as topics/locations vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUET 3050 - Music of Africa

3 hours

Study of musical experience in African life. How music functions in everyday life, in ritual and ceremony. When music happens and for what reasons. The social and political horizons of musical events. How musical experience changes in contemporary life. These topics are explored in relation to African music, ranging from the complex vocal polyphony of the Mbuti Pygmies of the Itui Forest to the worldwide explosion of Afro Pop.

Prerequisite(s): None.

Taught with MUET 5050.

Open to majors of all fields. No formal musical training is needed.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUET 3060 - African-American Music

3 hours

Exploration of the experiences of blacks in the Americas vis-à-vis music. In particular, critical examination of the long trajectory of "black music" in the United States, making reference first to its West African antecedents. Consideration of ways that the term "black music" is deployed politically and its appropriateness as a descriptive and analytical category. Exploring the permeability of the sacred and secular in African-American cultural experiences, interrogating the musical, philosophical and behavioral links between a Saturday night crowd and a Sunday morning people.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUET 3070 - Studies in Asian Music

3 hours

Historical development and current issues in Asian music. Select music cultures are studied from an ethnomusicological perspective.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUET 3080 - Studies in Latin-American Music

3 hours

Study of the traditional and popular music of Latin America in its cultural context using theoretical approaches of ethnomusicology and related disciplines. Countries and topics may vary.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUET 3090 - Music of India

3 hours

Study of Indian music culture from Vedic times to the present day. Course materials cover classical traditions (both North Indian Hidusthani and South Indian Carnatic styles), folk and popular music. These genres are explored from the socio-cultural contexts in which they developed and continue to function.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUET 3617 - African Music and Movement**

1 hour (2.5;0)

Study of selected African drum music and development of related traditional movement skills through studio experience. Movements will be compared and contrasted with various African dance styles, while exploring their cultural basis, recreational and social uses, and artistic and educational values.

Prerequisite(s): None.

Same as DANC 3617.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUET 4500 - Introduction to Ethnomusicology

3 hours

General overview of the discipline of ethnomusicology, including major contributions to the field, history, methodology and practical applications. Case studies are used to illustrate specific theoretical problems encountered in ethnomusicological research.

Prerequisite(s): None.

## **MUET 4900 - Special Problems**

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): None.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# **Event Design and Experience Management**

## **EDEM 1600 - Introduction to Global Event Management**

3 hours

Introductory course which examines different types of events and the global economic impact of these events. Overview of the event management industries. Techniques and procedures required for producing successful and sustainable events.

Prerequisite(s): None.

## **EDEM 3240 - Convention and Event Management**

3 hours

Analysis of the factors to be considered in the successful management of corporate and association meetings, conferences, conventions and special events. Topics include special event planning, budgeting, marketing, arrangements, international considerations and ethics.

Prerequisite(s): None.

#### **EDEM 3500 - Event Catering Operations**

3 hours

Study of event catering, including operations, menu development, responsible alcohol service, sales, and relationships with other departments and outside vendors. Emphasis placed on logistical operations, seeking and servicing various market segments. A practical approach to understanding the role of catering operation in event management.

Prerequisite(s): None.

## EDEM 3510 - Entertainment and Experiences in Hospitality and Events

3 hours

This course provides an overview of the function, design and structure of entertainment and related experiences for the event and hospitality industries. Topics include structure of the live entertainment industry, the promotion of entertainment-based events, and overall analysis of the impact events have on a property and how entertainment projects fit within the event and hospitality industries. Students acquire transferable knowledge and skills for planning entertainment and design experiences for events and hospitality businesses.

Prerequisite(s): EDEM 1600.

### EDEM 4500 - Strategic Event Design

3 hours

Capstone course for the event design and experience management degree program. This course serves as a senior-level simulated learning project designed to provide students with an opportunity to integrate knowledge, concepts and capacities from different parts of their learning experiences.

Prerequisite(s): Senior standing or consent of instructor.

## **Finance**

## FINA 2770 - Personal Finance

(BUSI 1307)

3 hours

Financial planning, insurance, budgeting, credit, home ownership, savings, investment and tax problems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### FINA 3770 - Finance

3 hours

Overview of money and the banking system; interest and present value calculations; financial information; analysis and financial decision making; security markets.

Prerequisite(s): Completion of pre-business requirements, including ACCT 2010 and ACCT 2020 or equivalent with grades of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4200 - Investments

3 hours

First course for the individual investor. Idea of investment value; necessary prerequisites for an investment program; policies; economic and industry factors; introduction to security analysis and valuation; operation of security markets; security laws.

Prerequisite(s): FINA 3770 and ACCT 2010 and ACCT 2020 or equivalent with grades of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4210 - Introduction to Derivatives

3 hours

Introduction to the theory, valuation and analysis of derivatives. Fundamental concepts of options, forwards, futures, swaps and other derivative products.

Prerequisite(s): FINA 4200 with a grade of C or better or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4300 - Financial Statement Analysis and Liquidity Management

3 hours

Analysis and interpretation of financial statements. Analyzing issues related to corporate liquidity. Problems and solutions related to the management of short term assets and liabilities. Effective financial statement evaluation from the perspective of managers, investors and creditors. Proforma statement development for effective financial management.

Prerequisite(s): FINA 3770 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

#### FINA 4310 - Valuation and Financial Decisions

3 hours

Applies the concepts of risk, return and diversification to standard capital budgeting problems. Students are introduced to basic option valuation and to the use of options and futures contracts for hedging purposes. There is a discussion of the implications of market efficiency and agency problems on corporate decisions. Finally, corporate capital structure decisions are examined.

Prerequisite(s): FINA 3770 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4400 - Financial Markets and Institutions

3 hours

Studies in the operations, mechanics and structure of the U.S. financial system. Topics include commercial banking, non-bank financial institutions, money and capital markets, the impact of monetary policy on financial institutions and markets, and an introduction to the international financial system.

Prerequisite(s): FINA 3770 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4410 - Advanced Topics in Financial Institutions and Markets

3 hours

May include topics such as application of the theory of finance to the management of financial institutions, analysis of fixed income securities including valuation of embedded options, study of international financial markets, or other topics selected by the instructor.

Prerequisite(s): FINA 4400 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4500 - International Finance

3 hours

International and regional financial institutions and arrangements; balance of payments, theory, adjustments and impact on world trade; role of commercial and central banks in financing international flow; financing exports and imports; the instruments and markets of foreign exchange; determination of exchange rates.

Prerequisite(s): FINA 3770 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4610 - Comprehensive Financial Planning

3 hours

Designed to prepare students to assist individuals in their financial planning and strategy, including analysis of needs, insurance and investment programs, tax planning and shelters, trusts, tangibles, and retirement planning. Study includes readings and analysis of cases.

Prerequisite(s): FINA 4200 with grade of C or better.

### FINA 4650 - Special Topics in Finance

3 hours

Special topics as selected by instructor. May include cases and/or lecture format

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4800 - Internship

3 hours

Supervised work in a job relative to student's career objective.

Prerequisite(s): Student must meet the employer's requirements and have consent of the department chair.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## FINA 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### FINA 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **French**

## FREN 1010 - Elementary French

(FREN 1411)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 1020 - Elementary French

(FREN 1412)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice

Prerequisite(s): FREN 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 2040 - Intermediate French

(FREN 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): FREN 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### FREN 2050 - Intermediate French

(FREN 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): FREN 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 2900 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### FREN 3040 - France Today

3 hours

Selected readings and video sequences in contemporary French culture with emphasis on communication skills.

Prerequisite(s): FREN 2050 or equivalent.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 3045 - Topics in the Francophone World

3 hours

Specialized topics may include, through readings and films, a general exploration of the diverse histories, cultures, and societies of the French-speaking world OR a focus on a French-speaking country or region. May be repeated as topics vary for a maximum of six hours.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## FREN 3050 - Advanced Readings in French

3 hour

Selected readings from French literature and other types of texts such as advertisements and film, with emphasis on conversational and written practice.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## FREN 3055 - Image of the Artist in France Throughout the Ages

3 hours

Analysis of the development of the image of the artist in France from medieval to modern times.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### FREN 3060 - French Phonetics and Pronunciation

3 hours

Focus on French phonetic system and pronunciation practice.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## FREN 3065 - Advanced French Conversation

3 hours

Study of themes related to contemporary French experience and heavily oriented toward conversation on topics of interest to contemporary youth.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## FREN 3070 - Advanced French Grammar and Composition

3 hours

Focus on French grammar and intensive practice through various composition assignments and grammar exercises.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## FREN 3075 - Writing in French: Style and Technique

3 hours

Perfection of writing skills and strategies through various forms of composition.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### FREN 3090 - Professional French

3 hours

French terminology and behavioral patterns related to the workplace in order to communicate in a French professional environment including employment practices and formalities for daily life. Can serve as preparation for students planning to spend a semester/year in a French-speaking country, or for relocating professionals.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### FREN 3095 - French for Science and Technology

3 hours

Study of French discourse and vocabulary used in the fields of science and technology.

Prerequisite(s): FREN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### FREN 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### FREN 4060 - Studies in French Literature

3 hours

French literature from any period from the Middle Ages to the present. Interdisciplinary studies of literature through art and film.

Prerequisite(s): 6 hours of advanced French or consent of department.

May be repeated for credit as topics vary.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

Academic (Ar) per nour. \$11.01

## FREN 4065 - French Culture Through French Cinema

3 hours

Explores specific aspects of French society and culture and the discourse of humor as depicted in recent French movies. Focuses specifically on two major themes: multiculturalism and racism, and family relations as seen through the prism of humor in French movies.

Prerequisite(s): 6 credit hours at advanced level or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4070 - French Culture and Literature through Film

3 hours

The thematic and chronological study of French literature and culture through films. Relations between literature/culture and film are explored.

Prerequisite(s): 6 hours of advanced French or consent of department.

#### FREN 4080 - Business French

3 hours

Students become familiar with business terminology in French. They also learn to function in a French business environment, including writing business letters, conducting telephone conversations and business meetings.

Prerequisite(s): 6 hours of advanced French, including FREN 3070 as prerequisite or corequisite.

This course serves as preparation for the exam leading to the Diplôme de Français Professionnel of the Paris Chamber of Commerce and Industry. No previous background in business is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### FREN 4085 - French Media and Current Events

3 hours

The role of traditional and digital media and the coverage of current events in France.

Prerequisite(s): 6 hours of advanced French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### FREN 4090 - French for Tourism

3 hours

Major facets of tourism in France and French overseas territories: overview of French regions with their characteristics, landmarks for visits and excursions, transportation, types of accommodation available to tourists and cuisine. The tourism industry and the organization of guided tours.

Prerequisite(s): 6 hours of advanced French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4150 - Foreign Language Instruction and Assessment

3 hours

Study of foreign language curriculum, instruction and assessment for future and current teachers of French.

Prerequisite(s): 6 hours of advanced French or consent of department.

Same as GERM 4150 and SPAN 4150

Designed for students in a teacher preparation program. May not be counted toward a minor in French.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4310 - Contemporary French Civilization

3 hours

A survey of contemporary French society including institutions, the value system and current issues. Readings, discussions and audiovisual materials.

Prerequisite(s): 6 hours of advanced French or consent of department.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4400 - French Linguistics and Translation

3 hours

Study of French grammar, semantics, stylistics and syntax through linguistic problem solving and translation from English to French and vice versa.

Prerequisite(s): 6 hours of advanced French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### FREN 4410 - French Sociolinguistics

3 hours

Exploration and analysis of language variation in French and social dimensions of French language use.

Prerequisite(s): 6 hours of advanced French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 4420 - Language and Culture in North Africa

3 hours

Study of linguistic and cultural products and practices in North Africa with an emphasis on French influences in the region.

Prerequisite(s): 6 advanced hours of French or consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 4430 - French Social Media

3 hours

Analysis and exploration of communication and discourse in Frenchlanguage social media.

Prerequisite(s): 6 hours of advanced French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4440 - Language and Culture in Canada

3 hours

Study of linguistic and cultural products and practices in Canada with an emphasis on French influences throughout the country.

Prerequisite(s): 6 advanced hours of French or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 4900 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## FREN 4910 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### FREN 4920 - Cooperative Education in French

1-3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 12 hours of credit in French; student must meet the employer's requirements and have consent of the department chair.

May be repeated for credit.

## FREN 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **General Music**

## MUGC 4000 - The Business of Music

3 hours (2;1)

Survey of the contemporary business of music, focusing on economic realities unique to the music industry and on available career options in music.

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUGC 4890 - Studies in Music

-3 hours

Organized classes specifically designed to accommodate the needs of students and demands of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUGC 4900 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): None.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUGC 4910 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): None.

May be offered when other required courses are unavailable. Not open to graduate students.

## Geography

## GEOG 1000 - National Parks: America's Best Idea

3 hours

Explores the history, processes, and values involved in developing national parks as places worth preserving for the American public.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GEOG 1200 - Global Societies**

(GEOG 1303)

3 hours

Explores the changing world by understanding how the far and near are connected by globalization, why markets rise and fall, why income gaps and international poverty persists, how terror and conflicts are produced, and how cultures are re-invented.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 1500 - Geospatial Technology and Urban Environments

3 hours

Introduces students to the field of geography by examining geographical dimensions of environmental, social and economic issues in the DFW Metroplex. Blends traditional lectures with interactive web-based learning exercises using Geographic Information Systems (GIS) software to analyze a variety of datasets.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 1710 - Earth Science

(GEOL 1401)

3 hours (3;2)

Principles and processes of physical geography. Introduction to mapping, weather and climate, soil and vegetation, and landforms of rivers, coasts and deserts.

Prerequisite(s): None.

Core Category: Life and Physical Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01; Lab (LF): \$2

## GEOG 2110 - Foundations of Geographic Research

3 hours

Introduction to research for entry-level geography majors. Journal articles are examined in detail with reference to exploring research design and implementation. Students also develop an area of research interest, choose a specific topic, and formulate research questions from which hypotheses are developed. Culminates in the development of a research plan and prospectus for a topical research question.

Prerequisite(s): Geography major status.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 2170 - Culture, Environment and Society

(GEOG 1302)

3 hours

Exploration of the dynamic relations between culture and environment addressing ethnic diversity and conflict, development and underdevelopment, settlement patterns, movement of commodities and people (including refugees), and environmental degradation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 2180 - Geosystems, Environment and Society

3 hours

Examines the physical and human dynamics associated with topics such as earthquakes, landslides, volcanoes, coastal processes, streams and flooding, soils, ground water, mineral extraction/processing, air pollution, energy production, water resources, and waste disposal. Explores contemporary environmental issues and events, including some of the key environmental issues in North Texas.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 2900 - Special Problems**

1-3 hours

Individual readings and laboratory research projects in geology, earth and regional sciences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3000 - Geo-literacy: Thinking in Space

3 hours

Examines core geographic concepts and their applications across disciplines as part of a multidisciplinary approach to solving big-picture problems. Cannot apply to the Geography major.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3010 - Economic Geography

3 hours

Examines the inter-connected and inter-dependent world economy. Focuses on world-systems, production, distribution, finance, labor, economic policies and economic change, and their socio-cultural implications. Fosters critical thinking along with social and environmental responsibility.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 3050 - Introduction to Cartography**

3 hours (1;2)

Technical aspects of cartography. Topics include: map projections, geodetic datums and coordinate systems, scale, elevation, topographic maps, thematic mapping, introduction to total station surveying, GPS surveying and GIS.

Prerequisite(s): None.

## GEOG 3100 - United States and Canada: Economies, Cities and Sustainability

3 hours

Analysis of the economic and urban environments that have developed in the United States and Canada. Examination of the cross-border relationships that tie the two countries, with a focus on the resource and population issues that relate to sustainable development.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 3120 - Medical Geography

3 hours

Focuses on the geographic aspects of disease ecology, health care delivery, and environment and health. Including the spatial pattern of diseases and associated explanatory variables including geological, meteorological, biological and cultural phenomena, as well as the social, political and economic barriers to healthy living.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3200 - Sustainability

3 hours

Introduction to sustainability concepts and practices. Includes topics on energy, water, waste, and transportation. Students conduct campus-based research projects on an area of sustainability.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3420 - Applied Biogeography

3 hours

Survey of biogeographic principles and their application to wildlife and ecosystem conservation and management practices.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 3500 - Introduction to Geographic Information Systems

3 hours (1;0;2\*)

Introduces the concepts and applications of computer-based spatial data handling, known as geographic information systems (GIS) technology. Illustrates the essential methods of GIS and its applications in fields including geography, business, administration, planning and environmental science. Students gain application skills via a series of practical exercises illustrating problem-solving strategies using up-to-date GIS software packages.

Prerequisite(s): None.

\*These hours are combined lab and lecture.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 3600 - Political Geography**

3 hours

Examines how political processes, space, and power are interconnected. Specific topics include nations and nationalism, identity politics, borders, colonialism, core-periphery relations, electoral geography, globalization, and war and violence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3750 - Geography of Contemporary Sub-Saharan Africa

3 hours

Deals with the problems and prospects of development in Sub-Saharan Africa; examines the opportunities, constraints and dilemmas of Sub-Saharan Africa's physical and cultural landscape, contemporary problems and the challenge and prospect of development and globalization.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3760 - Geography of China: Environment and Society

3 hours

Introduces students to the history, culture, physical environments, and diverse populations of China to better understand current and future affairs. Evaluate recent developments in China from a geographical perspective.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 3770 - Latin America: Geography and Globalization

3 hours

Extensive analysis of the geography, history, environment, economics, culture and development of Latin America. Critical investigation of the commodification of key natural resources in the region, with linkage to resource issues encountered in other major world regions. Provides a general introduction to the environments and people of Latin America.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 3800 - Weather and Climate**

3 hours

Explores atmospheric environment emphasizing the understanding and application of meteorological principles. Topics may include the composition, origin, and structure of the atmosphere, air mass, middle latitude cyclones, weather prediction, thunderstorms, tornadoes, hurricanes, global climate, climate change, and air pollution.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 3996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4030 - British Isles Field School

6 hours

Application of geographical field techniques in the British Isles and Ireland. The field school is centered on five base sites – Plymouth, Cork, Galway, Aberystwyth and Edinburgh. At each site, students conduct one-day human and physical geography field exercises. Topics include mapping historic changes in commercial functions in Plymouth; combining field mapping, air photo and map analysis to measure coastal erosion in Cork; field survey of rural service provision in Tipperary County; physical and human dimensions of

flood hazard in Aberystwyth; comparison of medieval, Georgian and modernist town planning in Edinburgh. Duration of field work is approximately three weeks.

Prerequisite(s): GEOG 2170 and GEOG 2180, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4060 - Applied GIS: MapInfo Professional®

3 hours (1;2)

Introduction to conceptual and practical aspects of geographic information systems. Emphasis on applications, using sociodemographic and business examples. Topics include: importing and mapping census data, creating and editing map attribute databases, geocoding, buffering, aggregating data, thematic maps and applications.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4115 - Our Energy Futures

3 hours

Development of high-energy society; renewable and nonrenewable energy resources; physical and social economies of energy use; geography of energy; energy problems and decisions; dependence of other resources on energy; alternative energy futures.

Prerequisite(s): GEOG 2170

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4170 - Field Methods and Mapping

3 hours

Identification, collection, mapping, and recording of human and environmental data in the field. Involves both classroom and multiple outdoor exercises.

Prerequisite(s): Upper-division standing, consent of instructor if not a geography major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4185 - Statistical Research Methods in Geography

3 hours

Application of statistical techniques and mathematical models to spatial analysis, including both point and areal patterns. Examples drawn from both earth and regional science.

Prerequisite(s): MATH 1680 and GEOG 2110, or consent of department.

Meets with GEOG 5185.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4195 - Geospatial Data Analytics and Visualization

3 hours

Data structures needed to enable data analytics. Exploratory data analysis (EDA) and exploratory spatial data analysis (ESDA) to analyze complex, unstructured datasets. Transform data into information using geospatial and other data visualization tools.

Prerequisite(s): GEOG 2110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4210 - Urban Geography

3 hours

Examines urban processes, urban landscapes, and urban transformations. Specific topics include structure of cities, gentrification, suburbia, ghettoization, displacement, race, class, and ethnic dispossession, globalization of cities, urban riots, slums and homelessness, and social justice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4220 - Applied Retail Geography

3 hours

Survey of the geographic principles and techniques used in the analysis of retail markets and locations. Examines the key characteristics of modern urban markets and commercial economies, and how geography makes a contribution to effective planning for retail firms.

Prerequisite(s): Junior standing or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4230 - Location Intelligence: Business GIS Concepts and Applications

3 hours

Survey of the geographic concepts and applications that support business decision-making. Examines the context for application of geographic methodologies and explores the analytical techniques that relate to the needs of businesses operating across the global economy.

Prerequisite(s): Junior standing or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4240 - Meteorology

3 hours

Weather elements and controls; air masses and upper air wind flow; emphasis on atmospheric storm systems.

Prerequisite(s): GEOG 2180 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4245 - Geography of International Development

3 hours

Examines theories and histories of development across different geographic contexts from global to local. Explores global policy regimes produced by organizations such as the World Bank, IMF, and WTO and their local impacts.

Prerequisite(s): Junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 4250 - Climatology

3 hours

Description and analysis of world climates; major classifications, controls, regional distribution and change.

Prerequisite(s): GEOG 2180 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4350 - Geomorphology

3 hours

Processes of landform analysis. Glacial, desert, fluvial and other settings are reviewed along with basic processes of construction, erosion and weathering.

Prerequisite(s): GEOG 1710, GEOG 2180, or consent of department.

#### **GEOG 4400 - Introduction to Remote Sensing**

3 hours (2;1)

Principles of remote sensing technology, including the physical principles of remote sensing, aerial photography, airborne and space-borne multispectral and hyperspectral imaging, and thermal and microwave imaging. Analytical techniques and applications of remotely sensed data in geography and other fields. Teaches skills for handling both analog and digital remote sensing data through visual interpretation and computer-based digital image processing.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 4410 - Location-Allocation Modeling**

3 hours

Introduction to location-allocation models for service delivery. Covering, p-median, p-center and hierarchical models and their applications; data accuracy, aggregation and distance problems in location-allocation modeling.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4420 - Capitalism, Nature and Climate Change

3 hours

Examines political-economy of human and natural resources and their implications for our environment and global climate change. Focuses on human population and its implications for our environmental, food and energy needs. Examines debates on sustainability across geographical scales. Fosters critical thinking and environmental responsibility.

Prerequisite(s): Junior or Senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 4525 - Using LiDAR Data in GIS

3 hours

Provides an overview of light detection and ranging (LiDAR) principles and data processing methods. Develops skills to effectively use LiDAR data in a geographic information system environment with applications in natural and built environments.

Prerequisite(s): GEOG 3500.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4530 - Digital Image Analysis

3 hours

Approaches to digital image analysis and processing. Includes topics on photo interpretation, information extraction from remotely sensed imagery for use in a variety of disciplines, including environmental and ecological science.

Prerequisite(s): GEOG 3500 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4540 - Introduction to Enterprise GIS Applications

3 hours

Explore cloud computing technologies, how they are used to host, manage, transform, and visualize geospatial data. Implement open-source and commercial software GIS solutions including spatial databases, geographic data mediators, and dash-boards.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 4550 - Advanced Geographic Information Systems

3 hours (1:0:2\*)

Advanced spatial analysis through the use of specialized software and the design and development of spatial databases and applications. The course includes GIS data models, project planning, raster-based data manipulation and analysis, three-dimensional (3D) analysis, network analysis, and other advanced topics in spatial analysis. Students gain advanced application skills through practical exercises and implementation of a GIS project in an area pertinent to the student's interests.

Prerequisite(s): GEOG 3500 (with a grade of C or better) or consent of department.

\*These hours are combined lab and lecture.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 4560 - Introduction to Python Programming**

3 hours (1;0;2\*)

Automation is an important component of data processing, analysis, and visualization. Python is a powerful, general purpose programming language that is used for automation, scientific analysis, and other data management and visualization tasks. Examines the basics of writing computer programs in Python, input and output operations, logic and data structures, object-oriented programming, and data visualization using graphing libraries.

Prerequisite(s): None.

\*These hours are combined lab and lecture.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4570 - Special Topics in GIS

3 hours (2;1)

Current topics and techniques in geographic information systems to complement core course work. Examples include multiuser geospatial data management, web-based map delivery, GIS programming, spatial statistics, applications for specific careers fields and other topics. Course content reflects recent trends in GIS research and the job market. Topics vary by semester.

Prerequisite(s): GEOG 3500 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOG 4580 - GIS in Health

3 hours

Spatial analysis, geographic information system (GIS) and computational methods for public health applications including disease mapping, disease clustering and exposure modeling. Location-allocation methods for measuring access to health care services also are discussed.

Prerequisite(s): GEOG 2110 and GEOG 4185, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4590 - Advanced GIS Programming

3 hours

Methods of creating new applications and improving productivity in GIS through computer programming, culminating in a programming project. Topics include accessing maps and data layers, querying and selecting features, updating databases, and accessing raster and TIN/Terrain layers.

Prerequisite(s): GEOG 4560 or consent of department.

## GEOG 4680 - GIS Applications for Spatial Epidemiology and Disease Ecology

3 hours

Focuses on the basic principles and methods used in epidemiology, geographical sampling and population study designs, and spatial analysis and statistical methodologies applied within an epidemiological context. Computer lab sessions will make use of relevant computer software including SPSS and other GIS packages.

Prerequisite(s): GEOG 4580.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4710 - Ecosystems: Structure, Function and Services

3 hours

Examines interactions between organisms and the physical environment as an integrated system and the factors that regulate the quantity and flow of materials and energy through ecosystems. Covers the history and use of the ecosystem concept, factors governing the distribution and structure of ecosystems, relationships between ecosystem structure and function, and the influence of natural and human processes on ecosystem dynamics. Discusses current topics and methods in ecosystem science.

Prerequisite(s): GEOG 2180 or BIOL 2140 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4750 - Surface Water Hydrology

3 hours

Study of hydrological processes with emphasis on the hydrological cycle; soil moisture and infiltration; watersheds and drainage systems; flow mechanics, sediment transportation and deposition; and river response to climatic change and other impacts of human activity.

Prerequisite(s): GEOG 2110, GEOG 2180 and MATH 1680, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4800 - Geography Capstone

3 hours

Capstone course required of all geography majors. Requires comprehensive research paper. Problem solving by application of geographic concepts, methodologies and techniques. Examples drawn from physical and human geography.

Prerequisite(s): GEOG 2110 and MATH 1680, plus 9 advanced hours in geography, and junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 4875 - Earth Science Topics**

3 hours

Topics emphasize human interaction with the physical environment, such as resource extraction, environmental degradation, climate change and earth-related hazards.

Prerequisite(s): GEOG 2180 or consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GEOG 4885 - Human Geography Topics**

3 hours

Topics emphasize geographical patterns of human activity, including land use and resource consumption, economic development, globalization, social conflict and environmental policy.

Prerequisite(s): GEOG 2170 or consent of department.

May be repeated for credit as topics vary up to a maximum of 12 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **GEOG 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### GEOG 4920 - Cooperative Education in Geography

3 hours

Job experience in a government agency and/or business for geography majors. Requires participation in a formal project.

Prerequisite(s): A minimum of 12 hours completed in the major, a 2.5 GPA in the major and consent of the internship director.

May apply toward Group A, Group B or Techniques group at discretion of advisor. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GEOG 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOG 4960 - Geography Institute

3 hours

For students accepted by the university as participants in special institute courses.

Prerequisite(s): None.

May be repeated for credit as topics vary.

## Geology

## **GEOL 1610 - Introduction to Geology**

(GEOL 1403)

3 hours (3;2)

Systematic exploration of your home planet, including processes that have shaped it over geologic time and continue today. Topics include plate tectonics, mountain building, and rock cycles; origins and distribution of energy, mineral and soil resources; geologic hazards including earthquakes, volcanoes, floods and coastal storms.

Prerequisite(s): None.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01; Lab (LF): \$2

## **GEOL 3000 - Geology of Texas**

3 hours

Rocks, minerals, fossils and geologic history of Texas; the state's stratigraphic sequence, structural geology and mineral resources; field trips.

Prerequisite(s): GEOL 1610, GEOG 1710 or GEOG 2180.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GEOL 3010 - Environmental Geology**

3 hours

Environmental geology is applied geology and focuses on applying geologic information to solve conflicts in land use, to minimize environmental degradation, and to maximize the beneficial results of using natural and modified environments. The application of geology to these problems includes the study of the following five subjects: 1) earth materials; 2) natural hazards; 3) land for site selection, land-use planning; 4) hydrologic processes; and 5) geologic processes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOL 3020 - Historical Geology

3 hours

Topics to include stratigraphy, sedimentology, plant and animal fossils, geologic time, continental drift, tectonics, former seas and past environments. Emphasis on geologic history of North America. Field trips.

Prerequisite(s): GEOL 1610, GEOG 1710, GEOG 2180, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOL 3030 - Earthquakes and Volcanoes

3 hours

Use scientific methods and models to understand the causes of earthquakes and volcanoes, their effects on communities, and our best practices for mitigating these hazards. Evaluate the scientific, economic, and ethical viewpoints that inform personal and societal preparedness, response, and mitigation using examples from recent and historic earthquakes and volcanic eruptions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## GEOL 4630 - Soils Geomorphology

4 hours (3;2)

Methods and applications of soils and landform analysis. Soils classification, formation processes and relationships to landforms and vegetation are stressed. Methods of soils description, mapping and physical-chemical analysis are taught, and applications to study of landscape change and land-use planning are emphasized.

Prerequisite(s): GEOL 1610, GEOG 1710 or GEOG 2180, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### GEOL 4850 - Introduction to Groundwater Hydrology

3 hours

Topics to include principles of groundwater flow; aquifer properties and characteristics; geology of groundwater occurrence; groundwater development and methods for assessing and remediating groundwater contamination. Emphasis on application of basic principles.

Prerequisite(s): GEOG 2110, GEOG 2180 and MATH 1680, or consent of department.

#### German

## **GERM 1010 - Elementary German**

(GERM 1411)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **GERM 1020 - Elementary German**

(GERM 1412)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): GERM 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GERM 2040 - Intermediate German**

(GERM 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): GERM 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

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GERM 2050 - Intermediate German

(GERM 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): GERM 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 2900 - Special Problems**

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be used once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GERM 3020 - Topics in German Studies**

3 hours

Continued general studies with varying emphasis on readings, conversation, aural and written practice.

Prerequisite(s): GERM 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GERM 3022 - Professional German**

3 hours

Expands and deepens students' cultural competency and communication skills by focusing on topics related to German business practices, the role of Germany in the European Union, science and technology, and the various professions associated with these subjects. All readings, course assignments, and discussions are conducted in the target language.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 3032 - German Phonetics**

3 hours

German phonetic system and pronunciation practice.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 3034 - Advanced German Grammar**

3 hours

German grammar and intensive practice through various grammar exercises.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 3040 - Topics in German Culture**

3 hours

Readings in Austrian, German and Swiss culture with emphasis on conversational practice.

Prerequisite(s): GERM 2050 or equivalent.

May be repeated for credit as topics vary.

Core Category: Language, Philosophy and Culture

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 3042 - German History**

3 hours

Selected readings and video sequences on the history of Germany with emphasis on communication skills.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 3044 - Contemporary Germany**

3 hours

Selected readings and films on history and culture of Germany since 1945

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### GERM 3045 - The Berlin Wall

3 hours

An in-depth analysis of the Berlin Wall and its legacy.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## GERM 3048 - Cultural History of Berlin

3 hours

Selected readings and video sequences on the history and culture of Berlin with emphasis on communication skills.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 3050 - Topics in German Literature**

3 hours

Readings in contemporary German-language literature with emphasis on conversational practice.

Prerequisite(s): GERM 2050 or equivalent.

May be repeated for credit as topics vary.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## GERM 3052 - German Literary Survey 1750-1918

3 hours

Survey of the literary canon from the German-speaking countries between 1750-1918 in the context of German history and culture.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 3054 - German Short Stories**

3 hours

Introduction to short stories from the German-speaking countries and their respective authors. Analysis of the literary texts includes the discussion of thematically related topics of German, Austrian and Swiss culture.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### GERM 3056 - German Novella

3 hours

An overview of major German literary movements and authors from the nineteenth and early twentieth centuries.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### GERM 3060 - Advanced German I (Oral Communication)

3 hours

Intensive practice in spoken German through an exploration of civilization topics.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## GERM 3070 - Advanced German II (Written Communication)

3 hours

Intensive practice in written German through an exploration of civilization topics.

Prerequisite(s): GERM 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 3996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4150 - Foreign Language Instruction and Assessment**

3 hours

Study of foreign language curriculum, instruction and assessment for future and current teachers of German.

Prerequisite(s): 6 hours of advanced German or consent of department.

Same as FREN 4150 and SPAN 4150.

Designed for students in a teacher preparation program. May not be counted toward a minor in German.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GERM 4310 - Topics in Advanced German Culture**

3 hours

Topics include German-language literature, music, art, literature as film, philosophy and historical developments.

Prerequisite(s): 3 hours of advanced German, or GERM 2050 or equivalent and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4312 - The Weimar Republic**

3 hours

Overview of the cultural life and artistic output during the Weimar Republic, the German state between 1918-1933. Taught entirely in German

Prerequisite(s): 3 hours of advanced German or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

GERM 4314 - The Third Reich

2 hours

Overview of the history and culture of the Third Reich (1933-1945) and the German postwar period until the foundation of the Federal Republic of Germany and the German Democratic Republic in 1949. Taught entirely in German.

Prerequisite(s): 3 hours of advanced German or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4320 - Topics in German Cinema**

3 hours

Topics include study of a period, movement, theme, genre or director.

Prerequisite(s): 3 hours of advanced German, or GERM 2050 or equivalent and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4330 - Topics in Advanced German Language**

3 hours

Topics include German grammar, syntax, language history, dialects and linguistics.

Prerequisite(s): GERM 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 4332 - Introduction to German Linguistics**

3 hours

Structure and variation of German through linguistic problemsolving.

Prerequisite(s): German 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4338 - German Translation**

3 hours

Basic techniques for translating texts from German to English, including literary texts, scientific texts, and journalistic texts.

Prerequisite(s): 3 hours of advanced German.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### **GERM 4350 - Topics in Advanced German Literature**

3 hours

Topics include study of a period, movement, theme, genre or author.

Prerequisite(s): 3 hours of advanced German, or GERM 2050 or equivalent and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### **GERM 4352 - German Travel Literature**

3 hours

Overview of canonical travel texts written by German-speaking authors between the late eighteenth and early twentieth century.

Prerequisite(s): 3 hours of advanced German or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **GERM 4354 - German Disaster Narratives**

3 hours

In-depth analysis of disaster scenarios portrayed in German literary texts, images, and films from the nineteenth century to the present.

Prerequisite(s): 3 hours of advanced German or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4900 - Special Problems**

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4910 - Special Problems**

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **GERM 4920 - Cooperative Education in German**

1–6 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): 3 advanced credit hours in German and declared major; student must meet the employer's requirements and have consent of the department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **GERM 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Health Promotion**

## **HLTH 1100 - School and Community Health Problems and Services**

(TECA 1318)

3 hours

Introduction to the field of health education and various health services offered by the school and community. Health problems and strategies to improve community health are explored.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 1570 - Environmental Health and Safety**

3 hours

Introduces students to environmental health issues, including specific health problems associated with environmental health.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **HLTH 1900 - Principles of Health**

(PHED 1304)

3 hours

Introduces principles of health promotion and effective strategies used with individuals and communities. In addition, provides an overview of behavior modification, communications, epidemiology, mental health, program planning, and program evaluation as it relates to the promotion of one's health. Students are introduced to the skills and knowledge required to become a successful professional in health promotion.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### **HLTH 2000 - Introduction to Public Health**

3 hours

Introduces principles and analytical tools utilized in improving the nation's health at-large, including social, environmental and medical care issues

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **HLTH 2100 - Mental Health**

3 hours

Introduces principles and strategies used to promote positive mental health to individuals and communities. Students develop an understanding of the importance of positive mental health to overall well-being.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 2150 - Health and Personal Safety**

3 hours

Health Promotion elective (all tracks). This course is a study of personal awareness, strategies for prevention and protection, and defense tactics. The topics will include identity theft, home and travel security, financial security, health care, insurance, and self-defense. This course will require some physical activity.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 2200 - Family Life and Human Sexuality**

3 hours

Emphasizes issues related to sexual health from historical, physiological, psychological, social and cross-cultural perspectives. Incorporates a multicultural, multiethnic perspective on human sexuality, reflecting the diversity of sexual experiences in our society and world.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **HLTH 2400 - Introduction to Global Health**

3 hours

Develop problem-solving skills utilized in improving the health of nations globally, including social, economic, medical and environmental considerations that affect the health of global populations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **HLTH 2900 - Special Problems**

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 2910 - Special Problems**

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### HLTH 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HLTH 3100 - Epidemiology of Communicable and Non-Communicable Disease

3 hours

Study of the nature, prevention, control and treatment of human disease; principles related to the causes of disease and the role of the health professional in practical application. Content emphasizes factors that contribute to population-based health disparities and the epidemiological practices associated with infectious disease investigation, prevention, treatment, and control as they relate to the role of health professionals.

Prerequisite(s): None.

## HLTH 3110 - Health Promotion: Development and Application of Presentation Skills

3 hours

Introduction to communication theories, methods of behavior change (behavior and social science theories), marketing/social marketing models, mass communication theories and persuasive presentation concepts. Case studies, resources, research tools and examples of different media channels are reviewed and analyzed to explore how to reach different target audiences with the most effective health communication strategy required.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 3120 - Drugs and Human Health**

3 hours

Discusses the pharmacological implications of drug use in human health. The nature of drug actions, motivational factors that influence the use of drugs, and societal responses to drug use and treatment are explored. Suitable for teachers and counselors.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 3130 - Health Promotion Skills and Competencies**

3 hours

Explores foundational content and skills development related to roles and responsibilities of the health educator. Content is relevant to the Certified Health Education Specialist (CHES) exam.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 3300 - Health Emergencies and First Aid**

3 hours

Theory and practical application of the American National Red Cross Standard First Aid and Personal Safety skills. Cardiopulmonary resuscitation (CPR) techniques and skill development. Designed to meet the requirements set by the American National Red Cross for certification in Standard First Aid and CPR.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 4251 - Consumer Health Advocacy**

3 hours

Examines an analysis and appraisal of issues related to the production and distribution of products and services as they affect consumer health. The role of the health educator as a consumer advocate is explored.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### HLTH 4300 - Health Promotion in the Corporate Setting

3 hours

Presents the importance of promoting health in a corporate setting. Students are introduced to planning and implementing a comprehensive health promotion program in a corporate setting.

Prerequisite(s): None.

Meets with RESM 3050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **HLTH 4350 - Environmental Community Health**

3 hours

Examines the nature and complexity of environmental health issues including specific health problems associated with environmental health.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HLTH 4430 - Planning, Administration and Evaluation of Health Programs

3 hours

Exploration of needs assessment and program planning, and the implementation and evaluation of health programs in various settings.

Prerequisite(s): HLTH 3130 or consent of instructor.

Meets with RESM 4160.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### HLTH 4500 - Leadership and Professional Proficiency in Health Promotion

3 hours

Prepares students for the transformation into health promotion professionals. Explores leadership and management theories and their application to diverse professional settings.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HLTH 4600 - Behavioral Change Strategies in Health Promotion

3 hours

Integrates social, behavioral, and psychological content and theory for the purpose of effecting positive behavior change in individuals. Focuses on the development of interpersonal skills in dealing with health behaviors throughout the lifespan.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **HLTH 4810 - Studies in Health Promotion**

1-3 hours

Organized classes for program needs.

Prerequisite(s): Consent of the health promotion program.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HLTH 4850 - Internship in Community Health Promotion

6 hours (1;internship)

Performance of a limited work or service project in a public health setting for a minimum of 320 supervised hours; identification and fulfillment of planned learning objectives; self-monitoring and regular seminars on learning accomplishment.

Prerequisite(s): HLTH 3110. Students must meet with internship coordinator at least one term/semester prior to registration for this course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### **HLTH 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

## **HLTH 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **HLTH 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **Higher Education**

## EDHE 3120 - Student Leadership Development in Higher Education

3 hours

Developing campus student leaders through learning of leadership role, skills, theories and techniques.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDHE 4800 - Studies in Higher Education

1-3 hours

Organized classes for specific program needs and student interest.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDHE 4900 - Special Problems

1-3 hours

Individual instruction to cover course content in special circumstances.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **History**

## HIST 1050 - World History to the Sixteenth Century

(HIST 2321)

3 hours

From the origins of civilization to the 16th century.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 1060 - World History from the Sixteenth Century

(HIST 2322)

3 hours

World civilization from 1500 to the present.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2610 - United States History to 1865

(HIST 1301)

3 hours

From colonial origins through the Civil War.

Prerequisite(s): None.

Core Category: American History

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2620 - United States History Since 1865

(HIST 1302)

3 hours

From the Civil War to the present.

Prerequisite(s): None.

Core Category: American History

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2675 - Honors United States History to 1865

3 hours

From colonial origins through the Civil War.

Prerequisite(s): Acceptance into the Honors College.

Core Category: American History

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2685 - Honors United States History Since 1865

3 hours

From the Civil War to the present.

Prerequisite(s): Acceptance into the Honors College.

Core Category: American History

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department chair.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department chair.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 3150 - Historical and Cultural Development of the Mexican-American Community

3 hours

Historical evolution of Mexican-American culture, social structure, family patterns and community organizations, and their effects on education, economic and religious institutions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### HIST 3450 - Islam and its Empires

3 hours

Dynamic social, political, religious, economic and cultural histories of the Islamic empires, beginning with pre-Islamic Arabia (4th–7th centuries) and ending with the height of Ottoman imperial authority (16th century). The emergence of Islam in Arabia and the world of Muhammad, its founder; the expansion of the Arab and non-Arab Islamic empires.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### HIST 3460 - Modern Middle Eastern History

3 hours

Historical foundations of contemporary ideologies, conflicts and cultures in the modern Middle East. Explores the role of imperialism in shaping the modern Middle East; explores the impact of religion and political ideologies on contemporary conflicts over space and resources; and examines how popular culture can influence political and social events through modern history.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 3762 - Rome: The Biography of a City

3 hours

Intensive study trip based in Rome, with excursions to other sites (e.g. Florence, Orvieto or Naples/Pompeii): overview of the history and culture of the city of Rome, from antiquity to the present, via personal encounters with the monuments, art and topography of the city. Exploration of the archaeology, history and art from the perspective of a single historical site: investigation of the impact of Rome in civilization, focusing especially on ancient Rome, medieval Christianity, and the Italian Renaissance.

Prerequisite(s): Consent of instructor(s), approved application from the Study Abroad Center.

Previous experience in courses such as ART 2350/ART 2360 or HIST 1050/HIST 1060/HIST 4003 strongly recommended. No knowledge of Italian or Latin is expected.

## HIST 3770 - Ancient and Medieval Women, Gender and Sexuality

3 hours

Study of women, gender and sexuality in ancient and medieval civilization, approached through primary sources from the Ancient Near East (including the Hebrew Bible), Greece, Rome, early Christianity and the Middle Ages.

Prerequisite(s): HIST 1050 suggested but not required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **HIST 4000 - Ancient Near East**

3 hours

Overview of developments in the Ancient Near East from ca. 3000-ca. 500 BCE, with an emphasis on southern Mesopotamia during this period. Topics include the origins of Ancient Near Eastern civilizations; the problems of ancient chronology; and the development of Near Eastern civilizations such as the Sumerians, Babylonians, Hittites, Assyrians, and Persians. Emphasizes the analysis of archaeological and literary sources to compare social, religious, and military concepts among Near Eastern Civilizations, an understanding of the role of cultural assimilation, and the contributions of these civilizations to modern notions of state formation and imperialism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4001 - Ancient Egypt

3 hours

Ancient Egypt from ca. 3500 BCE to ca. 332 BCE. Specific emphasis on the political, social, and religious history of this time period. Contextualizes ancient Egypt as one of the major Mediterranean cultures that shaped world history.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4002 - Ancient Greece

3 hours

The development of Greek civilization and literature from its Bronze Age origins (Minoans and Mycenaeans) to the advent of Rome. Major topics include early Greek literature (Homer), Sparta, the political development of Athens, the Persian and Peloponnesian Wars, Philip and Alexander the Great, and the religious impact of the emergent Hellenistic Civilization.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4003 - The Roman Republic and Augustus

3 hours

The development of the Roman state from the rise and fall of the republic to the establishment of the principate under Rome's first emperor, Augustus, in 27 BC. Key topics include the workings of republican government, the Punic Wars, the Gracchi, the Civil Wars of the first century BC, Julius Caesar and the final collapse of the Republic, and Augustus's imperial scheme.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4004 - The Roman Empire

3 hours

The development of the Roman state and society from the death of Augustus in AD 14 to the decline and fall of the Western Roman Empire in the fifth century. Major topics include dynastic intrigues, imperial wars and expansions, relationship of the Roman state with Jews and Christians, the "pax Romana" as a highpoint of Roman civilization, the third century crisis, Constantine, and the Christianization of the empire in late antiquity.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4005 - The Byzantine Empire

3 hours

The history of the Byzantine empire from its ancient origins to 1453 CE. Specific emphasis on the political, social, and religious history of this time period. Considers the Byzantine Empire in its historical context as one of the major late antique and medieval Mediterranean cultures that shaped world history. Emphasis on studying primary sources, the material culture, and modern scholarly interpretations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4006 - Roman Law and Order

3 hours

An introductory overview of ancient law, with a focus on outlining Roman law as a formal system during the Roman Republic and Empire. Surveys law in pre-Roman civilizations, archaic Rome of the XII Tables, and Rome's development from a Republic to an Empire. Reviews major historical developments in the Roman state and its laws, as well as the practicalities of public order and law enforcement. Concludes with a consideration of the significance of Roman law to later civilizations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4007 - Roman Warfare

3 hours

Surveys the development of Roman warfare (in both theory and practice) from the early Republican period (ca. 500 BCE) to the fourth century CE. Examines primary and secondary sources to determine how Roman military history was inexorably intertwined with Roman notions of empire, leadership, and community; and how these Roman ideals have affected modern thinking on these issues. Students will be introduced to the notions and problems of imperialism and state formation in the tradition of "Western" thought.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4008 - Ancient Religion and Magic

3 hours

Explores major aspects of ancient "paganism," especially as practiced by Greeks and Romans from earliest times to circa 300 CE. The class focuses on the formal structures of religion, its everyday practices and beliefs, the role of religion and magic in people's lives, and the complex relationship between polytheism and monotheism.

Prerequisite(s): None.

### HIST 4050 - Russia from the 9th to the 19th Century

3 hours

Key historical figures, events, culture and legends of old Russia and imperial Russia; process of social change and Russia's search for a place among world civilizations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4055 - The Russian Empire from 1700 to 1917

3 hours

The Russian empire from Peter the Great and his early 18th-century modernizing reforms to Russia's last tsar Nicholas II, ousted by the revolution of 1917. In-depth study of key events and processes of social change while emphasizing political thought and ideologies such as nationalism and socialism, as well as the great achievements of Russian culture during this period.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4060 - Russia in the 20th and 21st Centuries

3 hours

Social, political and cultural history of Russia in the 20th century, and the most recent events of the 21st century. Considers Soviet socialist experiments as an alternative way to modernity; also emphasizes the developments of Stalinism, based on modern approaches of Western and Russian historiography and new revelations from the Russian archives.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4061 - Russian Cultural History of the 19th and 20th Centuries

3 hours

The cultural history of Russia in the 19th and 20th-centuries, examining achievements in art, film, literature, and music in the historical context of cultural politics, state regulation of the cultural field, repression of artists, popular, underground, and official culture.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4065 - Warfare and Society in Europe from the French Revolution to World War II

3 hours

Examines the evolution of modern warfare from the French Revolution to the Second World War, focusing on technological and tactical advances in the broader context of strategic thought, social change, international relations, and sharpening domestic politics that influenced strategic decision-making. Analyzes the ways that warfare, government, and society evolved together. Traces the deadly interplay of politics, culture, strategy, war plans, and technology from Robespierre to Hitler.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4066 - World War I

3 hours

Explores the First World War in its global setting. Centered in Europe while also covering the rise of Japan and the United States in the context of the war and the post-war peace. Focuses on the military and naval rivalries that led to war and shaped the fighting, but also considers the social, political, cultural, and economic factors that tipped Europe into armed conflict, and then enabled exhausted, decimated societies to hold on through four years of savage attritional warfare, with varying degrees of success.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4070 - World War II: European Theater

3 hours

Europe, 1939–1945: military operations and occupations, the Holocaust, politics, diplomacy, and technology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4072 - World War II in Asia and the Pacific

3 hours

Explores World War II on the Asian continent and in the Pacific Ocean from 1931 to 1945, focusing on the participation of the United States and other Allies within a broader global context. Japan's reasons for going to war with the United States, Britain, and other countries and Japanese military strategies and tactics during the war.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4073 - World War II: The Soviet-German War

3 hours

Military, ideological, and social history of World War II on the Eastern Front in Germany and the Soviet Union.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4075 - The Korean and Vietnam Wars

3 hours

Analyzes the domestic historical background and roots of the Korean and Vietnamese conflicts; their function as international proxy wars between the socialist and capitalist camps in the context of the Cold War; and their effects on Korea, Vietnam, China and the United

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4080 - History of Early England from the Anglo-Saxons Through the Tudors

3 hours

Social, legal, political, religious and intellectual developments in England from the early Middle Ages through the Reformation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4081 - The Rise of English Sea Power: 1399-1714

3 hours

Explores the early modern history of the Navy Royal/Royal Navy. The administrative and technological development of the English navy during the reigns of the Lancastrian, Yorkist, Tudor, and Stuart monarchs; its use by those monarchs in the rise to power of the English state from 1399 until 1714; and the influence of both the navy and the sea upon English culture and society.

Prerequisite(s): None.

## HIST 4090 - Britain and Ireland in the Age of Revolution, 1603–1832

3 hours

The British Isles from the accession of James I to the eve of the first Reform Act. Change and continuity amid the rise and fall of royal dynasties, civil war, scientific and commercial revolutions, revolt in the colonies and the politicization of groups traditionally excluded from government: religious dissenters, Irish Catholics, artisans and women.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4100 - Modern Britain Since 1830

3 hours

British political, social, economic, cultural and sexual history to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### HIST 4104 - The British Raj

3 hours

Examines the expansion and growth of the English East India Company, the transition to British Crown rule after the rebellion of 1857, and anti-colonial movements leading up to the partition of India in 1947.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### HIST 4110 - British Empire in Asia, Africa, and the Pacific

3 hours

Examines the rapid expansion of the British Empire across Asia, Africa, and the Pacific after the loss of the American colonies, examining social, cultural, and political ideas of imperial subjects and anti-colonial activists from the nineteenth century to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4114 - Race and Gender in British Imperial Wars 1830-present

3 hours

Focuses on the role of race and gender in Britain's imperial wars of the nineteenth century to the present and how colonial powers used gendered and racial hierarchies to justify the use of military force.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4124 - Risings, Revolts, and Rebels of the British Empire, 1900-1930

3 hours

Explores the intensification of anti-colonial activism, working class movements, and gender non-conformity in Britain and the British Empire before, during, and after the First World War.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4125 - The Military History of England and its Colonies

3 hours

Series of demographic, social, religious and political convulsions transformed England into a modern nation state during the seventeenth and eighteenth centuries. England was also transformed, during this time period, into the preeminent naval and military power of the Atlantic World (i.e. the Americas, the Atlantic, western Europe and the Mediterranean). By following the development and accomplishments of England's fighting forces, this course examines the role of the military in early-modern England, the effects of the aforementioned convulsions on the military and the process by which England established itself as the West's premier superpower.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4150 - Mexican Immigration and the Chicano Community

3 hours

Introduction to the history of Mexican immigration in the United States, focusing on the dynamic effects immigration has had throughout the 19th and 20th centuries on the formation of the Chicano community. Utilizes lectures, discussion of the readings, films, and speakers to emphasize a variety of themes including labor, politics, nativism, citizenship, demography, gender and culture.

Prerequisite(s): HIST 3150 recommended.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4155 - Mexican American Autobiography

3 hours

Surveys Mexican American autobiographies since the 19th century but emphasizes contemporary works. Themes touching on the economic, political, social, cultural and gender spheres of life are examined. The literature covered is considered within the context of the broader history of Mexican Americans in the 20th century and continuing to the present period.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4160 - Chicano Political History: 19th and 20th Century

3 hours

Surveys the history of Chicano politics in the U.S. since 1821. Briefly examines antecedents in the colonial era. Comparing the Chicano political experience before and after American sovereignty, the course assesses the continuity of the Chicano political tradition. Emphasizes reading and discussing new literature in the field.

Prerequisite(s): HIST 3150 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4170 - History of Tejanos/as

3 hours

History of Tejanos/as is a general inquiry into the historical and cultural heritage of Tejanos/as who have lived or are currently living in what is today the Lone Star State.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4171 - Latin America: The Colonial Experience, 1492–1821

3 hours

Surveys the history of Latin America from pre-contact civilizations and the arrival of European explorers to the Wars of Independence. Analyzes the strategies and logic of conquest; the material, psychological and environmental effects deriving from the expansion of empire; the issues of slavery, labor systems, religion and honor; and the movement towards independence.

Prerequisite(s): None.

#### HIST 4172 - Modern Latin America: 1810-Present

3 hours

Surveys the history of Latin America from Independence to the present. Analyzes the formation of new states; the conflict between federalist and centralist groups; the role of caudillos in regional politics; the rise and crisis of export economies; international relations and the Cold War; U.S. involvement in Latin American affairs; the Mexican and Cuban revolutions; military governments and security structures; and current events in the region.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4174 - Revolutions in Twentieth-Century Latin America

3 hours

Traces the major revolutions in twentieth-century Latin America and the factors that led Latin Americans to rebel and take up arms. Explores each revolution's goals and effects as well as the role that the United States played in these conflicts. Examines a wide range of primary sources, including memoirs, oral histories, photographs, and cartoons.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4180 - Colonial Mexico and the Spanish Southwest

3 hours

Conquest and expansion of the Spanish in North America.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4190 - Mexico, 1810-Present

3 hours

Social, economic and political history since independence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4200 - The Spanish Frontier in North America

3 hours

History of the Spanish colonial settlements located within the present boundaries of the United States from 1513 to 1821. Particular attention is paid to the Spaniards' relations with the Native Americans of Florida, New Mexico, Texas and California.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4210 - Southern Plains Indian History

3 hours

Examines the social and political history of the Native American tribes from the pre-Columbian era to the present. Particular attention is paid to the Caddos, Comanches and Wichitas and their relations with Euroamericans.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4214 - Ancient Israel

3 hours

Survey of the Hebrew people's attempts at early state formation from their origins to the Persian period (ca. 3000 BCE--ca. 500 BCE). Major themes include early incarnations of Israel as a state bordering stronger powers, notions and problems of state formation in the tradition of "Western" thought, the interplay between Jewish

monotheism and assimilation with neighboring polytheistic cultures, and how this interrelationship informed Jewish notions of leadership and community. Concentrates on primary sources and on the most influential modern scholarship on Hebrew culture, ancient Israel, and its neighbors; also explores the use of archaeology and other non-literary sources to address the basic issues of the course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4215 - Jews Under Greek and Roman Rule

3 hours

History of the Jewish people from Alexander the Great to the spread of Islam; covers the Maccabean revolt, the Herodian dynasty, life in the diaspora, sects of Judaism, the ministries of Jesus and Paul, the Jewish revolts, early Rabbinic Judaism, and the development of Christian anti-Semitism. Readings include the Hebrew Bible, intertestamental literature, the Dead Sea Scrolls, the New Testament, Flavius Josephus and other historians, and Talmudic excerpts, as well as documentary sources.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4216 - Rome's Jewish Wars and the Roman Near East

3 hours

The expansion of Rome's sphere of influence to the east brought it into open competition with the Parthian Empire, which spanned from Arabia and the Caspian Sea to India. Judaea- an independent Jewish kingdom from 160 to 62 BC- soon came under Roman control, as a client kingdom, eventually becoming a Roman province (6 AD). Examination of the sources of Roman power in the East, as well as the military clashes that shaped Rome's administrative expansion into the Near East, focusing primarily on Judaea and the two Jewish Revolts (66 AD and 132 AD). Examination of the consequences of Rome's Jewish Wars for the Roman eastern front with the Parthians, and for Jews and Christians in Judaea/Palestina and throughout Empire.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4217 - Jew, Greek and Roman: Backgrounds of Early Christianity

3 hours

Historical introduction to the origins and early spread of the world's largest religion. Historical climate into which Christianity first emerged: ancient Judaism, the Roman Empire and the cosmopolitan culture of the Hellenistic Greek cities. The origins and growth of Christianity itself: the ministry of Jesus, persecutions, the career of Paul, the slow growth of Christian communities and the conversion of Emperor Constantine.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4218 - Early Medieval Europe, ca. 312-1095

3 hours

European civilization from the Christianization and decline of the Roman Empire to the eve of the First Crusade. Themes covered include the fall of Rome, the medieval church, monasticism, relations with Byzantium and Islam, Charlemagne and feudalism.

Prerequisite(s): None.

#### HIST 4219 - Late Medieval Europe, 1095 to 1400

3 hours

Crusades, investiture controversy, papal monarchy, late medieval piety and political theory.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4220 - The Renaissance

3 hours

Europe in the 14th and 15th centuries; the rebirth of the dignity of man, the formation of nation states, Florence, Venice, humanism, art, plague, women, Machiavelli, and the flowering of the fine arts.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4221 - Early Modern Europe and the World

Explores the major social, economic, cultural, and political developments that occurred in European countries from the end of the Counter-Reformation to the early eighteenth century, showing how Europe in this period was profoundly connected to the rest of the world.

Prerequisite(s): None.

Corequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

**HIST 4222 - Medieval Travelers** 

3 hours

Explores the accounts of a variety of medieval travelers (c. 500-1500) from Europe to the Middle East to Asia, and analyzes how their voyages serve as examples of cultural contact, communication, and exchange. And yes, unicorns.

Prerequisite(s): None.

Corequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4223 - Crusade and Jihad

3 hours

Seminar in the history of the crusading movement of Western Europe (ca.1095-1291 C.E.) and the counter-crusades (Jihad) and their impact on the civilizations of the medieval West and Middle East.

Prerequisite(s): None.

## HIST 4224 - History of the Book

Seminar and workshop exploring the influence of changing technologies of writing on the formation of world cultures up to and including the digital age.

Prerequisite(s): None.

## HIST 4230 - The Age of the Reformation

Europe in the 16th and 17th centuries; the Protestant Reformation, the Catholic Reformation and Counter-Reformation, Erasmus, peasant revolts, family life, Anabaptists and persecution.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4240 - Nationalism, Zionism and Islamism in Modern Middle Eastern History

Explores the history and significance of nationalism, Zionism and Islamism in modern Middle Eastern history. Analyzes the theories behind these movements as well as the historical application of them throughout the region.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4245 - Gender, Race and Class Issues in Middle **Eastern History**

Examines a variety of gender, race and class issues in modern Middle Eastern history, including the position of women in Middle Eastern societies, the role of minority ethnic groups (such as Kurds and Copts) in civil society, the crisis of masculinity and imperialism in the Middle East, and the impact of economic programs on class systems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4246 - Imperialism in the Modern Middle East

The modern history of imperialism in the Middle East. Historical foundation concerning classic Islamic styles of empire and the history of European and Ottoman imperialism, as well as antiimperial and post-colonial movements, in the past 200-plus years. Includes many contrasting arguments about empire and postcolonialism to give students a wider sense of the variety of issues, ideas and historical conclusions concerning this dynamic and influential region.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4247 - A History of Jews in the Middle East

3 hours

Examines the long-standing history of Middle Eastern Jewry and the experiences of Jews living in the Islamic empires of the medieval period and in the era of European imperialism. Delves into the changes that Jews and non-Jews experienced in the Middle East with the introduction of Zionism from Europe and the creation of Israel in the 20th century and Jewish experiences in the modern Middle East both outside and inside of Israel.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4248 - Palestinian History

Explores historical foundations and interpretations of modern Palestinian History. The history of the Holy Land from the early modern period (the Ottoman imperial era), through the 19th century, the end of the Ottomans and the creation of the British Mandate era of Palestine, Palestinian history in the Mandate period, and Palestinian history from the creation of Israel in 1948 to the early 21st century, both within historic Palestine as well as the Palestinian diaspora in the world.

Prerequisite(s): None.

## HIST 4249 - Food, Sex, and Drugs in Middle Eastern History

3 hours

Explores how the commodities of food, sex, and drugs have influenced Middle Eastern History since the 7th century. Focuses on changing attitudes and trends in food, sex, and drugs through time and the complex contributions of these concepts/things/ideas in shaping the region in various historical eras.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4250 - Modern Middle Eastern Diasporas

3 hours

Investigates the histories and experiences of migration and diaspora in modern Middle Eastern history. Explores the reasons why people migrate, how diasporas evolve, and the ways that personal and collective identities shift in the context of migration, expulsion, exile, and diaspora. Focuses on diasporas inside the Middle East and North Africa (MENA), as well as outside the region, including in the Americas and Europe.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4260 - Topics in History

3 hours

Specific historical topics: Groups A (U.S.), B (Europe) or C (Africa, Asia and Latin America); classification depends on the topic.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4261 - Topics in United States History

3 hours

Specific historical topics in U.S. history.

Prerequisite(s): None.

May be repeated for credit as topics vary. Satisfies Group A requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4262 - Topics in European History

3 hours

Specific historical topics in European history.

Prerequisite(s): None.

May be repeated for credit as topics vary. Satisfies Group B requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4263 - Topics in African-, Asian- or Latin American History

3 hours

Specific historical topics in African-, Asian- or Latin American history.

Prerequisite(s): None.

May be repeated for credit as topics vary. Satisfies Group C requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4270 - The American West

3 hours

Surveys the history of the western United States and nearby border regions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4271 - Hollywood and the Wild West

3 hours

Introduction to the critical study of western films from an historical perspective.

Prerequisite(s): HIST 4270 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4272 - Explorers of North America

3 hours

History of North American exploration and cartography from the 1400s to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4275 - American Environmental History

3 hours

Introduction to major topics in American environmental history.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4276 - Animal Histories

3 hours

Surveys the environmental and cultural histories of animal-human relationships and explores the role of nonhuman animals as historical actors

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4280 - French Frontier in North America

3 hours

Examines the colonies France established in Canada, the Caribbean and Louisiana in the 17th and 18th centuries and pays close attention to the Native Americans, Europeans and Africans who inhabited each colony.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4282 - Settler Colonialism and Empire

3 hours

Examines the history of the settler locations of the modern British Empire in Australia, New Zealand, Canada, the North American colonies, and South Africa. Thematic topics include military expansion and cultural encounters, native resistance to European powers, the history of race and science, and the role of settlers in modern-day decolonization.

Prerequisite(s): HIST 1060 recommended.

#### HIST 4283 - Decolonization in Asia and Africa

3 hours

Examines the modern histories of Asian and African experiences of colonialism, nationalism, and decolonization. Focus on the politics, economics, and cultural aspects of colonialism, nationalism, and decolonization from the early nineteenth century to the mid-twentieth century.

Prerequisite(s): HIST 1060 recommended.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4290 - Intellectual, Cultural and Social History of Medieval and Early Modern Europe

3 hours

Christianity through the Enlightenment; monasticism; rise of schools and universities; philosophy; religious dissent and Protestantism; the Scientific Revolution; women, the family and sexuality.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4300 - The French Revolution, 1774-1799

3 hours

Social, economic and political study of the crisis of the Old Regime and collapse of the French monarchy; special emphasis on the radical transformation of the French state by forces unleashed by revolution.

Prerequisite(s): HIST 4330 suggested.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4301 - Napoleonic Europe, 1799-1815

3 hours

Traces the rise of Napoleon, his empire and his impact—political, social, economic, military—on France, Europe and Americas, culminating with his final defeat at Waterloo and his influence on subsequent European history.

Prerequisite(s): HIST 4300 suggested but not required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4302 - Wars of Napoleon, 1792-1815

3 hours

Examination of the conflicts of the Napoleonic era that demonstrate the evolution of war and warfare in the Western world.

Prerequisite(s): HIST 4301 suggested but not required.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4303 - Age of Empire 1848-1914

3 hours

A thorough examination of the long-term origins of World War I since the end of the Revolutions of 1848 and the forces that changed the balance of power and led Europe down the path to the Great War.

Prerequisite(s): None.

Qualifies as "A" or "B" or "C" categories in the department's curriculum requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4310 - Gender and Sexuality in Early Modern Europe

3 hours

Covers the mid-16th to late 18th centuries; controversies generated by women's political influence, forces shaping masculinity and femininity, regulation of sexual behavior, and the impact of sexuality on individual identities before 19th-century psychologists articulated the notion of sexual orientation. Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4315 - History of Anti-Semitism from Ancient Times to the Present

3 hours

Examines the history of anti-Semitism from ancient Egypt to the contemporary world. Topics include pagan responses to Jews, Christian theological anti-Semitism, the first Crusade, the ritual murder accusation, the blood libel, the Inquisition, impact of the Reformation, Russian pogroms, anti-Semitism in America, the Holocaust, Holocaust denial, and Arab anti-Semitism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4320 - Anti-Semitism in Europe, French Revolution to Present

3 hours

Anti-Semitism in Europe, French Revolution to present: anti-Semitism and European Jews.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4330 - Absolutism and Enlightenment in Europe, 1648–1789

3 hours

Politics, economics, culture and society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### HIST 4335 - Age of Revolutions: Europe, 1700-1918

3 hours

European political, social, economic and cultural developments from the Old Regime to the Russian Revolution. Topics include the agrarian and industrial revolutions, the Enlightenment as spiritual revolution, the French Revolution and the Revolutions of 1848 and 1917. Provides a survey of key events and processes of social change while emphasizing ideologies such as nationalism, socialism, liberalism and conservatism, considering the cultural context of the revolutionary changes and how they affected people's lives.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4350 - Europe, 1914-1945

3 hours

World War I; rise of Fascists, Nazis and Communists; the Great Depression; World War II and the Holocaust.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4360 - Europe since 1945

3 hours

Economic recovery and subsequent stagnation, retreat from empire, popular culture, revolution of 1968, domestic politics, diplomacy, collapse of socialism and disintegration of the eastern bloc, European integration.

Prerequisite(s): None.

## HIST 4364 - Germany from Luther to Napoleon, 1500 to 1815

#### 3 hours

Explores the origins of modern Germany in the Reformation; the Thirty Years War; the rise of absolutism; the emergence of Prussia and the decline of Habsburg, Austria; and the German reaction to the French Revolution and Napoleon.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4365 - Modern Germany, 1815-Present

#### 3 hours

Overview of developments in Germany from the Congress of Vienna to the present, addressing topics such as the quest for national unification, rapid industrialization, Germany's position in central Europe, the role of elites in shaping government policy and social values, Germany's role in launching two world wars, the Holocaust, and Germany's ambivalent reception of western values.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4370 - Intellectual, Cultural and Social History of Modern Europe since 1789

#### 3 hours

The French Revolution, romanticism, reform movements, realism, feminism and the intellectual currents of the 20th century.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4380 - The European Witch Hunts

#### 3 hours

The origins, intensity and decline of the witch hunts that engulfed Europe from the late 16th to the early 18th century.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4385 - Nazi Germany

#### 3 hours

Comprehensive, sophisticated account and analysis of the Nazi period in German history, exploring issues related to the content and implications of Nazi ideology, the role of Hitler, the complicity of elites such as Junkers, the military, the churches and big business. Examines the origins both of the Nazi movement and of the conditions in Germany that led to the movement's rise to power. Analyzes the consequences of the implementation of Hitler's policies in the forms of genocide, military conquest and defeat.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4390 - The Holocaust, 1933-1945

#### 3 hours

European Jews and their destruction during Nazi Germany's ascendancy; Jewish communities and anti-Semitism before the Nazis; institutions and processes of extermination; victims, including non-Jews; perpetrators; historical background.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4391 - War Crimes, Genocide, and Justice

#### 3 hours

An examination of war crimes, genocides, and the development of international law to seek justice for these actions from antiquity to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4395 - The State of Israel

#### 3 hours

History of the modern State of Israel, including the prestate period, Zionism, the Arab-Jewish/Israeli conflict and wars, immigration, social and religious groups and cleavages, terrorism, culture, politics, religion and identity.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### HIST 4405 - History of the Body

#### 3 hours

The experience and meaning of human bodies through medicine, politics, and culture.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4406 - Sickness and Health in U.S. History

#### 3 hours

Survey of medicine and health in the US, from colonial times to present.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4407 - Fitness Culture in U.S. History

#### 3 hours

Examination of the history of fitness and exercise in the modern United States. Considers the rise of organized exercise in terms of culture, politics, class, race, and gender history.

Prerequisite(s): none

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4411 - Pirates, Smugglers, and States in the Atlantic World, 1600-1856

#### 3 hours

Piracy's "golden age" was a symptom of weak states that could not project power at a distance. Introduces two competing narratives about the rise, nature, and fall of Atlantic piracy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4420 - United States Constitutional Development, 1783–Present

#### 3 hours

The Articles of Confederation, the Constitution, role of the Supreme Court and changing nature of constitutional doctrines.

Prerequisite(s): None.

#### HIST 4430 - United States Political Parties, 1783-Present

3 hours

Growth and development of the two-party system; the parties' role in the political development of governmental institutions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4435 - American Jewish Experience

3 hours

Examines the Jewish experience in America from the colonial period to the present. Topics include immigration, shaping American Jewish identities, American Judaism, anti-Semitism, American Jews and the Holocaust, Zionism, and Israel.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4440 - African American History and Culture to 1865

3 hours

Social, cultural and political history of African Americans from the colonial period; slavery and its consequences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4450 - African American History and Culture Since 1865

3 hours

Social, cultural and political history of African Americans in the United States; development of segregation; civil rights movement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4451 - African American History During Segregation Era

3 hours

Examines problems of periodization and geography, the issue of white and black distance and propinquity, de jure and de facto segregation, Jim Crow socialization, and African-American resistance.

Prerequisite(s): HIST 2620 recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4455 - History of Black Women in America

3 hours

Historical exploration into the characteristics, cultures and reflective thoughts of black women in America.

Prerequisite(s): None.

Same as WGST 4460.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4460 - History of Sexualities in U.S.

3 hours

How concepts about sexuality changed and how sexuality relates to ideologies, identities and major trends like nation-building, the Enlightenment, slavery, capitalism, imperialism, urbanization and professionalism.

Prerequisite(s): 1000- or 2000-level HIST course recommended but not required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4461 - Gender, Race, Class and Policy since World War II

3 hours

Topical survey of United States history since 1941. Focuses on the interplay among identities, ideologies and policies. Identities focus foremost on gender, race and class while themes include (1) the roles of media, economics, public figures, and activists; (2) the relationships among government, business, and the general public; (3) the federal government's expansion; and (4) U.S. interaction with the rest of the world.

Prerequisite(s): U.S. history course that covers post-1945 recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4462 - Religion in American History

3 hours

Uses "religion" as a category of historical analysis to examine the diversity of religious belief, practice, and experience in the American past and present and how religion and American culture have shaped and reshaped each other over time. Explores the ways in which religious affiliation and belief have shaped social, economic, and political power in America.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4465 - Women in the United States to 1900

3 hours

Women's daily lives, work, public and political activism; differences and divisions among women.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4470 - Women in the United States Since 1900

3 hours

Women's daily lives, work and modern feminism; differences and divisions among women.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4475 - Jewish Women in Modern America

3 hours

Examines the changing experiences and representations of American Jewish women (and men) over the course of the last century. Topics include transformation of gender identity, gender and family, work, entertainment, sex, religion, and feminism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4480 - Colonial America

3 hours

The English Colonies in North America to 1763.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4490 - The American Revolution – Causes and Consequences

3 hours

The founding of the United States.

Prerequisite(s): None.

## HIST 4495 - United States Food History

3 hours

Examines the history of American food and its relationship to identity in terms of nationality, race, gender, religion, politics, and other categories. Emphasis on the meanings Americans have assigned to food and eating over time.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4550 - Imperial China

3 hours

Survey of the development of Chinese political philosophy, statecraft, economics and society from the Xia dynasty (ca. 2205 BCE) through the High Qing (late 18th century CE). Issues considered include the development and characteristics of the imperial state; the role of Buddhism in Chinese history; women's roles in family, state and society; and political, economic and cultural relations with non-Chinese peoples and states.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4560 - Modern China

3 hours

Chinese politics, ideas, economics and society from the High Qing (late 18th century) through 1989; European idealism, the decline and fall of the Qing dynasty, Republicans and Communists, women, modernization and the question of democracy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4565 - Chinese Military History, 1750-Present

3 hours

Chinese military history from the Qing Empire's military expansion of the mid-18th century through the early 21st century.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4570 - Japanese History

3 hours

Jomon Culture (ca. 10,500 BCE) through the 1970's; myth and history, the imperial system, Buddhism and Confucianism, samurai culture, modern economic development, European imperialism, Japan's rise to a world power, and the post-World War II "economic miracle."

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4580 - Africa to the Nineteenth Century

3 hours

The ancient civilizations of Egypt, Kush, Axum, Ethiopia, Sudan and others; contacts with Europe and Asia, Islam, and the slave trade.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4590 - Modern Africa

3 hours

African continent since 1800 emphasizing European colonization and colonial rule, African resistance; the rise of nationalism and liberation movements.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4605 - History of South Asia, 1757-1947

3 hours

Examines the modern histories of South Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Afghanistan, and the Maldive Islands) from 1757–1947. Topics include the East India Company in Southern Asia, the transition to formal colonialism, the 1857–58 rebellions and mutinies, colonial British Indian culture, anti-colonial resistance, nationalism, and the partition of British India in 1947.

Prerequisite(s): HIST 1060 recommended.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4610 - Contemporary South Asia

3 hours

Examines the contemporary histories of South Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, Bhutan, Afghanistan, and the Maldive Islands) from 1947 onward, including the 1947 partition of India, India-Pakistan relations since 1947, the role of Afghanistan in South Asia, and themes such as religion, caste, gender, minorities, cinema, popular culture, and sport.

Prerequisite(s): HIST 1060 recommended.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4630 - U.S. Navy, 1775-Present: Sails

3 hours

History of the U.S. Navy from its origin in the Colonial period to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4631 - North Atlantic Maritime History: 1427-1838

3 hours

Explores the European-dominated economic system that depended upon access to and reasonably unfettered use of the sea, focusing on the development of what Europeans proclaimed to be the modern world during the Age of Sail. The maritime aspects of European exploration of the world, the development of ships and navigational technology, naval developments, general maritime economic theory, and maritime cultural history.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4640 - Early United States Military History to 1815

3 hours

The genesis and development of the U.S. military tradition and system from colonial times through 1815.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4641 - History of U.S. Military in 20th Century

3 hours

An overview of United States military history from 1900 to the present.  $\,$ 

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4642 - War and American Society, 1608-2001

3 hours

Focus on the various ways in which the homefront has dealt with conflict and the changes that have taken place in American society as a result of war.

Prerequisite(s): None

#### HIST 4650 - Evolution of Warfare to Napoleon

3 hours

Art and science of warfare from ancient Greek society to the end of the French Revolution.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4660 - Evolution of Warfare from Napoleon

3 hours

Art of warfare from the French Revolution to the Cold War.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4700 - Texas

3 hours

Development of Texas from its frontier beginnings to an urban state.

Prerequisite(s): None.

Core Category: American History

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4750 - Social Studies Teaching Methods

3 hours

Designed to help prepare students to teach social studies courses for students in grades 7–12. Students are exposed to the content and pedagogy to teach Texas history, U.S. history, world history, world geography, government and economics.

Prerequisite(s): Major must be History with Teacher Certification or Social Science with Teacher Certification.

Senior status or consent of department.

Same as UCRS 4700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4771 - U.S. in the World 1898-1945

3 hours

U.S. foreign relations from 1898 to 1945. Topics include Spanish-American War; WWI; WWII; isolationism and interventionism; the impact of/on foreign policy on/of domestic politics, race, gender, culture, economics, and technology; the impact of individuals on foreign policy; competing rationalizations for American conduct and interventions; and historiographical debates and controversies concerning early 20th century U.S. foreign policy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4772 - U.S. in the World Since 1945

3 hours

U.S. foreign relations since 1945. Topics include the Cold War; Korean War; Vietnam War; The War on Terror; interventionism; the impact of/on foreign policy on/of domestic politics, race, gender, culture, economics, and technology; the impact of individuals on foreign policy; competing rationalizations for American conduct and interventions; and historiographical debates and controversies concerning 20th and 21st century U.S. foreign policy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4830 - Rise and Fall of the Slave South

3 hours

Explores the development of the American South from its earliest colonial settlements through its destruction during the U.S. Civil War, examining the broad economic, political and social development of the region while focusing on the role that slavery played in shaping the southern United States as a major economic and political force in the 19th-century Atlantic World.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### HIST 4840 - Making of the Modern South

3 hours

Examines the social, political and cultural history of the American South as a distinct region of the United States from 1865 to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4850 - The Early National Period of the United States, 1789–1848

3 hours

Securing the republic, the rise of democracy, and territorial expansion.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4860 - The Civil War and Reconstruction

3 hours

The slavery issue, secession, the appeal to arms, and Reconstruction.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4870 - Making of the Modern United States, 1877–1929

3 hours

The era of industrialization, reform, war and reaction.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## HIST 4871 - America in the Gilded Age

3 hours

Examines the growth of industry and influence of robber barons, the destruction of the West, U.S. immigration, and the rise and implementation of American imperialism in American history between 1865 and 1912. Synthesize themes and facts about politics, race, gender, economics, and culture in the Gilded Age illustrating how these historical events affected the lives of everyday citizens.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4875 - Prosperity, Depression and a New Deal, 1918-1941

3 hours

Examines the prosperity of the 1920s, the economic despair and environmental crisis of the 1930s, and the transformation that occurred in society, culture, politics, economics, and labor when these New Deal programs were implemented.

Prerequisite(s): None.

### HIST 4885 - History of Sports and American Society

#### 3 hours

Historical survey of the impact of sports and recreation from the colonial period to the present. Investigates the history of sporting and athletic endeavors by tracing their rise from informal folk games to a multi-billion dollar entertainment industry in the course of U.S. history. Examines the humble beginnings of these "wicked amusements" in colonial and pre-colonial America and follows them forward to the present time, including current controversies such as stadium welfare, steroids and Native American mascots.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4890 - Civil Rights and Black Power Movements in the U.S.

#### 3 hours

Surveys the history of American civil rights movements from 1865 to the present, with special attention to the 1945–1968 period. Analyzes the background of the modern civil rights movement; the goals and strategies of its participants and those who opposed it; the role of the federal government in creating reforms; and the enduring importance of the movement in contemporary America.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## HIST 4910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### HIST 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **Home Furnishings**

## **HFMD 2380 - Aesthetics and Environment**

3 hours (2;2)

Introduction to computer-aided design, drafting, dimensioning and aesthetics in the home environment.

Prerequisite(s): None.

## HFMD 2400 - Introduction to the Furniture Industry

#### 3 hours

Overview of the furniture and home furnishings industry. Topics include product development, manufacturing, distribution and merchandising of these products. Introduction to industry terminology, resources and career opportunities.

Prerequisite(s): None.

## HFMD 2655 - Textiles for Home Furnishings

#### 3 hours

Fibers, fabric, construction and finishes applied to selection, use and care of home furnishings fabrics.

Prerequisite(s): None.

## HFMD 3355 - Historic and Contemporary Styles of Home Furnishings

3 hours

Survey of furnishings in the built environment from the 16th century to the present. Emphasis on technological, cultural and social influences on historic and contemporary styles.

Prerequisite(s): None.

## HFMD 3380 - Global Home Furnishings Industry

3 hours

Emphasis on international issues and factors affecting design, sourcing, production, wholesaling and retailing of home furnishings.

Prerequisite(s): HFMD 2400.

#### HFMD 3405 - Drawing and Planning for Home Furnishings

3 hours (2;2)

Development of basic drawing and drafting skills. Emphasis on incorporating hand drafting techniques specific to the planning of cabinetry/fixture placement and home furnishings arrangements.

Prerequisite(s): A grade of C or better in HFMD 2380, HFMD 2400 (HFMD 2400 may be taken concurrently); major in home furnishings merchandising, or consent of instructor.

## HFMD 3410 - CAD for Home Furnishings

3 hours (2;2)

Concentration on CAD applications in the planning of home environments, including kitchen and other work zone areas. Focus on planning criteria for these spaces addressing function, aesthetics and economics.

Prerequisite(s): A grade of C or better in HFMD 2380, HFMD 2400 and HFMD 3405, or consent of instructor.

#### HFMD 3570 - Decorative Accessories Merchandising

3 hours

Overview of decorative accessories in historical contexts and in current industry applications. Examination of production and merchandising of products including giftware, lighting, home accents, rugs, accent furniture, softgoods and tabletop.

Prerequisite(s): None.

## HFMD 4400 - Estimating for Home Furnishings

3 hours (2·2)

Practical aspects of home furnishings and interior treatments; professional practices in home furnishings merchandising.

Prerequisite(s): HFMD 2380, HFMD 2400, HFMD 3405 and HFMD 3410 (HFMD 3410 may be taken concurrently); or consent of instructor.

#### HFMD 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

#### HFMD 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

## **HFMD 4951 - Honors College Capstone Thesis**

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Honors Courses**

## HNRS 1000 - Honors First-Year Seminar

1 hour

HNRS 1000 is a one-credit hour course for entering Honors College students. The course serves as a gateway—both professional and personal, academic and extracurricular—to the opportunities that await members of the UNT Honors community. The course is designed to promote greater self-awareness and to help students understand themselves as scholars, individuals, and global citizens. Students will investigate their college experiences holistically. Reflective exercises and discussions encourage students to explore their academic strengths and to develop an Honors plan of study informed by their personal values and goals.

Prerequisite(s): Admission to Honors College.

## HNRS 1100 - The Good Society

3 hours

Human beings form social groups to meet their common needs, such as order and infrastructure. For thousands of years, thoughtful people have asked questions about the nature of these human societies. Explores questions of ongoing interest and importance, including how good societies deal with poverty, illness, education, environmental issues and criminal behavior. Human rights, biodiversity and war are also considered. Takes an interdisciplinary approach to the study of these topics, and seeks to provoke critical thought rather than offer answers.

Prerequisite(s): Admission to Honors College; freshman or sophomore standing or consent of the Honors College dean.

Core Category: Component Area Option

## HNRS 1500 - Introduction to Research: An Interdisciplinary Perspective

3 hours

Interdisciplinary lecture and discussion course on the basic principles of research in physical and life sciences, social sciences, humanities, and the arts. Students apply basic research methods to specific research topic and present research in class including a prospectus defense and poster presentation at University Scholars Day. Topics covered include critically reviewing literature, research methods, ethics and values in research, safety issues, intellectual property rights, research funding, research presentations and publication.

Prerequisite(s): Admission to Honors College; freshman or sophomore class standing or consent of the Honors College dean.

Core Category: Component Area Option

## HNRS 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

## HNRS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

## HNRS 3500 - Honors Thesis Proposal Development

3 hours

Students develop a thesis proposal, including identification of a research topic, review of relevant literature and/or theory, formulation of hypotheses or research questions where relevant, addressing ethical and safety issues, developing a research budget, and developing a timeline for the research. Students will identify a thesis advisor in their major as a part of the course.

Prerequisite(s): Admission to Honors College.

## HNRS 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; permission of Honors College dean.

May be taken only once for Honors College credit.

## HNRS 4000 - Honors Capstone Seminar: Global Perspectives

3 hours

The Capstone Seminar is the final course for students enrolled in the Honors College. Students explore various issues of global importance.

Prerequisite(s): Good standing in the Honors College and completion of at least 12 semester hours of honors courses.

## HNRS 4100 - Honors Colloquium

3 hours

Interdisciplinary colloquium on various topics of significant interest.

Prerequisite(s): Acceptance to Honors College and upper-division standing or consent of college.

May be repeated for credit as topics vary.

## HNRS 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

## HNRS 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Hospitality Management**

## **HMGT 1420 - Food Sanitation**

1 hour

Introduction to food service sanitation, providing training in the regulations and procedures necessary to prevent food poisoning and food-borne diseases in a food service environment. Applies toward hospitality pre-major requirements.

Prerequisite(s): None.

## **HMGT 1450 - Principles of Nutrition**

(HECO 1322 or BIOL 1322)

3 hours

Introduction to human nutrition in health from an examination of nutrients and body function to food choice and healthful eating behaviors. Energy needs are calculated, nutrient information is analyzed, and national food and nutrition reports are reviewed. The connection between nutrition and risk of chronic disease is described with nutrition practices that promote health emphasized. The food environment is examined from the perspective of making informed food choices in a complex marketplace.

Prerequisite(s): None.

Core Category: Component Area Option

## HMGT 1470 - Introduction to Professional Food Preparation

3 hours (2;3)

Laboratory-based course designed to familiarize students with professional food preparation principles and techniques. Food Service sanitation, provides training in the regulations and procedures necessary to prevent food poisoning and food-borne diseases in a food service environment.

Prerequisite(s): None Uniforms required.

## HMGT 1500 - Orientation to the Hospitality Industry

3 hour

Survey of the hotel, restaurant, club and food service industries, including history, scope, organization and career opportunities.

Prerequisite(s): None.

## HMGT 2280 - Hospitality Accounting I - Financial

3 hours

Application of financial accounting principles to the hospitality industry: uniform system of accounts for restaurants, hotels, and clubs; completion of the accounting cycle for hospitality operations; transactions related to payroll, inventories, receivables, and payables for the hospitality industry.

Prerequisite(s): None.

## **HMGT 2460 - Introduction to Nutrition Science**

3 hours (3;2)

Introduction to the relationship between nourishment, lifestyle choices and long-term health. Topics include classes, sources and functions of nutrients and their digestion, absorption and metabolism. Investigation of eating patterns using database technology demonstrates the relationship between food consumption and nutrition adequacy. The economic, cultural and psychological implications of food choices and eating behaviors are studied.

Prerequisite(s): None.

Core Category: Life and Physical Sciences

## HMGT 2480 - Hospitality Accounting II - Managerial

3 hours

Comprehensive application of accounting principles to the hospitality industry. Managerial accounting approach to accounting practices, financial statements and operating activities. Problem-solving methods applied to managerial decisions for the hospitality industry. Applies toward hospitality pre-major requirements.

Prerequisite(s): HMGT 2280 or ACCT 2010.

## HMGT 2800 - Foundations of International Travel and Tourism

3 hours

Travel and tourism examined from global, industry and developmental perspectives. Topics include historical, contemporary and future effects of travel and tourism as related to social, economic, cultural and environmental issues.

Prerequisite(s): None.

## HMGT 2810 - Introduction to International Sustainable Tourism

3 hours

Global travel and tourism examined through the lens of sustainability and the triple bottom line: the economic, socio-cultural, and environmental effects of tourism on a destination. Introduction to the different components of the travel and tourism industry with a particular focus on examples of high and low sustainability practices in each industry, using case studies from around the world as illustrations.

Prerequisite(s): None.

# HMGT 2860 - Management Foundations in the Hospitality Industry

3 hours

Introduction to motivation, leadership, communications, decision making, managing employees, ethics, social responsibility, and managing consumer experiences in the hospitality industry by examining service-driven management foundations. Applies toward hospitality pre-major requirements.

Prerequisite(s): None.

#### **HMGT 3100 - Casino Management**

3 hours

Introduction to the history of gambling, organizational structure, types of casino games, casino operation, casino marketing, casino accounting, and gaming control regulations.

Prerequisite(s): Must be 18 years old.

## HMGT 3200 - Hospitality Industry Law

3 hours

Study of business-related torts and contracts, real and personal property, with an emphasis on hotels, restaurants, resorts and associated businesses. Includes duties of innkeepers and food and beverage liability.

Prerequisite(s): Hospitality major/minor status;

## HMGT 3250 - Restaurant Operations I

3 hours (2;5)

Laboratory-based course designed to familiarize students with dining room service systems encompassing American, French, Russian, banquet and beverage service. Students apply organizational and management skills in the actual operation of a restaurant facility, the Club at Gateway Center. Uniforms required.

Prerequisite(s): Hospitality major/minor status; HMGT 2860 (may be taken concurrently).

### **HMGT 3251 - Restaurant Operations**

3 hours 2:6

A laboratory-based course designed to familiarize students with both dining room service, and with an understanding of quantity food production principles and techniques. Students apply organizational and management skills in the actual operation of a restaurant facility.

Prerequisite(s): HMGT 1470. Student must complete ServSafe Food Protection Manager Certification or an alternative certification which is accepted by the department. Both can be completed concurrently.

#### HMGT 3260 - Resort and Club Management

3 hours

Introduction to managing resorts and private clubs. Emphasis on needs assessment, planning and development, marketing, hiring, staff evaluation and management, legal issues, and financial management.

Prerequisite(s): None.

#### HMGT 3300 - Hospitality Industry Marketing and Sales

3 hours

Application of marketing principles, methods and techniques to the hospitality service product. Analysis of principles of guest behavior, market research, promotion and marketing strategies. Function of convention and meeting sales related to lodging and tourism operations. Application of menu engineering techniques.

Prerequisite(s): None.

## HMGT 3470 - Global Kitchen: A Culinary Journey

3 hours (2;3)

Explore the cultural impact of geography, migration, war and crop movement on ingredient selection and cooking techniques. Prepare, taste, and evaluate traditional, regional dishes of the Americas, Asia, Europe, Africa and the Mediterranean. Topics include similarities between food production systems used in the United States and those used in other regions of the world.

Prerequisite(s): HMGT 1470 or consent of the instructor.

## HMGT 3600 - Management of Human Resources in the Hospitality Industry

3 hours

Effective management of human resources in the hospitality industry. Application of human resource management techniques to hotels, restaurants and other hospitality workplaces in planning, recruitment, selection, training, performance management, coaching, counseling and discipline, delegation and decision-making.

Prerequisite(s): HMGT 1500, HMGT 2860.

## **HMGT 3700 - Hotel Operations**

3 hours (3;1)

Detailed study of different departments within hotel properties. Emphasis on front office, food and beverage, housekeeping, engineering, security, sales and marketing and accounting.

Prerequisite(s): None.

## HMGT 3860 - Foundations in Leading Hospitality Organizations & Talent

3 hours

Introduction to motivation, leadership, communications, decision making, and leading people through effective management of human resources, ethics, social responsibility, and managing consumer experiences in the hospitality industry by examining service-driven management foundations.

Prerequisite(s): None.

## HMGT 3920 - Recent Developments in the Hospitality Industry

3 hours

Extensive study of current developments facing employers in the hospitality industry. Particular emphasis is given to selected readings and case studies dealing with societal, consumer and operational management issues and trends. Supported in part by Ben E. Keith Lectureship Series.

Prerequisite(s): None.

## HMGT 4001 - Chicago Study Tour

3 hours

Experience the hospitality and tourism industry in Chicago with visits to special event and tourism venues, city clubs, hotels, airlines, industry corporate headquarters and participation in the largest trade show in the restaurant industry (NRA). Specific topics may include labor relations and unionization; food trends and convention operations.

Prerequisite(s): UNT student in good standing & Instructor Approval

#### **HMGT 4210 - Hospitality Cost Controls**

3 hours

Study of the food, beverage and labor cost control systems used in the hospitality industry. Emphasis is on the use of control systems for managerial planning, analysis and evaluation. Includes the concept and terminology of costs; departmental income and expense statements; budgets; purchasing, receiving and inventory systems.

Prerequisite(s): Junior standing required or consent of instructor.

## **HMGT 4250 - Restaurant Operations II**

3 hours (2;6)

Laboratory-based course designed to provide students with an understanding of food production principles and techniques. Students apply organizational and management skills in the actual operation of a restaurant facility, the Club at Gateway Center. Uniforms required.

Prerequisite(s): Hospitality major/minor status; HMGT 1470, HMGT 2280, HMGT 2480, HMGT 2860, HMGT 3250, HMGT 4210. Students must hold a current ServSafe Food Protection Manager Certification, or an alternative certification which is accepted by the department.

## HMGT 4300 - Survey of Beverages in the Hospitality Industry

3 hours

Study of social beverages commonly used in the hospitality industry. Primary emphasis is on history, language, product identification and production and merchandising techniques for wines, beers, distilled spirits and non-alcoholic beverages.

Prerequisite(s): Student must be 21 years of age or older.

## HMGT 4480 - Hospitality Industry Finance

3 hours

Comprehensive application of financial management for the hospitality industry. Managerial finance approach to ratio analysis, risk and value, timing and value of cash flows, project valuation, capital expenditures, financial markets and income taxes. Problemsolving methods applied to managerial decisions for the hospitality industry.

Prerequisite(s): HMGT 2280; Junior Standing required, or instructor consent

## **HMGT 4490 - Hospitality Revenue Management**

3 hours

Comprehensive analysis of theories and strategies of revenue management that directly affect operations in the hospitality industry, such as strategic pricing, demand forecasting, data analysis, inventory management and distribution channel management. Application of revenue management techniques using data analysis and programs to maximize the hospitality firm's profitability.

Prerequisite(s): HMGT 2280 and HMGT 3700.

## HMGT 4600 - Information Technology in Hospitality and Tourism

3 hours

Study of the strategic use of information technology (IT) in today's hospitality and tourism organizations. Topics include the unique needs for and characteristics of IT in the hospitality/tourism industry and the most widely used information systems in operations, management, and e-business in hospitality and tourism, as well as their impacts on organizations and the industry as a whole.

## HMGT 4730 - Hospitality Management Systems

3 hours (2;1)

In-depth analysis of the systems approach to marketing management in the hospitality industry. Students utilize computer simulations to gain an understanding of hotel operations and menu engineering principles. An overall understanding of quality management is emphasized.

Prerequisite(s): HMGT 2280, HMGT 2480, HMGT 3700, HMGT 4210. Junior standing.

## HMGT 4820 - Facilities Planning, Equipment, Layout and Design

3 hours

Principles of hotel and restaurant property management and facilities layout and design, emphasizing equipment selection, space allocation, guest and production/service traffic flow patterns and facility operations management.

Prerequisite(s): Junior Standing required, or instructor consent.

## **HMGT 4860 - Hospitality Business Strategies**

3 hours

Comprehensive study, strategic management, leadership and analysis of the hospitality manager's role in operating a successful hospitality operation. Capstone course for the hospitality management degree program.

Prerequisite(s): HMGT majors only; must be taken in final 18 hours of coursework.

#### **HMGT 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

#### **HMGT 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

## **HMGT 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Human Development and Family Science**

## HDFS 1013 - Human Development

(TECA 1354)

3 hours

Introduction to the theories and processes of physical, cognitive and social development of the individual from conception until death.

Prerequisite(s): None.

Suitable for non-majors; HDFS majors should take in their first term/

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 1023 - Assessment and Observation

3 hours

Methods in observation and reporting of child development. Developmental assessment of infants, children and adolescents. Methods, reading and reporting of research in human development and family science.

Prerequisite(s): HDFS 1013 or concurrent enrollment in HDFS 1013.

HDFS majors should take in their first year.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 2013 - Introduction to Human Development and Family Science Theories

3 hours

This course provides an introduction and overview of theoretical perspectives used to study individuals and families. Practical application of theories and their relation to working with individuals and families will be examined.

Prerequisite(s): None.

HDFS majors should take this course in their first year.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### HDFS 2033 - Parenting

(TECA 1303)

3 hours

Commonalities and differences in parenting, caregiving and family life are emphasized from systems, ecological and cross-cultural perspectives. Parenting and caregiving in diverse family forms and cultures are studied in relation to adult-child interactions, parent/school/community relations, family roles, laws, and parenting skills.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 2042 - Professional Development in Human Development and Family Science

2 hours

Introduction to the field of human development and family science. Research and strategic planning for careers, professional activities, development of professional competencies and ethical decision making.

Prerequisite(s): None.

HDFS majors should take in their first year.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### HDFS 2313 - Courtship and Marriage

3 hours

Study of dating, courtship and marriage relationships.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 2900 - Special Problems in Human Development and Family Science

1-3 hours

Open to lower-level students capable of developing a problem independently. Problems are chosen by the student and developed through conferences with the instructor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 2996 - Honors College Mentored Research Experience in Human Development and Family Science

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 3113 - Infant and Child Development

3 hours

Growth and development of the child from conception through middle childhood, including the influence of the family and environment. Basic principles of physical, cognitive, and socioemotional development will be covered.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 3123 - Child Development for Non-Majors

3 hours

Study of the physical, cognitive, and socio-emotional development and learning of children and adolescents, ages 3 through 18.

Prerequisite(s): None.

May require some observation and case study.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 3153 - The Impact of Culture on Individuals and Families

3 hours

Study of diverse cultural and societal dynamics that influence individuals and families. Focus is on dimensions of culture, ethnicity, economic status, religion, gender, and lifestyle that affect individual development and family functioning. Provides an opportunity for students to learn and celebrate diversity of individuals and families by enhancing their knowledge, promoting interaction, and facilitating discussions regarding cultural and social issues that affect the population.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 3213 - Infant and Toddler Intervention and Education

3 hours

Focus on roles of professionals and parents/caregivers in fostering individual infant and toddler development through appropriate interactions and care, safe and healthy environments, and developmental intervention. Observations with infants and toddlers required. Course has been approved as fulfilling competencies for Early Intervention Specialist Credential.

Prerequisite(s): HDFS 3113 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### **HDFS 3313 - Interpersonal Relationships**

3 hours

Study of interpersonal relationships across the life span in a variety of contexts.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 3413 - Grief, Loss and Bereavement

3 hours

Focuses on gaining knowledge of death, loss and bereavement across the lifespan (i.e., infants through late adulthood), along with interventions for the bereaved. Students are prepared to interact with, and assess the needs of, individuals and families who have experienced different types of loss (e.g., sudden, anticipated loss, ambiguous) and targets of loss (e.g., sibling, spouse). Assists students in exploring their own perspectives on death and bereavement in an effort to gain a greater understanding of how their own perspectives impact their responses to others. Consideration is given to how faith, culture, religion and the sociohistorical context impact each individual's understanding of death and bereavement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 3423 - Family, School and Community

3 hours

Analyzing family, school and community resources and needs as related to the family life cycle; child welfare and education, ecological approach; and exploration of careers related to children and families. Strategies to improve communication and collaboration are emphasized with a focus on family types, cultures, economic conditions, school systems, community services, political forces, advocacy groups and other factors that impact young children and their families. Fifteen hours a term/semester in field work arranged.

Prerequisite(s): Junior or senior standing.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### HDFS 3533 - Families in Crisis

3 hours

This course examines the experiences and outcomes of individuals and families in crisis. Family adjustment (prior to crisis) and adaptation (post-crisis) to stress, perceptions of crises, individual and family resources and coping strategies will be explored and analyzed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4011 - Pre-Internship

1 hour

Provides a bridge from theory to professional practice. Determining career goals and assuming professional ethics, roles and responsibilities are emphasized. Preparation and placement for an in-depth internship related to or within the field of development and family science.

Prerequisite(s): HDFS 1023 and HDFS 2042.

A grade of C or better in this course is a requirement for registration in HDFS 4023.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4023 - Internship

3 hours

Requires a minimum of 150 clock hours of in-depth experience with an approved agency or research related to development and/or family science, plus seminar. Emphasis is placed on application of knowledge and skills to actual job roles and responsibilities.

Prerequisite(s): Must have received a grade of C or better in HDFS 4011. Student must have a minimum 2.45 overall grade point average, completion of 90 hours or more. The internship site must be approved the previous term/semester by the Pre-Internship instructor.

May be repeated for credit up to a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4133 - Adolescence and Emerging Adulthood

3 hour

Theories and characteristics of physical, cognitive and social development between 11 and 25 years of age. Effects of family, school, community and other factors on adolescence and emerging adulthood are also addressed.

Prerequisite(s): Junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### HDFS 4213 - Child Life Seminar

3 hours

Provide historical and theoretical perspective on the development of the child life field and information on fundamental skills required to help children and families cope with the stress of the healthcare experience.

Prerequisite(s): Junior or senior standing, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4233 - Guidance of Children and Youth

3 hours

Best practices in individual and group guidance and management of children from birth through adolescence. Focus on behavior in the context of family, culture and social practices. Requires a minimum of 5 hours field experience involving observations of and interactions with infants, children or youth.

Prerequisite(s): HDFS 3123.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## HDFS 4253 - Administration of Programs for Children, Youth and Families

3 hours

Analysis of programs, personnel policies, facility administration and related topics for teachers and administrators who work with children, youth and families.

Prerequisite(s): Junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4323 - Family Law and Public Policy

3 hours

Laws and public policies as they relate to and affect the family.

Prerequisite(s): Junior or senior standing.

### HDFS 4353 - Current Research in Family Science

3 hours

Exploration of current research and theory as it applies to family systems in social contexts; includes analyzing literature regarding issues that impact families.

Prerequisite(s): HDFS 2013 or concurrent enrollment in HDFS 2013; junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4413 - Family Life Education

3 hours

The practice and process of family life education and training of professionals in the child development and family field. Curriculum and program development and evaluation. Teaching strategies and professional responsibilities.

Prerequisite(s): HDFS 2033; junior or senior standing. Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4433 - Family Resource Management

3 hour

Application of principles of family resource management includes goal setting; decision making; and time, energy, financial, and consumer management.

Prerequisite(s): Junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### HDFS 4463 - Marriage and Relationship Education

3 hours

Comprehensive training, application, and practice of marriage and relationship education curriculum. Research and strategies for implementing relationship and marriage education and family life classes and programs in the community are examined.

Prerequisite(s): Junior or senior standing; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4800 - Studies in Human Development and Family Science

1-3 hours

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4900 - Special Problems in Human Development and Family Science

1-3 hours

Open to advanced students capable of developing a problem independently. Problems chosen by student and developed through conferences with the instructor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## HDFS 4951 - Honors College Capstone Thesis in Human Development and Family Science

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# **Industrial Distribution**

## INDS 1001 - Thinkubator in Industrial Distribution I

1 hour

This course combines students and corporations in teams that work together to find solutions to shared problems. Partnerships are established with corporations, early stage start-ups, and expert knowledge partners to establish an understanding and apply solutions for open-ended and societally impactful problems.

Prerequisite(s): None.

# INDS 2000 - Foundations of Science and Technology Analysis

3 hours

Introduction to basic science and technology mathematics and how it applies to solving fundamental technical problems. Illustrates to why mathematics is important in a technical career by demonstrating how technical problems can be mathematically described and methodically analyzed to find a solution. A number of applied examples from various applied technology disciplines will be introduced, analyzed and solved.

Prerequisite(s): None.

## INDS 2001 - Thinkubator in Industrial Distribution II

1 hour

Combines students and corporations in teams that work together to find solutions to shared problems. Partnerships are established with corporations, early stage start-ups, and expert knowledge partners to analyze solutions for open-ended and societally impactful problems.

Prerequisite(s): INDS 1001.

## **INDS 2010 - Industrial Chemistry**

3 hours

Introduction to the basic foundational concepts of the chemical and business aspects in industrial processing as well as the actual operations in chemical industries and knowledge of key areas such as raw materials, sourcing, processing, and intermediates and conversion of chemical materials to final products. Case studies of various industries such as petrochemical, food, cosmetics, pharmaceutical, nutraceutical, pollution, and water are examined.

Prerequisite(s): None.

## INDS 2020 - Industrial Physics

3 hours

Introduction to and demonstration of basic laws and concepts of physics through operation of industrial practices. Emphasis on understanding physical principles behind working of modern technologies and interplay between science and technology. Emphasis on observation, interpretation, and conceptual understanding of physical phenomena such as motion, momentum, energy, waves, light, electricity, and magnetism.

Prerequisite(s): None.

## **INDS 2030 - Industrial Computer Science and Informatics**

3 hours

Introduces concepts, tools, techniques, and applications of informatics in computer science. Includes an overview of programming, data management, visualization, modeling, and social implications with an emphasis on current trends. Students will use computer technology to gather, synthesize, store, visualize and interpret information to apply capabilities and technologies of informatics as they apply to industrial problems.

Prerequisite(s): None.

#### INDS 2040 - Industrial Life Sciences

3 hours

Introduction to the basic elements of life science, current and expected capabilities and products, the structure of the industry, and impact on society. Among the topics addressed will be human and animal medicine, environmental biology, modern agriculture, bio-imitation for design and industrial application.

Prerequisite(s): None.

## INDS 2050 - Industrial Cost Management

3 hours

Provides an understanding of both the tools and models that can be used through industrial channels to conduct trade-offs between performance and life cycle cost. Students are exposed to the methods, processes, and tools needed to conduct economic analysis, estimation, and management of life cycle cost perspectives of industrial channels.

Prerequisite(s): None.

# INDS 3001 - Thinkubator in Industrial Distribution III

1 hour

Combines students and corporations in teams that work together to find solutions to shared problems. Partnerships are established with corporations, early stage start-ups, and expert knowledge partners to evaluate solutions for open-ended and societally impactful problems.

Prerequisite(s): INDS 2001.

## INDS 3010 - Digital Trends in Industrial Distribution

3 hours

Examination of the top digital trends that are attributing to the digital transformation in industrial distribution. Each trend is explained, defined, and simplified. The students will get to know the main component and structure of the trend, learn how to apply it at a professional level, and get to know the main global market players and providers of the technology.

Prerequisite(s): None.

# INDS 3020 - Industrial Channel Selling

3 hours

Begins from the framework of understanding complex engineered systems and an understanding about interactions between constituent sub systems, and then parts. Focus on ensuring students understand the manufacturing, wholesaling, distribution and end-customer value channel in terms of acquisition and life cycle cost. Students will develop the inter-channel selling skills and strategies required by today's professional technical salesperson. Topics include channel structure, channel-to-channel and business-to-business sales, channel communication skills, relationship selling, product and service strategies, sales force management and measuring performance.

Prerequisite(s): None.

### INDS 3040 - Designing and Managing the Development Enterprise

3 hours

Introduction to the attributes associated with the design and management of technical enterprise that is responsible for designing, developing, testing, operating, and maintaining the system. Built on a fundamental that the successful development of a system is directly contingent on the human system. Using foundational constructs related to network theory and the extended enterprise, covers topics that directly impact the performance of technical enterprises. Case studies and academic research are used to provide a practical and advanced understanding of the subject.

Prerequisite(s): None.

# INDS 3050 - Storytelling for Strategic and Professional Communications

3 hours

Examines the aspects of human communication in public speaking, small group, and the virtual workplace. Designed to help students build confidence in their public speaking skills; learn to effectively participate in and lead small groups, develop the skills necessary to communicate in a virtual and digital environment, and know how to present persuasive ideas in a variety of modes.

Prerequisite(s): None.

## INDS 3060 - Complex and Systemic Thinking

3 hours

Builds upon a conceptual foundation of thinking constructs to ensure that systems are properly defined, conceived, and realized. Emphasizes perspectives, frameworks, role of paradox, and connectedness to enable people to see the bigger picture; one in which owners, solvers, solutions, problem-solving methods, and problem descriptions are portrayed as a whole systems for resolving complexity. Students will play an active role in learning through live projects, class exercises, class discussions, dialogue with guest speakers, participating in industry visits.

Prerequisite(s): None.

## INDS 3070 - Industrial Design Thinking

3 hours

Provides a systematic approach to innovation and creative problemsolving that can be used in many disciplines. Creativity and innovation are keys to an organization's ability to gain competitive advantage and survive in industry. Provides students with an understanding of how creativity and innovation can be facilitated and managed in a work setting using design thinking.

Prerequisite(s): None.

### INDS 4000 - Visual Thinking and Data Design

3 hours

Introduction to the art and science of data analytics and visualization for effective communications. The process of visual thinking and design of data includes the physical, mathematical or otherwise logical representation of a system, entity, phenomenon or process. This includes data modeling, data processing, mapping data attributes to graphical attributes, and strategic visual encoding based on known properties of visual perception as well as the task at hand. Students will also learn to evaluate the effectiveness of visualization designs, and think critically about each design decision, such as choice of color and choice of visual encoding.

Prerequisite(s): None.

## INDS 4001 - Thinkubator in Industrial Distribution IV

1 hour

Combines students and corporations in teams that work together to find solutions to shared problems. Partnerships are established with corporations, early stage start-ups, and expert knowledge partners to create solutions for open-ended and societally impactful problems.

Prerequisite(s): INDS 3001.

# INDS 4010 - Introduction to Industrial Systems and Analysis

3 hours

Fundamentals of systems engineering processes and planning. Focus on needs identification, problem definition, generating requirements, system architecting, concept of operations, systems engineering management, and the application of systems engineering in different disciplines. Course material is articulated through examples and case studies. Emphasis is placed on enhancing the effectiveness and efficiency of industrial systems.

Prerequisite(s): None.

ENGR 4000.

### INDS 4020 - Industrial Channel Strategy

3 hours

A systematic approach to helping an enterprise analyze and improve its products, processes, and channels. All products are designed, developed and engineered to support an enterprise strategy, therefore, an understanding of the processes and channels is crucial to choosing how to build, distribute and manage these products. A business process is a collection of activities operationalized through channels that creates an output (e.g. product) that is of value to a customer. Business processes and channels can be improved at any level of an organization or can be improved across multiple organizations (i.e. the enterprise). This course covers the strategic, operational and technological aspects of business processes and channels by relating them to quality improvement and enterprise operations. In addition, students will be exposed to and understand game theory depictions of different channel structures.

Prerequisite(s): None.

## INDS 4030 - Applied Team Development

3 hours

Builds a working knowledge of how to build your team, improve teamwork and collaboration, and sustain team performance through continuous learning and improvement. Students will learn best practices for composing a team, aligning individual and team goals and tasks, and managing divergent perspectives. Students will also learn how to establish roles, build structures, manage decision making to harness the productive potential of teams while mitigating the risks and traps of teamwork.

Prerequisite(s): None.

#### INDS 4040 - Industrial Innovation and Ideation

3 hours

Introduction to corporate entrepreneurship with an emphasis on learning how to find business ideas, how to evaluate their potential, and how to recognize the barriers to success within a corporation. Students are exposed to the challenges of developing innovation in a corporate environment, the uncertainties that exist, the behavior of an entrepreneurial spirit, and legal and regulatory issues.

Prerequisite(s): None.

# INDS 4800 - Internship for Industrial Distribution

1-6 hours

To learn to apply knowledge and skills, as well as to gain an understanding of change and planning within workplace cultures, students benefit from individualized experiences lasting an entire term (or more). Internships provide such a learning environment mentored by both the UNT instructor and a workplace internship supervisor.

Prerequisite(s): None.

# Information Science

## INFO 3010 - Introduction to Data Science

3 hours

This course introduces the to student concepts, principles, topics, technologies, and the profession of data science. Students study and understand different types of data and how data can be acquired, stored, organized, analyzed, and presented to meet a variety of needs on data products. Assignments and the term project allow students to handle real-world data challenges. Students learn to use data to answer questions and make informed decisions. The course will explore natural language processing, databases, financial modeling, statistical analysis, social network analysis, and data visualization. Ethical issues regarding data science process are also discussed.

Prerequisite(s): MATH 1650 and CSCE 1030, or consent from department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 3020 - Introduction to Computation with Python

3 hours

Python is a language with a simple syntax and a powerful set of libraries. It is an interpreted language, with a rich programming environment, including a robust debugger and profiler. While it is easy for beginners to learn, it is widely used in many scientific areas for data exploration. This course is an introduction to the Python programming language for students without prior programming experience. Data types, control flow and introduction to the analysis of program performance are covered. Real-world data from various areas are used as examples to demonstrate how to process and analyze these data with Python.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 3901 - Data Science Internship Project

3 hours

This internship course is focused on data science projects for undergraduates. The internship should be used to gain valuable work experience and increase the knowledge in the field of the major. Internship positions in a firm, industry, non-profit organization, or government entities allow students to further develop desired competencies and might lead to permanent employment.

Prerequisite(s): INFO 3010.

May be repeated for credit for a maximum of 6 hours.

# INFO 4050 - Statistical Methods for Data Science and Analysis

3 hours

Introduces students to both theories and applications of statistical methods. Students learn the core concepts of statistical computing and advanced techniques for data analysis, while working hands-on with real data using statistical tools.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4080 - Research Methods and Evaluation

3 hours

Research principles and techniques; role of theories and hypotheses; experimental and non-experimental research; measurement and data collection; analysis and interpretation; quantitative methods and applications; problems in formulating research proposals and evaluating representative studies.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4090 - Practice Work in Information Agencies

3 hours

Supervised practice work and field study (120 clock hours minimum) in a cooperating learning resources center or information agency, plus seminar conferences and summary report.

Prerequisite(s): 12 hours of prior courses in the school and application early in prior term/semester.

For students without prior field experience. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

#### INFO 4095 - Cooperative Education

3 hours

Supervised work in a job related to student's career objective.

Prerequisite(s): Consent of the practicum director and the cooperative education advisor.

Pass/no pass only. Cannot be used for degree credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4203 - Information Indexing and Organization

3 hours

Applications in different types of information systems of text documents, images or audio files. Use of database retrieval software to store and represent information. Indexing formulation, automatic programming, and design for user support. Planning and implementing multimedia documents.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4206 - Information Retrieval Systems

3 hours

Computer-based storage and retrieval of textual, pictorial, graphic and voice data. Addresses questions about how users interact with information retrieval (IR) systems, their components, evaluation and their impact in society. The issues of representation, the nature of the query, and other aspects of the system are examined.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4208 - School Library Organization and Media

3 hours

Cataloging and classification of print and nonprint collections. MARC records. School library automation systems and their management. Media and media services, including services special to populations. Representative problems and library experiences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4210 - Information Organization and Records Control

3 hours

Descriptive cataloging, subject analysis, classification and control of information resources of all kinds; Anglo-American Cataloguing Rules; Dewey Decimal and Library of Congress classification systems; subject headings; organization, functions and use of catalogs and classification systems; principles of information indexing and retrieval; use of bibliographic databases; representative problems and practice.

Prerequisite(s): None.

# INFO 4223 - Introduction to Metadata for Information Organization

3 hours

Introduction to representation and organization of different kinds of information resources using various forms of metadata. Introduction to examination and use of key metadata schemes, data and content standards, and tools for representing and organizing information resources in the digital environment.

Prerequisite(s): INFO 4203 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4230 - Records Management Operations

3 hours

Management operations for records control and use; preparation, organization, storage, retrieval and dissemination. Preservation, security and disposal problems. Planning and supervising records management programs. Departmental functions and organization. Data-processing applications and online systems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4300 - Administration of Information Agencies

3 hours

Role, functions and development of principal kinds of information centers and agencies. Management principles and practices; standards and evaluation; resources and services; facilities and equipment; planning, staffing and reporting; public relations; budgeting and financial procedures; policy making; social contexts and backgrounds; professional perspectives.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4306 - Project Management for Information Systems

3 hours

Managing the process of planning, developing, implementing and evaluating systems, including defining requirements, developing requests for proposals, evaluating alternative systems, and locating and hiring consultants.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# INFO 4307 - Knowledge Management Tools and Technologies

3 hours

Introduction to knowledge management technologies; Internet and web technologies; knowledge management processes and corresponding technologies; collaboration tools and technologies; information and knowledge portals; KM readiness and IT infrastructure; evaluation and selection criteria for knowledge management tools.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4325 - Advanced Topics in Rural Libraries

3 hours

Covers topics on concepts, theories and techniques on rural librarianship; resources available to support and assist staff and managers working in small and rural libraries, as well as real-world problems and advanced topics of rural public libraries.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4350 - Library Partnership and Community Outreach

3 hours

Covers basic skills to build collaboration among libraries and community units they serve. Designed for students interested in outreach, marketing and community-centered library practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4365 - Health Sciences Information Management

3 hours

Introduction to computer-based health sciences information centers. Topics include: health sciences environment, management, collections, users, project planning, information technology, evaluation and assessment, professional activities of health information management specialists, including the growing emphasis on evidence-based practice, informatics, and trends that affect future practice

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# INFO 4400 - Evaluation and Development of Information Resources

3 hours

Principles and techniques of selecting and acquiring information resources of all kinds; development and maintenance of collections; criteria and selection aids; national and trade bibliographies; online searching; publishers and publishing; censorship problems and intellectual freedom; representative problems and practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4420 - Information Resources for Children

3 hours

Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; children's services and programs; wide reading and use of literature and other materials for children from preschool through middle-school years.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# INFO 4430 - Information Resources for Young Adults

3 hours

Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; young adult services and programs; wide reading and use of literature and other materials for young adults from upper middle school through high school years.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4501 - Principles of Data Science and Analytics

3 hours

Introduction to the fundamentals of data science and data analytics. Provides the required foundational knowledge and practice to students to successfully integrate automatic methods and tools for qualitative and quantitative analysis. Other topics include CRTSP-DM; SEMMA; data assurance; policy; ethics; privacy and security; and principles and practice of technical, statistical and human behavior, as well as social and professional issues related to the handling of data.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

#### INFO 4615 - Electronic Information Services

3 hours

Basic concepts of electronic information services and databases in different fields; conducting online searches and evaluating services. Supervised practical experience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

#### INFO 4620 - Information Resources in the Humanities

3 hours

Information resources, methods and services to meet access needs in the humanities. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# INFO 4630 - Information Resources in Sciences and Technology

3 hours

Information resources, methods and services to meet access needs in science and technology. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## **INFO 4637 - Medical Informatics**

3 hours

History of medical information. Biomedical communication. Types of information resources and services related to the transfer of information in the health sciences. Computer applications to health sciences libraries. Analyses of current issues in the health care field and their relationship to health sciences libraries and information centers, ethics, confidentiality and security.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# INFO 4640 - Information Resources in the Social Sciences

3 hours

Information resources, methods and services to meet access needs in the social sciences. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

### INFO 4646 - Information Resources in Business

3 hours

Information resources, methods and services to meet access needs of business as a discipline and in practice. Characteristics of information services to a specific, diverse user community. Introduction to and development of print and electronic forms of information relevant to the business community's information needs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## INFO 4670 - Data Analysis and Knowledge Discovery

3 hours

Introduces the student to data analysis, data mining, text mining and knowledge discovery principles, concepts and practices to approach data and data mining tasks and techniques using suitable software and other data analysis tools. Covers principles and theories of data mining and text mining techniques as well as analytical applications of data mining and knowledge discovery tools.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# INFO 4685 - Information Resources in Culturally Diverse Communities

3 hours

Information resources, methods, and services to meet access needs of diverse communities. Issues in the provision of information services to diverse communities. Study of the needs and cultural milieu of these communities. Materials and methods for serving these groups.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# INFO 4707 - Data Modeling and Data Warehousing

3 hours

Introduction to traditional linear and relational database theory and practice. Main focus is on modern approaches that include SQL and NoSQL, graph-based databases for structured and unstructured datasets, and standards for data representation and exchange (RDA, XML, JSON, etc.).

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## INFO 4710 - Information Technology Management

3 hours

Basic concepts of information and its role in an information society. Includes mechanisms of information processing, information transfer, and applications of computers and other information tools in various disciplines and fields.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## INFO 4720 - Multi-Media Production

3 hours

Nonbook resources and services in different kinds of libraries and information/media centers. Includes preparation and organization of materials, instructional design and materials production, and the use and maintenance of related equipment. Supervised laboratory experience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# INFO 4730 - Digital Curation and Preservation

3 hours

The abundance of electronic and computer-based information requires a new type of professional to examine the life-cycle of the new type of information content: digital content. Decisions about the preservation of this new type of material are not trivial, and include its descriptive components and particular formats and standards for long term archival storage and access. This course is about the tools and techniques to accomplish these goals.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

#### INFO 4745 - Information Architecture

3 hours

Introduces the basic concepts and components of information architecture within the context of end-user and organizational needs. Provides an understanding of the intellectual technologies necessary to design and implement effective and cost-efficient information systems such as digital libraries, database systems, and a range of other web-accessible resources, as well as collaborative computer systems in organizational environments. Students conduct a collaborative term project to design and implement a real-world system integrating the knowledge and skills learned on organization of information, visual design, human interface and usability issues.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4750 - Managing Automation Projects

3 hours

Covers initiating, planning and managing projects to select, acquire, develop and install new, replacement and upgraded computer-based systems in libraries/information agencies of all types and sizes, oriented around activities necessary for effective automation projects.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4900 - Special Problems

1-3 hours

Supervised individual or small-group study of special problems or topics not otherwise covered by regular course offerings.

Prerequisite(s): Consent of instructor and department chair.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4907 - Data Visualization

3 hours

This course is designed to enable students to combine statistical methods and graphic-centered computer-based treatment of structured and unstructured data. It includes theoretical considerations to visual design as well as practical computer scripting that will enable students to use visualization techniques and the necessary tools to visualize large sets of data and facilitate visual analysis.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# INFO 4910 - Special Problems

1-3 hours

Supervised individual or small-group study of special problems or topics not otherwise covered by regular course offerings.

Prerequisite(s): Consent of instructor and department chair.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## INFO 4960 - Information Science Institute/Seminar

3 hours

Special institute course/seminar.

Prerequisite(s): Consent of the department chair or the dean of the college.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### INFO 4970 - Information Science Seminar

3 hours

Supervised individual or group work on current issues of modern technology and information science.

Prerequisite(s): Consent of instructor and chair of the department.

May be repeated for credit as topics vary.

# Interdisciplinary Program in Analytics & Computational Science

## IPAC 4130 - Data Analytics and Computational Statistics 1

3 hours

Provides an overview of quantitative methods essential for analyzing data, with an emphasis on science and industry applications. Topics include identification of appropriate metrics and measurement methods, descriptive and inferential statistics, experimental design, parametric and non-parametric tests, simulation, and linear and logistic regression, categorical data analysis, and select unsupervised learning techniques. Standard and open source statistical packages are used to apply techniques to real-world problems.

Prerequisite(s): MATH 1100 or MATH 1680 or equivalent, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### IPAC 4230 - Data Analytics and Computational Statistics 2

3 hours

Contemporary techniques of multivariate analysis, including association rules, classification methods, time series, text analysis and machine learning methods with an emphasis on applications in science and industry. Introduction to state-of-practice computational statistical and data analysis methods and tools.

Prerequisite(s): IPAC 4130, MATH 3680 or equivalent, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# IPAC 4240 - Principles of Data Structures, Harvesting and Wrangling

3 hours

Introduction to collecting, wrangling, storing, managing, retrieving and processing datasets. Topics include fundamental concepts and techniques of data engineering, large-scale data harvesting, data wrangling methodologies, and storage and process architectures. Emphasizes applications and includes many hands-on projects.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# IPAC 4250 - Principles of Data Visualization for Large Data

3 hours

Principles and methods for effective visualization and communication of large data sets. Standard and open source data visualization packages are used to develop presentations that convey findings, answer science and industry questions, drive decisions, and provide persuasive evidence supported by data.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# IPAC 4340 - Methods for Discovery and Learning from Data

3 hours

Introduction to contemporary methods for discovery and learning from data sets. Emphasizes applications of predictive and pattern recognition techniques in deriving insights and making decisions in business and science contexts. Topics complemented by hands-on projects using data discovery and statistical learning software.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## International Affairs

## INTE 1000 - International Internship Experiences

1-6 hours

Interdisciplinary course offering that provides students with greater cross-cultural knowledge and understanding through a real-world international experience prior to graduation. The experience, which may be an internship, service learning, research project or creative endeavor, is interdisciplinary in design. Moreover, the experience serves as a gateway to careers requiring global competencies by familiarizing students with various career opportunities.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

## INTE 1500 - International Education Experiences

1-3 hours

International Education Experiences (INTE 1500) is a special topics course that will align with a variety of international educational experiences. INTE 1500 intends to provide students with greater cross-cultural knowledge and to enhance students' global perspectives. The attached syallbus provides an example of the course structure and types of international educational experiences provided by INTE 1500.

Prerequisite(s): None.

## INTE 2000 - International Internship Experiences

1-6 hour

Interdisciplinary course offering that provides students with greater cross-cultural knowledge and understanding through a real-world international experience prior to graduation. The experience, which may be an internship, service learning, research project or creative endeavor, is interdisciplinary in design. Moreover, the experience serves as a gateway to careers requiring global competencies by familiarizing students with various career opportunities.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

### INTE 2500 - International Education Experiences

1-3 hour

Special topics course that aligns with a variety of international educational experiences. Provides students with greater cross-cultural knowledge and enhances students' global perspectives.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

# INTE 3000 - International Internship Experiences

1-6 hours

The International Internship Experiences course (INTE 3000) is designed as an inter-disciplinary course offering that provides students with greater cross-cultural knowledge and understanding through a real-world international experience prior to graduation. The experience which may be an internship, service learning, research project or creative endeavor and will be interdisciplinary in design. Moreover, the experience will serve as a gateway to careers requiring global competencies by familiarizing students with various career opportunities.

Prerequisite(s): None.

## INTE 3500 - International Education Experiences

1-3 hours

Special topics course that aligns with a variety of international educational experiences. Provides students with greater cross-cultural knowledge and enhances students' global perspectives.

Prerequisite(s): None

May be repeated for credit as topics vary for a maximum of 6 hours.

# INTE 4000 - International Internship Experiences

1-6 hours

Interdisciplinary course offering that provides students with greater cross-cultural knowledge and understanding through a real-world international experience prior to graduation. The experience, which may be an internship, service learning, research project or creative endeavor, is interdisciplinary in design. Moreover, the experience serves as a gateway to careers requiring global competencies by familiarizing students with various career opportunities.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

### INTE 4500 - International Education Experiences

1-3 hours

Special topics course that aligns with a variety of international educational experiences. Provides students with greater cross-cultural knowledge and enhances students' global perspectives.

Prerequisite(s): None

May be repeated for credit as topics vary for a maximum of 6 hours.

# International Studies

## **INST 2100 - Introduction to International Studies**

3 hours

Introduces students to the five areas of concentration of the major—international security and diplomacy, international business and economics, international development and humanitarian affairs, regional studies, and peace studies.

Prerequisite(s): None.

Core Category: Component Area Option

## INST 4800 - International Studies Internship

3 hours

Students seek supervised work-related internships to any of the areas of concentration in the international studies major. The internship aims at the advancement of the student's professional field of study and career objectives.

Prerequisite(s): International studies major status; junior or senior classification; minimum GPA of 3.0 and 6 upper-level hours in the student's primary area of concentration at UNT; student must meet employer's requirements and have consent of department internship supervisor.

May be repeated for credit; up to 6 hours of internship may count towards the major. Pass/no pass only.

#### INST 4850 - International Studies Seminar

3 hours

Topics vary and may cover any of the six areas of concentration of the major: international politics and diplomacy, international business and economics, international development, area studies, international security, and peace and human rights issues. Students explore issues that affect our world in the 21st century.

Prerequisite(s): None.

May be repeated for credit as topics vary.

# INST 4851 - International Security

3 hours

Examines the causes of war, the impact of the spread of nuclear weapons upon regional and world stability, transnational terrorism, and causes of world and regional instability.

Prerequisite(s): Senior status and international studies major with area of concentration in international security and diplomacy.

# INST 4852 - Critical Issues in Global Economics Senior Seminar

3 hours

Explores contemporary global economic issues including the restrictions on trade, the relationships between exchange rates and the flows of goods, fiscal and monetary policy in open and closed economy, international debt crisis, foreign direct investment, economic regional integration, and the roles of international economic organizations.

Prerequisite(s): Senior status and international studies major with area of concentration in international business and economics.

## INST 4853 - Global Development: Issues and Challenges

3 hours

Explores competing perspectives for development and various factors which explain why some countries are more developed than others. Survey of global challenges such as environmental, foreign aid, gender empowerment, international migrants, refugees and indigenous people, the role of culture and religion in development, and corruption and public sector reform.

Prerequisite(s): International studies majors whose area of concentration is international development and regional studies and senior status.

## **INST 4900 - Special Problems**

1-3 hours

Prerequisite(s): Consent of department.

#### **INST 4910 - Special Problems**

1–3 hours

Prerequisite(s): Consent of department.

## **INST 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Italian

## ITAL 1010 - Elementary Italian

(ITAL 1411)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 1020 - Elementary Italian

(ITAL 1412)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice

Prerequisite(s): ITAL 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# ITAL 1610 - Italian Influences in the United States of America

3 hours

Explores the influences of Italian language, food, people and cultural phenomena in America.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ITAL 2040 - Intermediate Italian

(ITAL 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): ITAL 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 2050 - Intermediate Italian

(ITAL 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): ITAL 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### ITAL 2900 - Special Problems

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 2910 - Special Problems

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## ITAL 3020 - Italy From Fascism To The Present

3 hours

Exploration and analysis of Italian history and society from the Fascist era to the present through literature, cinema, and historical documents.

Prerequisite(s): ITAL 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### ITAL 3030 - Italian Food Culture

3 hours

Focuses on the culture of food in Italian history, literature and cinema. In particular, it analyzes its historical, social and symbolic value from the Middle Ages to the contemporary Italian world-renowned "Slow Food" movement.

Prerequisite(s): ITAL 2050 or equivalent.

1 or 2 cooking workshops may be organized during the semester as an extracurricular activity in collaboration with the Department of Hospitality and Tourism Management in the College of Merchandising, Hospitality & Tourism and after consulting the Risk Management Service.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 3040 - Topics in Italian Culture

3 hours

Readings in Italian culture with emphasis on conversational and written practice.

Prerequisite(s): ITAL 2050 or equivalent.

May be repeated for credit as topics vary.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 3050 - Contemporary Italian Culture Through Film

3 hours

Study of different cultural topics relevant to life in contemporary Italy, using film as the primary source of authentic language for the development of listening and conversational skills.

Prerequisite(s): ITAL 2050 or equivalent.

May be repeated for credit as topics vary.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# ITAL 3080 - Italian Language and Culture through Italian Operas

3 hours

Introduction to Italian opera as a means of learning the language and appreciating the culture of Italy. Relations between culture and opera are explored.

Prerequisite(s): ITAL 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 4900 - Special Problems

1–3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## ITAL 4910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **Japanese**

## JAPN 1010 - Elementary Japanese

(JAPN 1411)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### JAPN 1020 - Elementary Japanese

(JAPN 1412)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice

Prerequisite(s): JAPN 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 2040 - Intermediate Japanese

(JAPN 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): JAPN 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 2050 - Intermediate Japanese

(JAPN 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): JAPN 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# JAPN 2900 - Special Problems

1–4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 2910 - Special Problems

1-4 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# JAPN 3020 - Advanced Japanese I

3 hours

Advanced listening, speaking, reading, writing and grammar. Topics include Japanese society, culture, history and intercultural communications.

Prerequisite(s): JAPN 2050 or equivalent.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 3030 - Advanced Japanese II

3 hours

Advanced listening, speaking, reading, writing and grammar. Topics include Japanese society, culture, history and intercultural communications.

Prerequisite(s): JAPN 3020 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### JAPN 3040 - Topics in Japanese Culture

3 hours

Focus on deepening students' understanding of Japanese culture and society today through a study of Japanese history, social dynamics, business practices and advanced readings from sources in contemporary and mainstream Japanese media.

Prerequisite(s): JAPN 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# JAPN 3042 - Japanese Society Today

3 hours

Exploration of contemporary Japanese society through readings and discussions.

Prerequisite(s): JAPN 3020 (may be taken concurrently) or consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 3046 - Japanese Cultural Expressions Through the Ages

3 hour

Exploration of Japanese art and culture throughout the ages.

Prerequisite(s): JAPN 3020 (may be taken concurrently) or consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# JAPN 3048 - Japanese Food Culture

3 hours

Students learn about the intricacies of Japanese food culture through a variety of reading materials and video clips.

Prerequisite(s): JAPN 3020 (may be taken concurrently) or consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# JAPN 3060 - Topics in Japanese Language

3 hours

Focus on Japanese grammar and intensive practice to develop fluency in reading, writing and comprehension of modern Japanese beyond the intermediate level.

Prerequisite(s): JAPN 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## JAPN 3068 - Japanese Extensive Reading

3 hours

Enhance reading proficiency and other skills through cultural materials.

Prerequisite(s): JAPN 3020 (may be taken concurrently) or consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### JAPN 4020 - Advanced Japanese III

3 hours

Continuation of advanced listening, speaking, reading, writing and grammar. Topics may include Japanese arts, culture, history and politics.

Prerequisite(s): JAPN 3030 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

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### JAPN 4030 - Advanced Japanese IV

3 hours

Continuation of advanced listening, speaking, reading, writing and grammar. Topics may include Japanese arts, culture, history and politics.

Prerequisite(s): JAPN 4020 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### JAPN 4040 - Advanced Topics in Japanese Culture

3 hours

Study of Japanese cultural products and practices with an emphasis on the past associated with the present.

Prerequisite(s): JAPN 3030 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# JAPN 4080 - Business Japanese

3 hours

Introduction to Japanese business culture and development of appropriate advanced language skills.

Prerequisite(s): JAPN 3030 (may be taken concurrently) or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## JAPN 4900 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## JAPN 4910 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **Jazz Studies**

## **MUJS 1131 - Jazz Performance Fundamentals I**

1 hour (0;2)

Study of the basics of jazz performance. Topics covered include instrumental technique, style, interpretation and improvisation.

Prerequisite(s): Audition and/or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUJS 1132 - Jazz Performance Fundamentals II

1 hour (0;2)

Continuation of Jazz Performance Fundamentals I.

Prerequisite(s): MUJS 1131.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 1360 - Jazz Fundamentals

2 hours (2;0)

Introduction to jazz harmony and scales. Drill in ear training and keyboard. Required for freshman majors in jazz studies.

Prerequisite(s): MUTH 1400-MUTH 1410 (may be taken concurrently) (non-music majors by consent of college).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUJS 1361 - Jazz Aural Fundamentals

1 hour (0:2)

Drill in ear-training of the melodic, harmonic and rhythmic materials that are idiomatic to jazz. Includes the singing of jazz chords and scales and the singing, dictation and transcription of jazz melodies, rhythms and chord progressions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUJS 1370 - Jazz Fundamentals

2 hours (2;0)

Continuation of MUJS 1360.

Prerequisite(s): MUJS 1360 and MUJS 1361 with grade of A or B.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 1371 - Jazz Keyboard Fundamentals

1 hour (0;2)

Basic jazz keyboard skills. Keyboard realization of jazz harmony with typical idiomatic voicings.

Prerequisite(s): MUJS 1360 with grade of A or B, or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUJS 1470 - Introduction to Jazz Recordings

3 hours (3;0)

Introductory overview of key artists and recordings in the history of jazz, including their stylistic, historical and social context.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUJS 2360 - Jazz Improvisation

2 hours (2:0)

Materials and practices for improvising in the jazz idiom.

Prerequisite(s): Grades no lower than B in applied music concentration; MUJS 1132, MUJS 1370, MUJS 1371 and MUJS 1470 with grades of A or B; and entrance audition.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUJS 2370 - Jazz Improvisation

2 hours (2:0)

Continuation of MUJS 2360.

Prerequisite(s): Grades no lower than B in applied music concentration; MUJS 2360 with grade of A or B.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 3120 - Vocal Jazz Techniques

2 hours (2;0)

Practical study of the basic vocal, interpretative, and microphone techniques for the performance of vocal jazz.

Prerequisite(s): MUTH 1500, MUJS 1370, MUJS 1371, MUJS 1470.

May be repeated for credit, contingent on a minimum grade of B.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUJS 3360 - Advanced Jazz Improvisation

2 hours (2;0)

Performances of improvised solos. Includes standards and original works. Improvisation by memory and reading chord symbols.

Prerequisite(s): Grades no lower than B in applied music concentration; MUJS 2370 with grade of A or B; Jazz Studies Proficiency Examination.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 3370 - Advanced Jazz Improvisation

2 hours (2:0)

Continuation of MUJS 3360.

Prerequisite(s): Grades no lower than B in applied music concentration; MUJS 3360 with grade of A or B.

# MUJS 3400 - Understanding and Appreciating Jazz in U.S. and World History and Culture

3 hours

Study of jazz music in the context of U.S. and world history and culture. Listening for musical style. Study of the role of jazz music in expressing and mediating differences in racial, gender, and national identity.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUJS 3470 - Jazz Lecture Series

1 hour (1;0)

Contemporary jazz composition, performances and presentations by nationally recognized composers, arrangers and performers.

Prerequisite(s): None.

Open to majors in other fields by consent of college. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUJS 3610 - Jazz Arranging

3 hours

Jazz harmony, melody and rhythm applied to modern instrumentation; arrangements written and played.

Prerequisite(s): MUJS 1370, MUJS 1371 and MUJS 1470 with grades of A or B, MUTH 1500 and MUTH 1510, or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 3620 - Jazz Arranging

3 hours

Continuation of MUJS 3610.

Prerequisite(s): MUJS 3610 with grade of A or B.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUJS 3900 - Vocal Pedagogy for Non-Classical Styles

1 hour (1;2)

Introduction to the science and practice of healthy singing in non-classical music styles, emphasizing jazz, but including other popular styles as well. Includes an overview of the basic anatomy and physiology of the body as it relates to singing, analysis of various professional vocal artist's approaches (successful and unsuccessful), understanding a healthy approach to achieving unification of vocal registers while maintaining speech-like lyric delivery, and other topics relevant to both singing and teaching singing in non-classical music styles.

Prerequisite(s): MUJS 1132, MUJS 1361, MUJS 1371, MUJS 3120.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUJS 3920 - Songwriting

1 hour (2;0)

Outlines various techniques and methods for songwriting, and also serves as a master class environment for the writers in the class. Topics include melodic and harmonic construction, lyric writing, the setting of original material, self-editing, and songwriter analysis.

Prerequisite(s): MUJS 1132, MUJS 1361, MUJS 1371, MUJS 3120.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

### MUJS 3950 - Advanced Songwriting

2 hours

Intermediate through advanced skill development in expressive songwriting, encompassing lyrics, form, rhythm, melody and harmony.

Prerequisite(s): MUJS 3920 or consent of instructor.

May be repeated for credit as topics vary for a maximum of 4 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUJS 4120 - Vocal Jazz Styles

2 hours (1;1)

Advanced vocal and recording techniques for the jazz studies major with a vocal concentration. Performing and recording with instrumental groups.

Prerequisite(s): MUJS 3120 (four terms/semesters), and completion of vocal concentration requirements.

Corequisite(s): Concurrent enrollment in MULB 1820, Jazz Singers, required.

May be repeated for credit, contingent on a minimum grade of B.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 4470 - History of Jazz

3 hours

Chronological survey of the major styles and artists of jazz, from African acculturation in the New World to the present.

Prerequisite(s): MUJS 1470 with grade of C or higher.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

### MUJS 4610 - Advanced Jazz Arranging

3 hours (2;4

Analysis and composition of music for the modern jazz orchestra.

Prerequisite(s): MUJS 3620 with grade of A or B, and passing grade on Jazz Studies Proficiency Examination.

Corequisite(s): MULB 1808 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUJS 4620 - Advanced Jazz Arranging

3 hours (2;4;)

Continuation of MUJS 4610.

Prerequisite(s): MUJS 4610 with a grade of A or B.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUJS 4630 - Vocal Jazz Arranging

3 hours

Group and individual instruction in jazz harmony, rhythm and melody, applied to contemporary vocal ensemble. Arrangements written and performed.

Prerequisite(s): MUJS 3610 with minimum grade of B. Concurrent enrollment in MUEN 2624, Jazz Singers, required.

### MUJS 4720 - Jazz Senior Recital Capstone

3 hours (1:0:2)

Public performance of music on the major instrument by each student completing undergraduate studies in jazz studies. The culmination of at least four years of work in academic and applied music, it represents the academic, musical and artistic growth the student has experienced throughout the undergraduate career. The senior recital is typically given in the last semester of undergraduate study.

Prerequisite(s): A senior recital is required of all candidates for the Bachelor of Music with a major in jazz studies. In order to be eligible, candidates must successfully complete either the Jazz Studies Concentration Exam (for Performance Emphasis) or the Jazz Arranging Proficiency Exam (for the Arranging Emphasis). Jazz studies drum set performance majors must pass all required drum set and percussion proficiency barriers before scheduling a jazz studies senior recital. Successful completion of all College of Music Proficiency exams, including the Theory Proficiency Exam (TPE), Upper Division Exam (UDE), and Piano Proficiency Exam.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUJS 4890 - Studies in Jazz

1\_3 hours

Organized classes specifically designed to accommodate the needs of students and demands of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis.

Prerequisite(s): None

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 4900 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUJS 4910 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### MUJS 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Journalism**

## **JOUR 1210 - Mass Communication and Society**

(COMM 1307)

3 hours

Principles of mass communication including historical, economic, social, ethical and legal factors influencing the operation and content of the mass media. Impact of new technology in changing the media. A survey of mass communication areas (newspapers, magazines, advertising, public relations, television, wire services, Internet and networks), and careers they offer.

Prerequisite(s): None.

Core Category: Component Area Option or Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 2000 - Principles of Advertising and Public Relations

3 hours

Survey of advertising and public relations principles provides a broad overview of key components used in integrated marketing communication. Explores advertising and PR agencies, media corporations, not-for-profits and other institutions. Topics include history, practices, trends and case studies delivered in two eight-week modules. Taught by two instructors, the course includes two eight-week modules in advertising and public relations.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

## JOUR 2250 - Media Literacy

(COMM 2300)

3 hours

This course involves criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media. This course also delves into the production of media, the methods consumers use to interpret media content, and the impact of different levels of individual media literacy on civic and socioeconomic, and communication issues.

Prerequisite(s): N/A

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# JOUR 2300 - Principles of News

(COMM 2302)

3 hours

Understanding the fundamentals of news and news gathering through lectures, discussions, group projects, hands-on activities, guest speakers and multimedia to educate students on the skills, methods and practices of the twenty-first century journalist. Introduction to the business of journalism, audience information needs, reader/viewer engagement and news judgment. Students also learn news writing and reporting principles used in print, photojournalism, broadcast and digital/online journalism.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

# JOUR 2310 - Introduction to Media Writing

(COMM 2311)

3 hours (3;2)

Fundamentals of writing, reporting and information gathering for a variety of journalism professions including advertising, newspapers, public relations, broadcast and web.

Prerequisite(s): Passing score on the grammar, spelling and punctuation exam; ENGL 1310 and ENGL 1320 with a grade of C or better; journalism major or minor status; consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3020 - Advertising Account Planning

3 hours

Explores the role of the account planner who develops innovative ways to engage consumers, writes the creative brief and inspires the copywriter/art director team as they create advertising messages. Students learn to think critically and to understand the use of both primary and secondary research to develop key insights. Students are also exposed to strategic thinking as they write the creative brief and other communication that advertising professionals use to solve business problems.

Prerequisite(s): Journalism major status: MATH 1680, passing score on the GSP (grammar, spelling and punctuation exam), JOUR 1210, JOUR 2000, JOUR 2310. Journalism minor status: JOUR 2000. Or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 3040 - Advertising Media Strategy

3 hours

Print, broadcast and web time-buying procedures important to media buyers and media salespeople. Assignments in audience research, identifying media that reach target audiences and using effective media mixes. Also includes development and presentation of media plans.

Prerequisite(s): Journalism major status: Passing score on the GSP (grammar, spelling and punctuation) exam, JOUR 1210, JOUR 2000, JOUR 2310. Journalism minor status: JOUR 2000. Or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3050 - Advertising Copywriting

3 hours

Advertising strategy and execution (writing) for print, broadcast and other media.

Prerequisite(s): Journalism major status: Passing score on GSP (grammar, spelling & punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3020 and JOUR 3210. Consent of school.

Corequisite(s): JOUR 3055.

### JOUR 3055 - Advertising Art Direction

3 hours

Introduction to tools and techniques for the visual expression of advertising. Covers visualization for advertising in a variety of media: print, outdoor, television, ambient and interactive. Handson-class covering how to tap into and use creative assets to make advertising that is compelling and effective.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3020 and JOUR 3210.

Corequisite(s): JOUR 3050.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

### JOUR 3070 - Advertising Agency Management

3 hours

Covers all aspects of the organization, supervision and management of advertising agency operations in both advertising and marketing agencies as well as client organizations. Topics include client relations, internal/intra-agency relations, project supervision, workflow, traffic, presentations, business development, campaign coordination and project evaluation.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000 and JOUR 2310.

Journalism minor status: JOUR 2000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### JOUR 3200 - Mass Communication Research Methods

3 hours

Introduction to quantitative and qualitative methods used to study audiences, contents and effects of mass media, especially focusing on advertising and public relations communication and utilizing social science research skills and statistical analysis. Approaches include content analysis, survey research, focus groups and other experimental studies.

Prerequisite(s): Journalism major status: MATH 1680, passing score on the GSP (grammar, spelling and punctuation) exam, JOUR 1210, JOUR 2310. Journalism minor status: JOUR 2000. Or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 3210 - Applied Design for Advertising and Public Relations

3 hours

Lab setting that incorporates lectures and demonstrations with handson experience where students learn and apply the fundamentals of core software applications used in the advertising and public relations industry. Lectures also cover an appreciation of graphic design, typography and other principles used by professionals in advertising and public relations.

Prerequisite(s): Journalism major status; passing score on the GSP (grammar, spelling and punctuation) exam, JOUR 1210, JOUR 2310; consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### **JOUR 3220 - Professional Practice Studies**

1 hour

Rotating professional training in news, advertising and public relations offered in a flexible format. May repeat for credit as topics vary for up to 3 hours.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 3250 - Game Design for Journalism

3 hours

Fundamentals of game design are taught demonstrating how to integrate games into digital storytelling on behalf of media communication disciplines such as journalism, advertising and public relations. Game mechanics are explored and evaluated to engage audiences with news events, social issues, or on behalf of a client or product. Students design interactions that seek to open dialogue with audiences and explore issues of balance and perspective. Following the design studio model, students organize into teams and apply the design process, rapid content generation, iteration and prototyping, with an emphasis on designs that enhance audience engagement.

Prerequisite(s): JOUR majors that have a passing score on the GSP (grammar, spelling & punctuation) exam and have successfully completed JOUR 1210, JOUR 2310, and either JOUR 3210 or JOUR 3300.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3260 - Web Design for Journalism

3 hours

Course is an overview of online design and an introduction to coding for designers, with an emphasis on thinking mobile first. A case study approach will be used to evaluate the design and production of web applications for journalism, advertising and public relations. After the case studies section, students will incorporate best practices for user experience (UX) and plan and produce an interactive design of a web application for digital storytelling (this can be on behalf of a newsworthy topic, for a client or a campaign). Students will work on front-end coding skills and investigate the affordances of various languages and libraries for web design.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310 and either JOUR 3210 or JOUR 3300. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3270 - Media Entrepreneurship and Innovation

3 hour

Course provides an overview of the current and future state of media and what it takes to become an entrepreneur. Students will learn how to start a business in media, find customers and pitch a business idea.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 3300 - Introduction to Visual Communication for News

3 hours

Introduction to basic video photography and editing, still photography and editing, and audio recording and editing for use in news and a digital multi-media environment. Instruction in theory and practice of visual and audio storytelling for news programming. Instruction may include the operation of digital video cameras, digital still cameras, voice recorders and video and audio editing software and hardware including non-linear editing systems.

Prerequisite(s): Journalism major status: Have successfully passed the GSP (grammar, spelling and punctuation) exam and have successfully completed JOUR 1210. Journalism minor status: Have successfully passed the GSP (grammar, spelling and punctuation) exam and have successfully completed JOUR 2300.

## JOUR 3310 - Feature Writing

3 hours

Analysis of newspaper and magazine feature material, from human interest stories to magazine articles; clinical course to develop writing skills, freelance abilities and interests of journalism students.

Prerequisite(s): Journalism major status and passing score on GSP (Grammar, Spelling and Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3322 and either JOUR 3321 or JOUR 3323.

JOUR minor status and passing score on GSP (Grammar, Spelling and Punctuation) exam; successfully completed JOUR 2310, JOUR 3322 and either JOUR 3321 or JOUR 3323; consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 3321 - News Reporting and Writing

3 hours (3:4)

Continued practice in news gathering and writing to develop news judgment, build writing skills and handle complex news stories. Includes regular campus beat and special assignment reporting. Also examines the editor's role in news copy, with emphasis on writing quality, copy editing, AP style, headline and caption writing, and basic graphics.

Prerequisite(s): Journalism major status: Passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 1210, JOUR 2310. Journalism minor status: passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 2310; or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3322 - Copyediting

3 hours

Course introduces students to the theory and practice of editing text for print and digital media, with an emphasis on news stories. The course will focus on fundamental grammar, punctuation and journalistic style. The purpose of this course is to assist students in becoming critical consumers of news and develop skills that can help them write for news audiences on online platforms.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310.

JOUR minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 3323 - News Writing for Broadcast and Web

3 hours

Theory and practice of writing and editing for radio, television and web-based news. Topics include news judgment, script formats and style for radio, TV and web news. Regular writing assignments, lectures and critiques. Possible hands-on writing for student media including student web sites.

Prerequisite(s): Journalism major status: Passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 1210, JOUR 2310. Journalism minor status: Passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 2310; or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### JOUR 3330 - Mobile Journalism

3 hours

Course acts as a digital-only newsroom, utilizing photos, video, audio and text to produce content for an audience. Focus will be on mobile journalism and utilizing the smartphone as a "digital hub," used for creating and consuming content. Fast-paced course provides principles and practice for students to produce content in the digital realm. Includes focus on the role and impact of digital-first thinking and technology on journalists' news gathering and distribution. Also addresses fundamentals of social media, curation and new business models.

Prerequisite(s): Journalism majors who have successfully taken JOUR 1210 and JOUR 2310 and have passed the Grammar, Spelling & Punctuation (GSP) test.

Journalism minors who have successfully passed the Grammar, Spelling & Punctuation (GSP) test and have successfully taken JOUR 2300 and JOUR 2310.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3340 - Digital Media for Journalists

3 hours

Fast-paced course providing students principles and practice in using digital tools to report, write, blog and produce content in multiple platforms: print, online, social, broadcast and mobile. Includes focus on role and impact of digital-first thinking and technology on journalist's news gathering and distribution. Also addresses fundamentals of social media, curation, web site analytics and new business models. Content for class shared with NTDaily, NTDaily. com and Denton Community Television.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling and Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322, and either JOUR 3321 or JOUR 3323.

JOUR minor status: Passing score on GSP (Grammar, Spelling and Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322, and either JOUR 3321 or JOUR 3323; consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3400 - Fundamentals of Public Relations Practices

3 hours

Broad overview of public relations practices covering the history, mechanism and processes of public relations in various workplace settings and types of relations. Emphasis is on the four-step public relations process, strategic planning, writing formats and real-world cases. Implications of technological changes, globalization as well as unethical and illegal practices are discussed.

Prerequisite(s): Journalism major status: Passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 1210, JOUR 2310. Journalism minor status: JOUR 2000 or consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3410 - Public Relations for Non-Profits

3 hours

Designed for both majors and non-majors. Examines the philosophical and theoretical foundations of public relations and volunteerism in the United States. Students learn to apply these theories to public relations campaigns in the non-profit sector. Strategic communication strategies relating to both internal and external publics are explored, including the unique legal and ethical issues impacting non-profits.

Prerequisite(s): Completion of at least 45 hours of credit.

## JOUR 3420 - Public Relations Writing

3 hours

Writing-intensive course that focuses on professional-level writing skills needed by new practitioners of public relations. Components include news releases, pitch letters, media advisories, feature writing, Web writing, business formats, message design concepts and broadcast forms, as well as communication theory, ethics and law. Editing, grammar and AP style are discussed.

Prerequisite(s): Journalism major status: Passing score on GSP (grammar, spelling & punctuation) exam and successfully taken JOUR 1210, JOUR 2310, JOUR 3210, JOUR 3322 and JOUR 3400; consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3430 - Crisis Communication

3 hours

The course focuses on professional crisis communication including research, planning, writing, communication, evaluation and analysis skills. Students gain an understanding of appropriate responses/work products for nonprofit, corporate, presidential, governmental organization, social media and media reporting communications. Students use critical thinking and public relations writing skills, working under pressure to convey targeted messages.

Prerequisite(s): Students must have at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 3450 - Public Relations Practices for Business

3 hours

Provides a comprehensive overview of corporate communication and advanced public relations practices for business organizations. Areas of focus include preparation of planning and strategy documents, executive communications, organizational storytelling, media relations, investor relations, customer complaints, issue management, public affairs, communication and presentation of data, and examination of the history of public relations from a business perspective. Class conducted as a business meeting with real-world public relations assignments.

Prerequisite(s): Journalism majors that have successfully completed the GSP (Grammar, Spelling, Punctuation & Usage) exam, JOUR 1210, JOUR 2310 and either JOUR 3321 or JOUR 3322.

Journalism minors that have successfully completed the GSP (Grammar, Spelling, Punctuation & Usage) exam, JOUR 2000, JOUR 2310 and either JOUR 3321 or JOUR 3322.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 3700 - Fundamentals of Photojournalism

3 hours (3;3)

Instruction in fundamental photojournalism skills and methods including image production and digital post-production, candid documentary observation, visual sequencing, photography critique, visual news judgement, photojournalism writing, and ethical and legal limits concerning photographic coverage and publication. Covers a variety of photographic subjects outside of class. Also prepare students to be effective problem solvers for situations that may arise during the scope of their reporting. An overview of the history of photojournalism, technological advances, ever-changing business practices and opportunities facing the profession are provided.

Prerequisite(s): Journalism major status: Passing score on GSP (grammar, spelling & punctuation) exam and successfully completed JOUR 1210, JOUR 2310 and JOUR 3300.

Journalism minor status: Passing score on GSP (grammar, spelling & punctuation) exam and successfully completed JOUR 2310 and JOUR 3300.

Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4020 - Advertising Industry in New York

3 hours

Introduces students to the industry in a major international advertising center – New York City. Course activities focus on three primary areas of the industry: the advertising agency business, advertisers and advertising media. Students have daily group appointments with members of the New York advertising community. A Shadow Day program allows individual students to meet on specified days with industry personnel in their area of career interest. Offered in New York during summer (3W1) only.

Prerequisite(s): Journalism major or minor status; application required; consent of school.

Application required to be admitted to the class.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4030 - Advertising and Public Relations for Social Good

3 hours

Advertising practitioners encourage consumers to purchase products, and the same toolbox can be used to change other types of behavior. Employs classic advertising techniques to promote pro-social behaviors. Explores the use of advertising skills outside of the advertising agency environment and across a variety of media platforms.

Prerequisite(s): Students must have successfully completed at least 45 hours of course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4052 - Advertising Portfolio

3 hours

Capstone course for advertising students in the creative track. Students work in copywriter/art director teams at a local agency with professional mentors to develop their entry-level portfolios. Class meets once a week at a local agency.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3210, JOUR 3020, either JOUR 3040 or JOUR 3200, JOUR 3050 and JOUR 3055.

Application required to be admitted to the class. May be repeated for credit up to a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4055 - Broadcast Advertising

3 hours

Writing, producing and editing radio and television scripts. Lectures cover writing, preproduction, production and examples of radio and television commercials.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3210, JOUR 3020, either JOUR 3040 or JOUR 3200, JOUR 3050 and JOUR 3055

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4060 - Advertising Agency Account Management

3 hours

Course is designed to provide students with information needed to succeed as a senior advertising agency account manager. Emphasis will be on practical skills, including negotiating contracts, scope-of-work compensation plans, senior client relations, income and expense forecasting, new business presentations and managing external resources. By class completion, students will have a mastery of how to function as a Management Supervisor or Account Director.

Prerequisite(s): Journalism majors: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310 and JOUR 3070.

Journalism minors: JOUR 2000 and JOUR 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23

#### JOUR 4065 - Advanced Art Direction

#### 3 hours

Course teaches fundamental skills of advertising art direction. Includes art directing photography, print production, paper school, selling creative to creative director/account executive/client (presentation) and strategic thinking. Course also provides guest lecturers and on-site visits to studios and printing shops.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3210, JOUR 3020, JOUR 3040, JOUR 3070, JOUR 3050 and JOUR 3055.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4070 - Advertising Campaigns

#### 3 hours

Mirrors the roles of the advertising agency in developing a strategic advertising plan and creating a complete campaign for real clients. Brings together skills and knowledge from all previous advertising courses and results in a comprehensive plansbook and professional presentation of the campaign to the client.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2000, JOUR 2310, JOUR 3020, JOUR 3040, JOUR 3050, JOUR 3055, JOUR 3070 and JOUR 3210. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4075 - Advertising Campaigns Competition

### 3 hours

Intensive immersion in advertising campaign planning, with focus on developing an integrated communications campaign for a national client as part of an organization such as the National Student Advertising Competition. Students create, develop and execute a campaign including a comprehensive plansbook and competitive client presentation.

Prerequisite(s): Application required to be admitted to the class. Consent of school; requires application.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4100 - Supervising School Media

### 3 hours

For journalism teachers who plan to supervise secondary school newspapers, magazines, yearbooks, new media and radio or television outlets. Emphasis on teaching basic journalism courses, staff organization, editorial supervision, advertising sales and media business management.

Prerequisite(s): Journalism major: Passing score on GSP (Grammar, Spelling and Punctuation) exam and successfully taken JOUR 1210, JOUR 2310, JOUR 3210, JOUR 3300, JOUR 3321 and JOUR 3322; consent of school.

Satisfies a requirement for teacher certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4210 - Topics in Journalism and Mass Media

3 hours

Rotating topics in both news and strategic communications.

Prerequisite(s): Consent of school.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4215 - Media Performance for News and Public Relations

#### 3 hours

Students are introduced to the methods of professional media performance for live on-camera work delivering news, interviewing subjects and conducting public relations event/press conferences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### JOUR 4220 - Business Journalism

#### 3 hours

Course focuses on basic concepts of writing about publicly traded and private companies as well as how financial markets affect every aspect of news coverage. Students research CEO salaries, read financial statements, understand the stock market, write basic earnings report stories and research publicly traded and private companies. Students also learn fundamentals of personal finance including understanding loans, renting vs. owning property, credit scores and other money management issues.

Prerequisite(s): Completion of at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4230 - Arts and Culture Journalism

### 3 hours

This course focuses on critiquing for a variety of arts and culture. Examples might include the performing arts such as music (e.g., classical, country, hip hop), theater, dance or fine arts such as film/movies, art shows, photography, food, books, architecture or other areas. The section number will distinguish the area of focus for each class.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4240 - Comparative International Media Systems

### 3 hours

Study of mass media throughout the world with special attention to how media institutions contribute to building democracy. Comparison of print and broadcast news systems, the sources and flow of international news and the challenges of globalism.

Prerequisite(s): Completion of at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4250 - Race, Gender and the Media: A Methods Approach

## 3 hours

Students critically analyze media portrayals of race, gender, sexuality and class and learn to use scholarly research methods to evaluate them. Students examine historical and modern patterns in news media, advertising, television, film, video gaming, popular music, and other mass media. Discussion and writing are major components to this class.

Prerequisite(s): Completion of at least 45 hours of credit.

## JOUR 4270 - Strategic Social Media

3 hours

In a collaborative atmosphere, students explore strategic applications of a variety of social media platforms used for strategic communications and journalism. Students are challenged to bring new ideas to the classroom while adapting social media tools to traditional communications planning and measurement methods. Students with specific expertise/interests are encouraged to present to class

Prerequisite(s): Completion of at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4280 - Media Management

3 hours

Course introduces media management issues including leadership, management, marketing and budget. Students gain analytical tools to help understand the current state of media and to help develop new models for the future. Students read, discuss, listen, observe, analyze and make recommendations about how media has changed, what's going on now and how it can be changed for the future. Students will also meet and discuss current issues and trends with media executives.

Prerequisite(s): Completion of at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4290 - Media Innovation Lab

3 hours

Students develop, build and test their ideas at the intersection of intre/entrepreneurship, technology and emerging media. Students will launch a new media venture or exercise intrapreneurial skills and build solutions for an established media organization.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling and Punctuation) exam and successfully completed JOUR 1210, JOUR 2310 and JOUR 3270 and either JOUR 3210 or JOUR 3300.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4321 - Opinion Writing

3 hours

Writing for the editorial page: editorials and columns. Writing critical reviews of the performing arts, visual arts and popular culture. Emphasis on editorials, arts reviews and personal columns.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323.

Journalism minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323. Consent of school

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4323 - Advanced Writing and Reporting for Broadcast and Web

3 hours

Advanced news writing, reporting and storytelling for television, web and radio. Includes information gathering, writing, interviewing, working a news beat, developing sources and ideas, editing copy, and learning specific formats. Hands-on experience writing, producing and editing news pieces and webcasts for student and area media outlets and web sites.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322, JOUR 3323 and JOUR 4343. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4343 - Visual News Storytelling

3 hours

Focuses on shooting and editing for television with information about how to select audio for radio news, plus audio and video for the Web. Extensive hands-on experience with camera and editing equipment. Students produce multiple packages, content for student media, newscasts for Denton Community Television and webcasts.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and JOUR 3323. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4350 - Sports Journalism

3 hours

Teaches sports reporting, writing, photojournalism and performance for multi-platform use, including web, broadcast and print. Studies column writing, reporting on competition, ethics in sports journalism, sports entertainment, sports business and the impact of sports in society.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323.

Journalism minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4355 - Sport Media Relations

3 hours

Course explores the purpose, processes and careers in sport media relations including history, media convergence, economics, budgets, operations, law and ethics of sport media communication. Course will survey sport media careers and provide a better understanding of sport media career opportunities.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, either JOUR 3210 or JOUR 3300 and either JOUR 3321 or JOUR 3322. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4410 - Reporting of Public Affairs

3 hours

Police, court, political and governmental news with typical practical news assignments assigned to professional reporters; background and practice in writing enterprise and investigative stories, including long-form non-fiction narrative writing. Focus on the role of the journalist, the role of the government and the Freedom of Information Act and open government acts. Students cover meetings and police, some at night and possibly on weekends.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323.

JOUR minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323. Consent of school

#### JOUR 4440 - Public Relations Case Studies

3 hours

Applications of public relations principles to cases and problems involving various stakeholders. Emphasis on strategic planning and execution, crisis management, and assessment of social media strategies and techniques. Original case analyses and presentations.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3400 and either JOUR 3020, JOUR 3321 or JOUR 3322.

JOUR minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2000, JOUR 3400 and either JOUR 3020 or JOUR 3321 or JOUR 3322. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4460 - Public Relations Communication

3 hours

Advanced PR writing, planning and media relations, including writing strategic communications plans as well as writing, editing and producing a wide range of public relations communications materials for traditional and new media. Students work with actual clients individually and in groups to produce a PR campaign and professional portfolio.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3200, JOUR 3210, JOUR 3321, JOUR 3322, JOUR 3400 and JOUR 3420.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4470 - Ethics, Law and Diversity in Advertising and Public Relations

3 hours

Study of philosophical bases for ethical behavior, as well as study of professional codes of ethics for practitioners of advertising and public relations and other journalists. Examination of mass communication law, including privacy, defamation, copyright, financial disclosure, legal and regulatory compliance. Exploration of tactics and strategies for understanding and working with diverse communities.

Prerequisite(s): Journalism major status: Passing score on the GSP (grammar, spelling and punctuation) exam and successfully completed JOUR 1210 and JOUR 2310. consent of school.

Journalism minor status: JOUR 2000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4480 - Public Relations Campaigns

3 hours

Provides classroom situation where students work in teams to research, plan, create, execute and evaluate a multimedia public relations campaign for a designated client. Students use their accumulated knowledge from their major courses.

Prerequisite(s): Journalism majors who have successfully completed the GSP (Grammar, Spelling, Punctuation & Usage) exam, JOUR 1210, JOUR 2310, JOUR 3321; or JOUR 3322, JOUR 3420.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4520 - Advertising and Public Relations Study Abroad

3 hours

Advertising and public relations campaigns are similar in the U.S. and abroad in that they are the culmination of extensive, systematic preparation and planning. Introduces students to issues and trends involved with international advertising and public relations. Studying abroad provides an educational opportunity and life experience. In addition, students are immersed in international advertising and public relations through field trips to global advertising/public relations agencies, readings/resources, guest speakers/presentations, journal writing, ad collection/analysis, and class discussion.

Prerequisite(s): Application through Study Abroad office required.

May be repeated for credit up to a maximum of 9 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4530 - News Study Abroad

3 hours

Explores international media systems, including the press, magazines, broadcasting and online media. Instruction includes lectures, discussions, readings, presentations, field trips, guest speakers and blogging. Students gain a firm grasp of the international media systems and the differences and similarities to the United States media. Concentration is on news media, but entertainment media and sports media are also discussed.

Prerequisite(s): Application through Study Abroad office required.

May be repeated for credit as topics vary up to a maximum of 9 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### JOUR 4620 - Mass Communication Law and Ethics

3 hour

Examination of law and ethics used by working journalists. Law topics include First Amendment, libel, privacy, access to information among other topics. Also examines critical ethical challenges and the ethical decision-making process in today's changing media.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323.

Journalism minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323. Consent of school.

Should be taken final semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4720 - Multimedia Storytelling for News

3 hours (3;3–6)

Course prepares students for high-level, long-form visual storytelling using still and video photography. Advanced photojournalism and video documentary techniques are employed while gathering sound, shooting and editing video and producing narrative multimedia stories. Course addresses advanced journalism practices including versatility in reporting, ethical decision-making, accuracy, writing proficiency and meeting deadlines.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322, JOUR 3700 and either JOUR 3321 or JOUR 3323.

Journalism minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322, JOUR 3700 and either JOUR 3321 or JOUR 3323. Consent of school.

## JOUR 4730 - Advanced Photojournalism Portfolio

3 hours (3:3)

Guides students through the production of a cumulative online portfolio of their best photojournalism which may feature student photography and video created both before and during the course. Topical discussions include advanced image post-production techniques, digital asset management, online portfolio content management, and field and studio lighting techniques. Course explores various career paths and professional and business practice in photography and photo editing in both freelance and staff contests. Students produce visual projects and critically analyze the works of others from practical, aesthetic, ethical, legal and cultural perspectives.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322, JOUR 3700 and either JOUR 3321 or JOUR 3323.

JOUR minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300, JOUR 3322, JOUR 3700 and either JOUR 3321 or JOUR 3323. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4800 - Professional Internship

1-3 hours

Practical experience through employment under the supervision of department chair and professional at the work site. Student must submit bi-weekly reports, work samples and evaluation report at the end of internship; professional supervisor must submit mid-term and final evaluations. Internship and total work and credit hours to be completed must be arranged in advance of enrollment by application to the school. For each hour of credit, student must work a minimum of 100 hours.

Prerequisite(s): Journalism major status; prior completion of at least one upper-level journalism skills course and consent of school.

May be repeated for credit; however, no more than 3 hours of total credit for JOUR 4800 and JOUR 4805 or JOUR 4810 may be applied to the journalism degree requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4805 - Advertising and Public Relations Practicum

1-3 hours

Supervised practical experience for advertising and public relations students working on-campus. For each hour of credit, student must work a minimum of 100 hours.

Prerequisite(s): Journalism major status; prior completion of JOUR 3020 and JOUR 3050 or JOUR 3420; consent of school.

May be repeated for credit; however, no more than 3 hours of total credit for JOUR 4800 and JOUR 4805 may be applied to the journalism degree requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4810 - News or Sports Practicum

1-3 hours

Supervised, intensive practical experience for journalism students to cover news or sports events on a daily basis. Includes interviewing, writing, reporting, shooting, editing reports for the *North Texas Daily*, NTDaily.com, NTDaily TV, or other appropriate web, broadcast or print venue approved by supervising journalism faculty. Requires a minimum of 100 hours of work for each hour of credit.

Prerequisite(s): Journalism major status: Passing score on GSP (grammar, spelling & punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322 and either JOUR 3321 or JOUR 3323. Consent of school.

May be repeated for credit; however, no more than 3 hours total credit for JOUR 4800 or JOUR 4810 may be applied to the journalism degree requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4815 - SWOOP Agency Practicum

1-3 hours

Supervised intensive practical experience for advertising and public relations students while working in on-campus student advertising and PR agency. Includes agency experience from working directly with clients to development and execution of advertising messages and PR communication for a variety of media. For each hour of credit, student must work a minimum of 100 hours.

Prerequisite(s): Journalism major status; JOUR 3020; JOUR 3050 or JOUR 3420; consent of school. By application only.

May be repeated for credit up to a maximum of 3 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

#### JOUR 4820 - History of American Media

3 hours

Main trends and economic, social, political, and technological factors and people that produced the institutions and traditions of the American mass media; emphasis on the changing roles of media and the impact of new communications technologies in the 21st century.

Prerequisite(s): Completion of at least 45 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4850 - Magazine Production

3 hour

Study of American magazines; production sequence of a publication, composition and printing methods, layout problems, writing to fit, cost-quality factors, rewrite, copy reading, styling, writing, titles, blurbs, captions and fitting galleys into layouts.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300 and either JOUR 3321, JOUR 3322 or JOUR 3323.

JOUR minor status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 2310, JOUR 3300 and either JOUR 3321, JOUR 3322 or JOUR 3323. Consent of school.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# JOUR 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

## JOUR 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

### JOUR 4999 - News Capstone

3 hours (1;2)

Culmination of the entire college learning experience by integrating concepts and skills of journalism learned in the classroom with real-life experiences of a working newsroom. Students learn and practice online, print, broadcast and photo journalism together in a newsroom setting. Capstone experience course required of all journalism majors with concentrations in digital/print, broadcast and photojournalism.

Prerequisite(s): Journalism major status: Passing score on GSP (Grammar, Spelling & Punctuation) exam and successfully completed JOUR 1210, JOUR 2310, JOUR 3300, JOUR 3322, either JOUR 3321 or JOUR 3323 and either JOUR 3310 or JOUR 4321 or JOUR 3700 or JOUR 4323.

Should be taken during final 30 hours of study.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23

# Kinesiology

# KINE 2000 - History and Philosophy of Sport and Physical Activity in the United States

3 hours

Study of the historical foundations and philosophical questions related to the development of sport and physical activity programs in the United States. Investigation of the forces, controversies and leaders affecting sport and physical activity development as an integral part of current society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 2010 - Fundamentals of Strength and Conditioning

3 hours (2;1)

Practical aspects of development of muscular strength and endurance, cardiorespiratory endurance, and flexibility including: proper strength and conditioning exercise techniques, safety, and basic exercise programming.

Prerequisite(s): PHED 1000, KINE 2030, KINE 2050, and KINE 3080 with a minimum average GPA of a 3.0 across the four courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 2030 - Introduction to Kinesiology

3 hours

Survey of the foundations underlying the scientific basis of kinesiology. Units include curricula, historical, philosophical, sociological, psychological, physiological, biomechanical, pedagogical and motor behavioral components essential to the study of kinesiology. Students are introduced to the skills and knowledge required to become a successful practitioner, researcher or teacher in the psychomotor domain. Students are expected to complete this course prior to enrolling in kinesiology core courses.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 2050 - Sociology of Sport

3 hours

Study of social behavior in sport with particular emphasis on its relationship to the cultural perspectives of socialization, minorities, economics, politics and current issues.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 2051 - Honors Sociology of Sport

3 hours

A study of social behavior in sport with particular emphasis on fundamental sociological concepts and critical thinking related to studying sport as sociocultural phenomena.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 2220 - Coaching Volleyball

3 hours

Coaching techniques of skills and strategies.

Prerequisite(s): PHED 1790 or PHED 1791 with a minimum grade of B or consent of instructor.

### KINE 2230 - Coaching Football

3 hours

Coaching techniques of skills and strategies.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## KINE 2240 - Coaching Soccer

3 hours

A study of coaching strategies, skills, and techniques for soccer that includes organization and administration of a soccer program in the public schools. Students participate in a variety of activities that include classroom lecture, labs, and field work.

Prerequisite(s): Prior soccer experience in league play, high school or middle school or PHED 1740 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 2250 - Coaching of Track and Field

3 hours

Coaching techniques of skills and strategies.

Prerequisite(s): Previous track and field experience or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 2260 - Coaching Softball

3 hours

Study of coaching strategies, skills, techniques and tactics for the organization and administration of a softball program. Students learn how to implement a softball program within a public or private school setting.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 2350 - Introduction to Scuba Diving

3 hours (2;1)

Provides a basic knowledge and understanding of scuba diving, with applied practical use of scuba equipment. Basic skills are developed which prepare students for certification.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 2550 - Skill Competency for Physical Education Candidates

2 hours

Prepare teacher candidate students with the knowledge and skills necessary to demonstrate competent movement performance and to teach a variety of movement skills effectively. The skills and associated knowledge are found in the Texas Essential Knowledge and Skills (TEKS) and National Association for Sport and Physical Education (NASPE) (as prescribed in Physical Education Curriculum Analysis Tool from Centers for Disease Control and Prevention).

Prerequisite(s): Admission to teacher education program and purchase of Teaching K20 (Tk20).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 2800 - Studies in Kinesiology

1-6 hours

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 2900 - Special Problems

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### KINE 2910 - Special Problems

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3020 - Movement for Individuals with Disabilities

3 hours (2:1)

Comprehensive practical approach to conducting physical activity programs for individuals with disabilities. Course includes discussion on relevant federal legislation, the social model of disability, procedures for assessment, and best practices for working with individuals with developmental, congenital, acquired or sensory disabilities. Students will complete a 10-hour lab and 15-hour service learning assignment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3030 - Fundamentals of Sport Nutrition

3 hours

This course will merge the basic principles, ,latest evidence-based knowledge, and scientific understanding of sports nutrition with realworld practical applications and examples.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3050 - Biomechanics

3 hours

The analysis of efficient movement through a study of mechanical and anatomical principles and their application to human movement.

Prerequisite(s): PHED 1000, KINE 2030, and KINE 2050 and KINE 3080 with a minimum average GPA of a 3.0 across the four courses; BIOL 2301/BIOL 2311 and MATH 1680 with a C or better, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3080 - Physiological Bases of Exercise and Sport

3 hours

Applied physiology course of study including bioenergetics, neuromuscular factors, and cardiovascular and pulmonary dynamics during exercise. Emphasis is placed on acute and chronic responses of human physiology to exercise stress.

Prerequisite(s): BIOL 2301/BIOL 2311 and BIOL 2302/BIOL 2312, with a C or better, or consent of instructor.

Meets with BIOL 3080.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### KINE 3090 - Motor Behavior

3 hours

Concepts related to motor skill acquisition, motor control and motor performance.

Prerequisite(s): PHED 1000, KINE 2030, KINE 2050, and KINE 3080 with a minimum average GPA of a 3.0 across the four courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3200 - Coaching Basketball

3 hours

Skills, strategies and knowledge of coaching and administration of basketball athletic programs.

Prerequisite(s): PHED 1710 or PHED 1711 with a minimum grade of B or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3250 - Coaching Individual Sports

3 hours

Study of skills, knowledge and strategies associated with coaching selected individual sports such as tennis, racquetball, badminton, swimming, wrestling, gymnastics and golf, plus a study of administration of teams, tournaments and special events.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3260 - Coaching Youth Sport

3 hours

Coaching best practices that meet the needs of children and adolescents in non-school sport programs. Students develop a coaching philosophy; plan and demonstrate effective communication, instruction and management techniques; and create appropriate conditioning programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3270 - Principles and Ethics in Sport

3 hours

Examination of the ethical and moral structure of sport in the postmodern era. Ethical considerations regarding pushing the limits of science in an effort to win at any sport. Exploration of the mores of today's society as they intersect with the values of sport.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3350 - Advanced Scuba Diving, Marine Conservation and Environmental Crime

3 hours (2:1)

Provides students with advanced scuba diving skills, while developing an understanding of the complex ecosystems found in the marine environment. Various underwater tasks broaden student awareness of marine conservation, the environment, and their capabilities as divers.

Prerequisite(s): Students must demonstrate good physical stamina, the ability to complete a 200-yard swim, a 10-minute water tread and a current open-water scuba certification, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3400 - Administrative Theory and Practice in Athletic and Sport Regulatory Organizations

3 hours

Administrative theory and practices in planning, organizing, staffing and evaluating athletic and sport organizations. Emphasis is placed on factors involved in administrator behaviors needed for successful programs in school athletic and sport regulatory organizations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3500 - Motor Development

3 hours

Basic up-to-date view of the processes and mechanisms underlying the development of motor skills.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 3540 - Learning and Teaching in Physical Activity

3 hours

The complexity of developing and facilitating learning experiences in physical activity and education is addressed across the psychomotor, cognitive and affective domains. Learning and teaching in K-12 school and other settings (youth sport, therapy) are the focus with authentic, practical experiences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 3550 - Pedagogical Skills, Strategies and Management in Physical Education and Movement for Children

3 hours (2;1)

Effective use of communication and pedagogical skills and strategies to enhance student engagement and learning. Focuses on developmentally appropriate physical education at the EC-6 level, highlighting movement education theory and application. Candidates are provided with opportunities to learn and implement effective demonstrations, explanations and instructional cues and prompts, linking physical activity concepts to appropriate learning experiences. Candidates are afforded both peer teaching and field based applications of content.

Prerequisite(s): Consent of department needed for Kinesiology majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 3560 - Pedagogical Skills, Strategies and Management in Secondary Physical Education

3 hours (2;1

Pre-service candidates develop knowledge and skills necessary to deliver developmentally appropriate school-based physical activity programs for adolescents. Includes application of concepts, principles, strategies, and tactics related to movement such as dance, fitness and performance of individual and team sports. Candidates design and implement lesson plans, conduct class observation, assess student learning, apply achievement motivation theories, and implement advanced technology in various physical activity settings. Candidates complete peer teaching and field based experiences in 6-12 school settings.

Prerequisite(s): Consent of department needed for kinesiology majors.

Course is required for students seeking all-level teacher certification. For students born outside the U.S., a TB test may be required.

## KINE 4000 - Psychology of Sport

3 hours

Survey of the literature concerning the relationship of psychological processes and motor performance. Topics include motivation, communication, anxiety management, youth sports, concentration, confidence and group dynamics.

Prerequisite(s): PHED 1000, KINE 2030, KINE 2050, and KINE 3080 with a minimum average GPA of a 3.0 across the four courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4050 - Quantitative Analysis in Kinesiology

3 hours

Study of measurement theory, instruments used to collect data and procedures for data analysis specific to exercise and sports. The use of computers for data analysis is included.

Prerequisite(s): PHED 1000, KINE 2030, KINE 2050, and KINE 3080 with a minimum average GPA of a 3.0 across the four courses; MATH 1680 with a C or better, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4100 - Curriculum and Methods in Kinesiology (Sport Pedagogy)

2 hours (3;0;3)

Plan and implement developmentally appropriate learning experiences aligned with local, state and national standards to address the diverse needs of all students. Utilize assessments, reflection and discipline planning to foster student learning and inform instructional decisions. Students must sign up for a 1 credit lab in which they will complete 55 hours of early field experience (EFE) in elementary and secondary school settings concurrent with this class. This 1 credit lab requires approximately 4 hours per week of observation during the school day. These 4 hours will be completed outside of scheduled class time. Students must apply for EFE through the field advising office the semester prior to taking the course. Note: deadlines for application may occur prior to early registration.

Prerequisite(s): KINE 3020, KINE 3500, KINE 3550, KINE 3560. Admission to teacher education.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4101 - Early Field Experience Kinesiology Certification

1 hour

Students experience firsthand the scope and sequence of physical education. Assignments, directed field experience and other class activities take place on site in a K–12 school setting.

Prerequisite(s): KINE 3020, KINE 3500, KINE 3550, KINE 3560. Admission to teacher education.

Corequisite(s): KINE 4100.

Must apply for EFE using TK20, the semester previous.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4102 - Student Teaching in Physical Education, Grades EC-5

3 hours

Teaching under supervision in an elementary physical education setting (EC-5/6). Required for those seeking all-level teacher certification in physical education. See Student Teaching Program for details.

Prerequisite(s): KINE 2030, KINE 2050, KINE 3020, KINE 3050, KINE 3080, KINE 3090, KINE 3500, KINE 3550, KINE 3560, KINE 4000, KINE 4100, KINE 4050, HDFS 3123, EDCI 3830. Admission to teacher education program; six (6) PHED courses; 15/18 hours in minor area.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4104 - Student Teaching in Physical Education, Grades 6–12

3 hours

Teaching under supervision in a secondary physical education setting (grades 6-12). Required for those seeking all-level teacher certification in physical education. See Student Teaching Program for details.

Prerequisite(s): KINE 2030, KINE 2050, KINE 3020, KINE 3050, KINE 3080, KINE 3090, KINE 3500, KINE 3550, KINE 3560, KINE 4000, KINE 4050, KINE 4100, EDEC 3123, EDCI 3830. Admission to teacher education program; six (6) PHED courses; 15–18 hours in minor area.

Pass/ no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### KINE 4200 - Basic Athletic Training

3 hours

Current practices in care and prevention of athletic injuries and medical problems related to athletics.

Prerequisite(s): BIOL 2301 /BIOL 2311 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4250 - Advanced Athletic Training

3 hour

Etiology, evaluation and treatment of athletic injuries. "Hands on" approach to allow transfer of information covered in class to everyday use. Examination of each body part and its injuries as it pertains to athletics. Determination of the best course of action to be taken immediately after an injury occurs. Helps prepare students for the National Athletic Trainers' Association Certification Exam and the Texas Licensing Examination.

Prerequisite(s): KINE 3080, KINE 4200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4260 - Principles of Rehabilitation and Therapeutic Modalities

3 hours

Theory, principles and physiological effects of therapeutic modalities used in treatment and rehabilitation of injuries. Emphasis placed on indications, contraindications and appropriate selection of modalities for therapeutic intervention. Teaches students to plan and implement functional rehabilitation programs using therapeutic modalities, functional activity, plyometrics and other exercises based on goal setting and objectives.

Prerequisite(s): KINE 4200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4300 - Exercise Leadership

3 hours

Integrates the scientific basis of exercise prescription with the practical skills of exercise prescription necessary for leadership of exercise in a variety of modes for groups of individuals.

Prerequisite(s): KINE 3080 or consent of instructor.

## KINE 4310 - Advanced Strength and Conditioning

3 hours

Students acquire knowledge regarding implementing strength and conditioning programs, coaching different types of athletes, strength and conditioning program design, proper resistance exercise techniques, and evaluation of physical performance capabilities. Prepares students for the practical applied aspects of strength and condition certifications.

Prerequisite(s): <u>KINE 2010</u> or consent of instructor; KINE 3080 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4320 - Exercise Testing and Prescription

3 hours

Applied techniques for the measurement of exercise bioenergetics, neuromuscular performance, cardiorespiratory fitness and motor ability. Particular emphasis is given to the assessment of acute and chronic (training-induced) physiological responses arising from exercise training programs. Application and evaluation of test results are used to develop exercise prescriptions for individuals participating in specific sports and training programs.

Prerequisite(s): KINE 3080 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4325 - Fitness Testing

3 hours

Practice of fitness assessment with an emphasis on practical application.

Prerequisite(s): KINE 3080 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## KINE 4330 - Advanced Sport Nutrition and Metabolism

3 hours

Nutritional principles required for exercise and health. Emphasis placed on the role of biochemical production of ATP.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# KINE 4410 - Facilities, Equipment and Budget for Athletics

3 hours

Study of facilities relative to quality and intended use. Equipment study to include construction, procurement and maintenance. Budgeting includes sources of monies and record keeping.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 4550 - Issues in Movement Acquisition for Youth

3 hours

Systems for promoting motor skill acquisition, assessment and analysis based on current, applicable issues in movement activity for youth; identification of principles, programming and inclusion of children with special needs in physical activity setting; and importance of maximal involvement of all learners in movement program for youth.

Prerequisite(s): KINE 3500 and KINE 3550, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 4800 - Studies in Kinesiology

1-6 hours

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### KINE 4860 - Internship in Kinesiology

3 hours

In-depth practicum affiliation work in an approved agency selected from corporate, commercial or clinical settings. Emphasis is placed on application of knowledge and skills to actual job roles and responsibilities.

Prerequisite(s): Minimum GPA of 3.25 in the Kinesiology core courses (KINE 3020, KINE 3050, KINE 3080, KINE 3090, KINE 4000, and KINE 4050), successful completion of the University core courses and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### KINE 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### KINE 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## KINE 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# Language

## LANG 1010 - Elementary Language

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### LANG 1020 - Elementary Language

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): Foreign language course 1010 in same language, or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LANG 2040 - Intermediate Language

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): Foreign language course 1020 in same language, or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LANG 2050 - Intermediate Language

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): Foreign language course 2040 in same language, or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# LANG 2900 - Special Problems

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### LANG 2910 - Special Problems

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LANG 4900 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LANG 4910 - Special Problems

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## Latin

## LATI 1010 - Elementary Latin

(LATI 1411)

3 hours (3;2)

Grammar and basic vocabulary.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LATI 1020 - Elementary Latin

(LATI 1412)

3 hours (3;2)

Grammar and basic vocabulary.

Prerequisite(s): LATI 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### LATI 2040 - Intermediate Latin

(LATI 2311)

3 hours

Grammar principles and readings from representative Roman authors; Vergil.

Prerequisite(s): LATI 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### LATI 2050 - Intermediate Latin

(LATI 2312)

3 hours

Grammar principles and readings from representative Roman authors; Livy.

Prerequisite(s): LATI 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## LATI 3050 - Topics in Latin Literature

3 hours

Readings in classical, medieval or renaissance Latin literature. Emphasis is on reading fluency grounded in aesthetic and historical appreciation.

Prerequisite(s): LATI 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# LATI 3060 - Being A Roman: A Day in Ancient Rome

3 hours

Immersion in the everyday life of ancient Romans though primary and secondary sources. Emphasis on advanced grammar and vocabulary, and various aspects of Roman civilization. Focus on Roman political, economic and social life.

Prerequisite(s): LATI 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### LATI 4900 - Special Problems

1–3 hours

NONE

Prerequisite(s): Consent of department.

## LATI 4910 - Special Problems

1–3 hours NONE

Prerequisite(s): Consent of department

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# **Learning Technologies**

## LTEC 1100 - Computer Applications

3 hours

Introduction to computer usage. Integrated approach to software tools such as word processing, database management, spreadsheet, communications and graphics applications.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 2100 - Surviving the Information Age

3 hours

A collegiate guide to Internet resources and information procurement. Topics include: connecting to UNT resources, peripheral selection and use, tips for purchasing and using application software, an overview of graphics software, applications of the Internet, HTML code, methods of establishing an Internet connection, netcasting, voice and video conferencing, PC-based troubleshooting techniques, electronic research, and information processing using the Internet.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 2600 - Digital Tools in Education

1.5 hours

Prepares pre-service teachers to select and use digital tools to infuse technology into teaching and curricular decisions. Major topics include selecting digital tools, technology limitations, inequities in student access, and technology integration in face-to-face, blended, and online learning environments.

Prerequisite(s): None

Corequisite(s): COUN 2600.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LTEC 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 3000 - Foundations of Learning Technologies in STEM

3 hours

This course focuses on learning across STEM Disciplines using a variety of technologies: cloud computing, mobile devices, MOOCs, virtual labs, etc. Students learn problem-solving and inquiry skills, and apply those to interpret, aggregate, and create arguments based on evidence. Real-world problems with data driven and focused outcomes are used to follow a process, develop a solution, perform analysis, and communicate findings.

Prerequisite(s): None

### LTEC 3010 - Personal Development

3 hours

Provides opportunities for students to develop themselves professionally. Special emphasis is placed on charting a course through goal setting, discovering and launching a career in today's environment. Topics covered include determining avenues to find a job, creating a career portfolio and preparing for an interview, getting started at a new job, dressing for success, e-mail etiquette, diversity in the workforce, stress management, business etiquette, time management, and selecting and working with a mentor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 3100 - New Horizons for Learning Technologies in STEM

3 hours

This course focuses on innovative and emerging technologies and their use in STEM Disciplines. Students use gamification, immersive learning environments, wearable technologies, and other tools to explore conditions of learning, transfer, motivation, ability, and learner characteristics across STEM.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 3200 - Leadership and Ethical Practices for STEM Professionals

3 hours

This course is a study of contemporary leadership practices, ethical issues, and team dynamics related to STEM occupations. It focuses on evidence-based leadership practices while addressing ethical practices that future leaders in STEM occupations might face along with best practices on how to manage in multidisciplinary group environments.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3220 - Computer Graphics in Education and Training

3 hours

Application of computer graphics to the preparation of multimedia and web-based materials. Includes principles of graphics communication, concepts in computer graphics, graphics input systems, graphics manipulation software, and graphics output systems.

Prerequisite(s): LTEC 2100 or consent of the department

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3260 - Web Authoring

3 hours

Creation of web-based materials incorporating text, graphics, and multimedia elements. Emphasis on use of standards-based technologies for creating content for web-based delivery.

Prerequisite(s): LTEC 2100 or consent of the department

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3440 - Introduction to Instructional Technology

3 hours

Introduction to instructional technology and its application in education and business with an emphasis on online learning and environments.

Prerequisite(s): LTEC 1100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3530 - Data Communications

3 hours

Foundational skills in data communications. Covers the basics of computer networking, including terms and concepts, contemporary network services, transmission media, and protocols. Students learn how protocols are used in networking implementations from many vendors, especially those most common in today's LANs and WANs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LTEC 3610 - Principles of Team Science

3 hours

This course provides students with an overview of team science and how this field of science applies to the workplace. Students will gain an understanding of evidence-based practices that apply to team and small group settings and will learn how to apply these practices to the workplace. The fundamentals of teams and their processes will be covered along with introducing students to various tools that could be applied to team and small group settings in the workplace.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3620 - Team Building

3 hours

This course introduces students to the different types of teams and their processes. Students will learn systematic approaches to team building, including planning, implementing, managing, and completing the teamwork processes. Students will become familiar with the six enabling conditions that create team-friendly work environments. Students will learn different team building tools, the role that diversity plays in successful teams, and will be introduced to some of the challenges to teamwork.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3630 - Team Dynamics

3 hours

This course focuses on describing, exploring, and understanding all things related to human groups. Being able to successfully work in a team/group environment is critical in today's age of complexity. This course identifies the characteristics of a team, studies different team related theories, identifies how to manage or lead teams, and highlights how to optimize a team's overall performance. As an interdisciplinary topic, this course covers evidence-based literature from the disciplines of anthropology, biology, psychology, sociology, and other social sciences.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 3640 - Leadership and Team Leadership

3 hours

This course provides a study of leadership theories, leadership styles, and leadership development techniques. Students will begin with a historic overview of leadership research from trait-based theories to leadership theory. Students will focus their attention on learning team-based and collective types of leadership theories. Following, students will learn different practices and techniques in leadership development and will learn to apply some of these techniques to developing leaders in the workplace. This course focuses on evidence-based leadership and leadership development techniques while addressing current issues related to: ethical leadership, power, diversity, leader-member interactions, and leadership development evaluation.

Prerequisite(s): None

### LTEC 4000 - Principles of Training and Development

3 hours

Investigates the design, delivery and evaluation of training and development programs. The relationship of modern technology and training theories are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4040 - Organizational Development and Performance Improvement

3 hours

Explores the need for organizational change by examining the process of needs analysis, intervention selection, implementation and evaluation. Focus is on performance improvement and organizational development.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4050 - Entrepreneurship and Performance Improvement

3 hours

The role of small business and the utilization of technology for performance improvement are addressed along with the advantages and limitations of small business ownership. Small business planning and operation are explored through the development and use of technology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4060 - Project Management and Applied Technology Performance Improvement

3 hours

Explores the life cycle of defining, planning, executing and delivering a project. Students learn and apply the processes and methods of project planning, management and evaluation through a simulation activity. The use of technology applications is addressed to improve human performance.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4070 - Principles of Leadership, Empowerment and Team Building

3 hours

The nature and scope of leadership and empowerment as it relates to applied technology and industrial training environments; the techniques for leadership, empowerment and team building are emphasized.

Prerequisite(s): Junior standing or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4100 - Technology Integration

3 hours

Computers in education; computer topics covered in formal and informal learning. Motivation and objectives in computer education; some programming language. Instructional uses of the computer, topics in curriculum integration.

Prerequisite(s): LTEC 1100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4110 - Instructional Design in Career and Technical Education

3 hours

Development and use of resources for preparing contextual learning and instruction, presenting lessons and assessing learner performance. Strategies for infusing employability skills, work-based learning and applying instructional technology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LTEC 4120 - Instructional Strategies in Career and Technical Education

3 hours

Basic instructional techniques and media commonly utilized in applied technology, training and development; emphasis is placed on illustrated presentations and technical demonstrations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LTEC 4121 - Technical Presentation Skills

3 hours

Emphasis on technical presentation skills and electronic presentation media commonly utilized in training and development. Topics such as developing an audience profile, arranging facilities, topic introduction techniques, questioning and summary strategies are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LTEC 4130 - Professional Responsibilities and Management in Career and Technical Education

3 hours

Examines the role and responsibilities of career and technical education professionals as well as the importance of creating a classroom and laboratory environment that fosters a positive learning climate. The role and responsibilities of career and technical education professionals as well as technology applications, effective time management, standards for student conduct and teacher liability are addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LTEC 4140 - Work-Based Learning in Career and Technical Education

3 hours

Study of the basic standards and recent changes in work-based learning. Emphasis is placed on developing materials to effectively facilitate the work-based learning component of a workforce education program.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4160 - Advanced Computer Applications in Education and Training

3 hours

Designed as an advanced preparation for students preparing to enter organizations in education or training that utilize modern computer-based technologies that include: graphic applications, telecommunications, networking, programming and computer-based training.

Prerequisite(s): None.

# LTEC 4200 - Performance Improvement in Education and Training

3 hours

Introduction to the history, theory and practice of human performance technology in education and training. Explores the systemic process of analysis, intervention development, change implementation and process evaluation involved in performance improvement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4210 - Digital Multimedia in Education and Training

3 hours

Production of multimedia materials using digital video and audio production techniques. Project management teams, instructional design, editing techniques, digitizing, using a video camera, and production/post-production techniques are covered.

Prerequisite(s): LTEC 3220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4230 - Directed Occupational Internship in Industry or Training

1-3 hours

Supervised individual work experience in a recognized occupation or field of specialization.

Prerequisite(s): Consent of department.

(2000 clock hours equals one year of experience or 8 semester credit hours.) For those who meet the necessary state-mandated requirements for years of work experience these credits can be granted for successful completion of an occupational competency examination. May be repeated up to 24 hours of credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4440 - Advanced Instructional Strategies

3 hours

Emphasis on advanced instructional techniques; including questioning, discussion, problem-solving, motivation, and instructional development used in applied technology and industrial training setting.

Prerequisite(s): COMM 1010 or LTEC 4120 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4470 - Human Relations in Business, Education and Industry

3 hours

A study of the components of human relations and interpersonal communication factors in business, education, trade and industrial education and training programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4490 - Serving Learners from Special Populations in Applied Technology Programs

3 hours

Introduction to identification, assessment, instructional and curriculum modifications, support services and evaluation of learners from special populations (e.g. disadvantaged, disabled and limited English-speaking) in applied technology programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4510 - Communications in Business, Education and Industry

3 hours

Important factors in succeeding on the job. Emphasis is placed on communication, strategies for conducting meetings and seminars, conflict management, developing and arranging agendas, itineraries, minutes and business reports, designing and using business graphics, and job-getting communication.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LTEC 4550 - Network Systems Administration

3 hours

Study of file and print network services in a directory services environment. Topics include server configuration, user management, resource allocation, risk management, and disaster recovery.

Prerequisite(s): LTEC 3530.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

#### LTEC 4560 - Internet Services Administration

3 hours

Design and implementation of Internet information services including FTP, NNTP, World Wide Web and streaming media. Conferencing using H.323 and T.120 standards-based systems. Students both design and build various information services using representative software tools and hardware platforms.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4610 - Team Cognition

3 hours

This interdisciplinary course focuses on describing, exploring, and understanding human cognition in social settings. This course explores the meaning of cognition with emphases on cognition as a shared activity rather than just an individual activity. This course covers evidence-based literature from other cognate disciplines such as anthropology, biology, computer science, psychology, sociology, and other social sciences.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4620 - Team Decision Making

3 hours

This course provides overview of individual decision making techniques then extends the conversation to include group level decision making techniques and theories. Students will be able to identify and distinguish between various problem types (i.e., simple problems, complex problems, wicked problems). Students will learn how to address complex and wicked problems using different group decision making tools and processes.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4630 - Evaluation, Measurement and ROI

3 hours

This course covers evaluation techniques for assessing the performance of individual team members and teams. Different evaluation models for the workplace will be presented along with coverage of topics related to assessing return on investment (ROI).

Prerequisite(s): None

## LTEC 4640 - Team Coaching

3 hours

This course covers coaching tools and techniques focused on coaching (i.e., individual members, teams, and groups of teams). This course reviews coaching and how coaching can be applied in the workplace to aid teams perform more effectively and to manage its own resources and team processes. Students will gain an understanding of some coaching skills and will learn specific coaching techniques that can be applied to teams and small group settings in the workplace.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4740 - Instructional Internship in Applied Technology and Training

3-6 hours

Supervised observation and instructional practice in an approved applied technology program or industrial training environment; discussion and evaluation seminars are scheduled.

Prerequisite(s): Consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4741 - Learning Technologies Capstone

3 hours

A capstone course designed for students to synthesize the knowledge, skills, and attitudes learned throughout the undergraduate applied degrees with concentrations supervised by the Department of Learning Technologies. Students will demonstrate their ability to articulate career pathways, apply technology in the workplace, and contribute to the organizational structure of either business and industry or education.

Prerequisite(s): This course may only be taken during the final term/semester of the LTEC professional development sequence.

May only be taken during the final term/semester of the ATPI professional development sequence.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4800 - Studies in Education

1-3 hours

Organized classes for program needs.

Prerequisite(s): Consent of department.

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LTEC 4830 - Practicum, Field Problem or Internship

3 hours (1;0;6)

Supervised professional activities in computer education.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LTEC 4900 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

### LTEC 4910 - Special Problems

1-3 hours

Prerequisite(s): Consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LTEC 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# Linguistics

## LING 1020 - Speech for International Students

3 hours (3;2)

Designed for international students learning English as a second language. Emphasis on improving oral English communication skills through lectures and labs on speech sound production, vocabulary, grammar, word order, intonation and idioms. Individual and small-group work.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

### LING 1312 - Academic Grammar and Writing for International Students

3 hours

Provides students with the skills needed to think critically and creatively while learning to analyze the modes of communication in academic writing. Students will read texts, articles, attend events, work collaboratively with their classmates and develop effective academic communication and critical thinking skills.

Prerequisite(s): None.

May be substituted for ENGL 1310 by international students only.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 1322 - Research Writing and Preparation for International Students

3 hours

Students write a research paper on language and science related topics, work collaboratively with their classmates to learn how to disseminate research via social media, poster/ power point presentations, and publishable papers. Students learn about research ethics, IRB clearances, and citation standards in the American context.

Prerequisite(s): LING 1312 or equivalent.

May be substituted for ENGL 1320 by international students only.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 2040 - Endangered Languages

3 hours

Global survey of cultures, political ecologies and environmental issues related to language endangerment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 2050 - The Language of Now: Pop Culture, Technology and Society

3 hours

Explores the relationship among pop culture, rapidly changing technology and language change. Examines the linguistic significance of new technologies such as texting, gaming, instant messaging and social networking.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 2060 - Language and Computers

3 hours

An introduction to the theory and practice of human language technology. Topics include text encoding, search technology, tools for writing support, machine translation, forensic linguistics, dialog systems, computer-aided language learning, and the social context of language technology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LING 2070 - Language and Discrimination

3 hours

Examines the ways language plays a role in social and political issues, particularly with respect to questions of gender, race, ethnicity and social identity. Investigation of ideologies about language and language variation, issues surrounding regionally and ethnically linked dialects, hate speech and political correctness, and language-based discrimination locally and globally. The following questions are addressed throughout the semester: how are people discriminated against based on their language variety; can a person's language affect access to employment, education, housing, medical care; what is the media's role in shaping our views of language; how are we socialized into language discrimination; what does it mean to speak a standard variety of a language; who/what determines the standard form of a language; what are the consequences of hate speech; can you sound gay, white, rich, poor, uneducated; what is linguistic profiling; what is the relationship between gender and language.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

# LING 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by freshman or sophomore honor students under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 3010 - African American English

3 hours

Examines the history, linguistic structure, social dimensions, and political and educational debates of African American English.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 3020 - Forensic Linguistics

3 hours

This course investigates the role that language and linguistics play in legal oral and written discourse, specifically in the areas of semantics, pragmatics, discourse analysis and sociolinguistics. We will study how linguistic science can be explored and applied in legal settings. Case studies and practical real-world strategies, including criminal investigations, trial, and judicial procedure will provide an explicit connection between theory and practice.

Prerequisite(s):

None.

### LING 3040 - The Politics of Language

3 hours

Study of the inevitable interactions between language use, and the displays and distribution of power among speakers. Course focuses on what constitutes political speech - be it the in the privacy of individuals' interactions, or in the more public arena of institutions, or group management. It is in the context of the tripartite subclassification of power, politics, and structure that the course investigates the role of language in producing and reinforcing unequal relations of dominance in society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

#### LING 3050 - Communication Across Species

3 hours

This course considers perspectives and issues of animal and human language and communication using cross-disciplinary evidence from different fields. Two major questions are being addressed and explored: "How do humans and non-humans communicate?" and "What are the similarities and differences in communicative abilities between humans and non-humans?"

No previous knowledge of linguistics is required.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 3060 - Principles of Language Study

3 hours

Introductory linguistics course that focuses on the structure of English (phonology, morphology and syntax). Includes language acquisition and development, the history of English, dialects of American English, and problems of usage. Students who have taken LING 3070 may not take LING 3060.

Prerequisite(s): None.

For non-majors.

Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 3070 - Introduction to Linguistics

3 hours

Introduces students to the richness and complexity of human language. Focuses on the fundamentals of phonetics, phonology, morphology syntax, semantics and pragmatics.

Prerequisite(s): For linguistics majors and minors only. Consent of linguistics program undergraduate advisor is required for non-majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 3080 - Language and Society

3 hours

Survey of the quantitative and qualitative analytical approaches used to understand language as a social practice. Analyzing the fluid, rather than static, structure of language, as it exists and changes in the service of people and communities.

Prerequisite(s): LING 3060 or LING 3070.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 3090 - Discourse Analysis: Talking and Telling

3 hours

Methods and concepts of discourse analysis and conversational analysis. Applying these methods to the study of spoken language.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 4010 - English Language in America

3 hours

Linguistic analysis of historical and contemporary American English; regional and social variations.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

#### LING 4020 - Structure of Modern English

3 hours

Modern English grammar, morphology and syntax; principles of analysis and various theories of English structure; relationship between linguistic structure, rhetorical pattern and literary style.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 4030 - Acquisition of English as a Second Language

2 hours

Study of language acquisition, development, production and comprehension focusing on the application of current research findings to the context of learning and teaching English as a second language

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department. Non-majors may also substitute LING 3060 for LING 3070.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 4040 - Phonetics and Phonology: The Sound Patterns of Language

3 hours

Explores two fundamental aspects of the sounds used in human language: phonetics and phonology. Analyzes the sounds of English and other languages spoken around the world.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

### LING 4050 - Morphology

3 hours

This course will introduce students to the foundations of morphological analysis, providing descriptive and analytical techniques for understanding the internal structure of words.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4055 - Syntax

#### 3 hours

Introduces students to the foundations of syntactic analysis and to the descriptive and analytical techniques for understanding the internal structure of sentences of typologically different language systems.

Prerequisite(s): LING 3070

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4060 - Scientific Methods

3 hours

Provides an introduction to a range of quantitative and qualitative research methods widely applicable in linguistic research and to the different steps involved in scientific investigation and academic writing. Students will learn techniques for using library resources, formulating research questions, writing a literature review, collecting and analyzing data, preparing and writing a research proposal for a language study.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 4070 - History of the English Language

3 hour

Evolution of Modern English from Indo-European through Old English and Middle English.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

# LING 4080 - Teaching English as a Second Language

3 hours

Theory and method of teaching English as a second language. Study of major approaches with specific attention to methods of teaching, listening, speaking, reading and writing.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of linguistics program undergraduate advisor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4090 - Semantics and Pragmatics

3 hours

Introduction to the linguistic sub-discipline of semantics. Examines how meaning emerges at the word, sentence, constructional and utterance levels, and how it is required by second language users. Includes an introduction to empirical methods for the study of meaning.

Prerequisite(s): LING 4055 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

### LING 4100 - Poetics

3 hours

Examines the universal language of linguistic power and how writers choose their words and sequences of words.

Prerequisite(s): LING 3060 or LING 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LING 4120 - Migration and Language Contact

3 hours

Study of the linguistic and social patterns resulting from language contact due to migration. Topics include lexical and structural borrowing, code switching and formation of pidgins, creoles, and mixed languages.

Prerequisite(s): LING 3060 or LING 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

### LING 4130 - Discovering Language from Data

2 hours

Application of computational tools to curate, analyze and produce a variety of research products from text, video and audio language data, including methods of language transcription, data analysis and presentation formats.

Prerequisite(s): LING 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

### LING 4135 - Python Programming for Text

3 hours

Teaches Python programming focusing on applications for text.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LING 4140 - Computational Linguistics

3 hours

Study of the foundational methods used for the automated analysis of language, as well as how linguistic knowledge influences those methods. Students also learn basic Python programming and work with the Natural Language Toolkit.

Prerequisite(s): LING 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LING 4410 - World Englishes

3 hours

Examines the historical and political reasons for the spread of English around the world and the creation of new varieties of English. Unique formal structures, pragmatic and conversational principles of interaction used in local and global print and broadcast media, creative fiction, and technical writing. Includes a survey of how English is taught around the world.

Prerequisite(s): LING 3060 or LING 3070.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$13.78

## LING 4800 - Special Seminar in Linguistics

3 hours

Study of linguistics that extends scope of traditional offerings.

Prerequisite(s): LING 3070. Students who have received credit for LING 3060 with a grade of A prior to declaring a major in linguistics may substitute LING 3060 for LING 3070; or consent of department.

May be repeated for credit as topics vary.

#### LING 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4950 - Senior Capstone Field Experience

3 hours

Applies the tools used for linguistic research and conducting linguistic fieldwork; transcribing, coding and analyzing linguistic data; and presenting research before an audience.

Prerequisite(s): Linguistics majors only. Students must complete LING 4060 prior to registering for the Senior Capstone.

Must be taken in the final year of major. May not be taken in the same semester as LING 4060.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## LING 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$13.78

## **Logistics and Supply Chain Management**

## LSCM 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 3960 - Logistics and Supply Chain Management

3 hours

Analysis and design of domestic and international logistics systems. Topics include transportation, warehousing, inventory control, materials handling and packaging, and plant and warehouse locations within and between firms. Emphasis on concepts and practices that provide firms with a competitive advantage.

Prerequisite(s): Junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# LSCM 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4360 - Global Alliances and International Supply Chain Management

3 hours

Supply chain and alliance strategy in the multi-national firms. Materials management, international sourcing and distribution, and importing/exporting procedures. International carrier management and operations are examined.

Prerequisite(s): LSCM 3960.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4510 - Logistics and Business Analysis

3 hours

Analyses of logistics case studies and development of issue-based problem solving skill sets and tools. Development of business analysis frameworks and application of Excel-based optimization tools to assess shareholder value implications of logistics solutions.

Prerequisite(s): LSCM 3960.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4530 - E-Logistics in Supply Chain Management

3 hours

Comprehensive inquiry into the role of e-commerce in collaborative distribution and logistics relationships. Special attention is afforded to resource and technology interdependencies, exchange governance mechanisms and relationship management bench-marking. Emphasis is given to the tools for creating value in the supply chain.

Prerequisite(s): None.

# LSCM 4540 - Logistics Application of Enterprise Resource Planning Systems

3 hours (2;2)

Students gain first-hand experience in Enterprise Resource Planning (ERP) systems through a combination of lectures and lab exercises. Special attention is paid to interdependencies between logistical (SCM) and back office software functions such as finance (FI), controlling (CO) and human resources (HR). Students learn how to navigate, analyze data, and develop solutions for supply chain management problems using a modern, commercially available ERP system. Students learn how to work through key tasks in all major modules and develop greater understanding of the underlying supply chain business processes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4550 - Logistics Systems Modeling/Simulation

3 hours

Introduces MKTG and LSCM systems modeling and simulation approaches for logistics and supply chain management. Modeling includes the physical, mathematical or otherwise logical representation of a system, entity, phenomenon or process, and simulation is a method for implementing a model over time in an effort to design, test, or analyze a "real-world" system. Modeling tools are used with a focus on a general purpose and a specialization with specific software tools (i.e., SIMIO). Along with individual assignments, students work in groups partnered with industry to build a simulation that addresses a "real-world" problem.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4560 - Business Transportation Management

3 hours

Principles of transportation covering the role of transportation systems; environmental and economic impacts; modal components; managerial and economic aspects of the various modes, with applications to both domestic and international operations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4800 - Logistics Internship

3 hours

Supervised work in a job related to the student's career objectives.

Prerequisite(s): LSCM 3960

Must be within two long terms/semesters of graduation at the time of the internship and have consent of department chair or internship director. Pass/no pass.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# LSCM 4810 - Special Topics in Logistics and Supply Chain Management

3 hours

Investigation, analysis and discussion of a variety of topics that are important in logistics and supply chain management. Topics may include supply chain management, transportation, logistics, distribution and channel management.

Prerequisite(s): LSCM 3960.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4860 - Advanced Logistics Management

3 hours

Application of logistics decision-making tools and skills as they apply to inventory, transportation, and warehouse management. Course stresses hands-on application of analytical tools useful in logistics; analysis of the characteristics of logistics system elements and their interrelationships within a company; developing skills to analyze technical logistics problems; and developing executive-level communications skills leading to the concise statement of problems and proposed solutions.

Prerequisite(s): LSCM 3960.

Capstone course to be taken during the last term/semester of course work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4900 - Special Problems

1-3 hours

Supervised study on a selected logistics and supply chain management topic. Typically requires a research paper and significant independent study.

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## LSCM 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Management

## MGMT 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3330 - Communicating in Business

3 hours

Development of interpersonal business communication skills in the following areas: group communication, written communication (collaborative writing and business letters, memorandums and reports), oral communication (business presentations, meetings and interviews), and listening. The following topics are also addressed: international communication and electronic communication technology.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MGMT 3610 - Small Business Development I

3 hours

Objective is to enhance students' immersion and engagement in the entrepreneurial process through hands-on experience of developing a business and preparing students for actual execution of a business project in an existing or new business. Covers a series of topics which provide the fundamental theoretical background for business development. Topics include economic and environmental context, financial literacy, motivation and leadership, ethics in free enterprise, business idea generation and project execution. Involves the preparation of a business project that includes the development or re-design of a business.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3720 - Organizational Behavior

3 hours

Individual behavior in formal organizations. Cases, lectures and experiential exercises in organizational culture, motivation, leadership, dynamics of power, perception and attribution, communication, decision making and performance, and individual differences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# MGMT 3721 - Essentials of Organizational Behavior for Non-Business Majors

3 hours 45

Junior-level survey course designed to introduce non-business majors to the management of organizations and organizational behavior. Exposes students to the key concepts of the discipline with an emphasis on OB as a practical field. Topics include work attitudes, motivation, leadership, group and team processes, and decision-making.

Prerequisite(s): For non-business majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MGMT 3810 - Principles of Family Business

3 hours

Explores the unique managerial issues associated with family businesses, the dynamics and competitive positioning of family businesses, as well as their contribution to the economy. Emphasis on student application of material and on proposing solutions to problems in organization, management, and succession in family business contexts. Topics may include family and business relationships, management and strategy issues unique to family businesses, succession and wealth management, nonfamily management recruitment and compensation, and harnessing new visions and innovations in leadership transitions.

Prerequisite(s): MGMT 3850

Open to business and non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3820 - Management Concepts

3 hours

Management philosophy; planning, organizing and controlling; entrepreneurial processes; organizational performance; structure and design. Includes an overview of organization theory and strategic management.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MGMT 3850 - Foundations of Entrepreneurship

3 hours

Initiation of new ventures. Emphasis on developing effective entrepreneurial skills, analytical abilities, market analysis capabilities, and understanding of principles of successful entrepreneurial actions. Includes preparation of a feasibility study.

Prerequisite(s): None.

Open to non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3860 - Human Resource Management

3 hours

Introduction to personnel management. Topics include employment, placement and personnel planning, training and development; compensation and benefits; health, safety and security; and employee and labor relations.

Prerequisite(s): None.

Open to non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3870 - Management Research Methods

3 hours

Develops skills in management research methods necessary for problem-solving success. Particular emphasis is given to applying theory to management decision making based on objective methods for solving problems in organizational behavior, human resource management, entrepreneurship and operations.

Prerequisite(s): DSCI 2710 or equivalent and completion of all prebusiness courses.

#### MGMT 3880 - Business Ethics and Social Responsibility

3 hours

A study of ethical behaviors crucial to personal and corporate success in organizations. Codes of ethics, theoretical models and managerial behavior serve as the foundation to investigate ethics and, in turn, social responsibility associated with firm theory. Various stakeholder interest and demands are analyzed as an important theme during the course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4100 - Business Planning for Entrepreneurs

3 hours

Comprehensive planning of new ventures. Emphasis on business plans, selecting business models and revenue sources, refining effective entrepreneurial skills, project funding, and generating a marketable plan for a viable new business. Includes preparation of a comprehensive business plan and presentations.

Prerequisite(s): MGMT 3850.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4130 - Human Resource Information Systems and Analytics

3 hours

The course is designed to expose students to the concepts and issues associated with the management of an HRIS (Human Resource Information System). The course will address the strategies for determining the need for, the implementation of, the effective operation and management of, and the assessment of an HRIS. The course will review issues associated with the centralized, digital management of personnel records, including legal and ethical issues that may arise. Students will be exposed to concepts of data processing and basic technical components of operating an information system. The course will explore with students the tenuous balance of simultaneously managing technology and people, as a part of database management in a human resources position.

Prerequisite(s): MGMT 3820 or MGMT 3720 or MGMT 3860.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# MGMT 4150 - Power, Influence and Politics in Organizations

3 hours

This course provides a framework for analyzing the sources of power in organizations, and the circumstances that lead to its attainment and effective use. It also offers frameworks for evaluating political behaviors on both pragmatic and ethical grounds.

Prerequisite(s): MGMT 3820 or MGMT 3720 or MGMT 3860.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4170 - Employee and Labor Relations

3 hours

Employee-employer relationships; problems and theories of the bargaining process.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4180 - Workplace Health and Safety

3 hours

Problems of occupational safety and health (OSHA) workers' compensation, unemployment compensation, industrial security and environmental risk management.

Prerequisite(s): One of the following courses: MGMT 3820, MGMT 3720, MGMT 3721 or MGMT 3860.

Open to non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4200 - Strategic Processes

3 hours

Study of the context and concepts of strategic decision making. Topics include strategic leadership, corporate governance, international influences on strategic decisions, and strategic risk management.

Prerequisite(s): Senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# MGMT 4210 - E-Management: Managing in a Digital Economy

3 hours

Deals with the "why" and "how" of the changing face of management. Focuses on what managers do to maintain and enhance their firm's competitive position in the era of e-commerce. Examines and evaluates some of the more critical issues associated with analyzing the environment, designing organizations and managing people to deal with the challenges that emerge in the new business environment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4220 - Entrepreneurial Growth and Strategy

3 hours

Management of entrepreneurial ventures with an emphasis on application and integration. Students will learn about the stages of venture growth and development, key success factors, strategies and theoretical frameworks to make sense of and appreciate the challenges in sustaining and managing an entrepreneurial venture in a variety of contexts.

Prerequisite(s): MGMT 4100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4235 - Social Entrepreneurship

3 hours

Introduces entrepreneurial concepts that can be used to stimulate entrepreneurial behavior in individuals for the benefit of communities. Students study best practices of not-for-profit enterprises and social venturing practices and learn how these enterprises launch and sustain their ventures. Primary focus is on equipping students with knowledge and skills that are needed to develop viable socially relevant organizations or to grow entrepreneurial initiatives in not-for-profit organizations. Course may include projects.

Prerequisite(s): None.

## MGMT 4300 - Talent Acquisition and Management

3 hours

Recruitment, selection and placement of employees in an organization. Test validation and other selection techniques relative to EEO, ADA and AAP laws. Recruiting, selecting and placing a culturally diverse work force.

Prerequisite(s): MGMT 3660 and one of the following: MGMT 3720, MGMT 3721, or MGMT 3820.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4310 - Talent Management in the Sports Entertainment Industry

3 hours

Explores the unique managerial issues associated with talent management in the professional sport entertainment industry. Emphasis is on student application of material and proposing solutions to problems in developing, recruiting and managing talent in the professional sport entertainment industry. Subjects discussed in the course are talent development programs in youth sports, player evaluation strategies around the world, draft and trade strategies, contract law, mentorship, and career development off and on the field.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MGMT 4330 - Administrative Communication

3 hours

Development of administrative communication skills including factors affecting the communication process and its effects on specific organizational/personnel situations. Topics include organizational communication, interviewing (selection, disciplinary, counseling, orientation and exit), policy manuals, communication audit tools, gender-related communication differences and electronic communication media.

Prerequisite(s): MGMT 3330 or equivalent experience and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4335 - Technology and Innovation Management

3 hours

Examines frameworks and concepts to understand technology and innovation management in businesses. Topics may include areas such as technology entrepreneurship, product and process innovation, innovation process theories, etc. Main focus is on equipping students with the skills and ability to manage, develop and expand technological innovation. May include projects and applied exercises.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4460 - Topics in Organizational Behavior

3 hours

Study of individual and group behavior in organizations. Representative topics include employee motivation, leadership, organizational power and politics, decision making and performance, organizational culture, perception and attribution, and individual differences. Students study one or more of these topics in depth.

Prerequisite(s): MGMT 3720 or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MGMT 4470 - Leadership

3 hours

In-depth course on leadership. Students are provided practical tools and methods of leadership that apply to a variety of organizational structures. Students gain insights about their own personalities, skills,

ethics, values and beliefs as they relate to leading others, and have the opportunity to discuss and debate a number of leadership topics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4560 - Topics in Entrepreneurship

3 hours

Study of entrepreneurs, entrepreneurship, and new business. Representative topics include start-up motives, strategic issues in small and entrepreneurial businesses, franchising, behavioral issues in small business management, legitimacy of new business, international aspects for new and small businesses, family business, succession, growth and alliances for small businesses, decision making and the entrepreneur. Students study one or more of these/ such topics in depth.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4660 - International Management Perspectives

3 hours

A comprehensive framework is used to study the management of multinational operations in cross-cultural environments with a focus on the decisions that managers must make. Topics include strategic planning, organization, human resources, operations management, entrepreneurship and ethics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4710 - Family Entrepreneurship

3 hours

Explores the unique managerial issues associated with family businesses, the dynamics and competitive positioning of family businesses, as well as their contribution to the economy. Emphasis on student application of material and on proposing solutions to problems in organization, management, and succession in family business contexts. Topics may include family and business relationships, management and strategy issues unique to family businesses, succession and wealth management, nonfamily management recruitment and compensation, and harnessing new visions and innovations in leadership transitions.

Prerequisite(s): MGMT 3850.

Open to business and non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4790 - Comprehensive Talent Management

3 hours

Integrative course to prepare students to enter the human resources field as qualified professionals. Intensive review of the functional disciplines in the HR field are integral to the course. Students study and evaluate theories of human resources management; engage in practical applications of theory through participation with employers engaged in solving HR problems within their workplace or identifying HR needs; explore the pragmatic implications of the professional human resource certification process and what it means for HR professionals in the global economy during the 21st century; and demonstrate integrative knowledge of HR functions relative to each other and to other functional areas within an organization.

Prerequisite(s): MGMT 3820 or MGMT 3720, and MGMT 3860.

To be taken within the final 9 hours of course work.

#### MGMT 4800 - Internship

3 hours

Supervised work in a job related to student's career objective.

Prerequisite(s): Student must meet the employer's requirements and have consent of advisor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4840 - Strategic Rewards and Performance Management

3 hours

Wage and salary administration in public and private organizations; determinants of general wage and salary levels and structures; total compensation systems; interrelationship among employee performance, intrinsic and extrinsic rewards, perceived equitable payments, and employee satisfaction.

Prerequisite(s): MGMT 3860 and one of the following: MGMT 3720, MGMT 3721, or MGMT 3820.

Open to non-business majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4860 - Organizational Design and Change

3 hours

Organizational design is a primary management tool for organizing business processes and developing organizational capabilities. The course focuses on developing an understanding of the basics of organizational design, how to utilize organizational design principles to manage change, and how to keep the design aligned with the needs of the firm and the demands to which it must respond. The design and development effort includes study of organizational structures, the basic work patterns of the organization, organizational cultures, managerial roles, and the use of teams.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4870 - Business Planning in the Sports Entertainment Industry

3 hours

Advanced course for BBA BUIS students in the track of Sport Entertainment Management. Allows students to combine and apply the content from previous course work to the conceptualization of a business plan and present it to representatives of the sport entertainment industry. Guest speakers from the various segments of the industry share their experiences and provide mentorship to the students in their development of the business plan.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4890 - Legal Aspects of Employment Practices

3 hours

Current legislation and its impact on human resources policy and practices.

Prerequisite(s): MGMT 3820 or MGMT 3720 or MGMT 3860.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MGMT 4900 - Special Problems

3 hours

Supervised study on a selected management topic. Typically requires a research paper and significant independent study.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MGMT 4910 - Special Problems

3 hours

Supervised study on a selected management topic. Typically requires a research paper and significant independent study.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MGMT 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Manufacturing Engineering Technology**

## MFET 3110 - Machining Principles and Processes

3 hours (2;3)

Machine tool manufacturing techniques emphasizing sequence of operations, cutting tool geometry, tooling systems, tool materials and performance characteristics, cutting forces, speeds, feeds, surface finish, horsepower calculation and cutting fluids.

Prerequisite(s): MATH 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MFET 4190 - Quality Assurance

3 hours

Review of statistics and discussion of statistical process control (SPC). The study of quality management, including preproduction supplier, in-process and finished product quality; methods of statistical analysis and quality audits, costs and employee training.

Prerequisite(s): MATH 1720.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MFET 4200 - Engineering Cost Analysis

3 hours

Principles and techniques for cost evaluation of engineering design including: labor, material, direct, indirect, fixed, variable costs, parametric cost estimation techniques, forecasting tools and techniques, time value of money, depreciation methods and taxes, replacement, breakeven and sensitivity analyses, evaluation of single and multiple projects alternatives, decision making considerations, and introduction to business accounting .

Prerequisite(s): MATH 1720.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MFET 4210 - CAD/CAM System Operations

3 hours (2;3)

CAD/CAM programming, compilation of generic tape files for N/C and CNC machine tools local N/C and CNC part programming and operational techniques, G codes and M codes.

Prerequisite(s): MFET 3110, ENGR 1304. Completion of math and science requirements.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MFET 4220 - CNC Programming and Operation

3 hours (2;3)

Local programming and operation of CNC machining and turning centers, including programming of fixed cycles; program troubleshooting, editing and optimizing; setting work coordinate system selections; and setting tool geometry offsets.

Prerequisite(s): MFET 4210 or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## Marketing

## MKTG 2650 - Culture and Consumption

3 hours

Critically examines how shifts in U.S. demography impact marketplace decisions. Focuses on first- and second-generation immigrant populations, and how these consumers' values, attitudes and lifestyles are reflective of their cultural identities and ensuing consumption behaviors. Examines the connection between cultural identity, including ethnic, gender and generational diversity, and its relationship to brand preference formation, retail patronage and consumer dissonance.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MKTG 3010 - Professional Selling

3 hours

Professional selling principles and practices for business applications. Principles of communication, listening, selling yourself and a business sales model. Students develop and present two sales presentations. Satisfies the CoB business foundation communication requirement.

Prerequisite(s): None.

Open to all majors.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 3650 - Foundations of Marketing Practice

3 hours

Survey of marketing concepts and practices and overview of the range of activities performed by marketing managers. Topics include the identification of market opportunities, strategic marketing planning, product/service development and management, price setting and management, establishing and managing distribution channels, and structuring promotional programs.

Prerequisite(s): Junior standing

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 3651 - Foundations of Marketing Practice for Non-Business Majors

3 hours

An introductory survey of marketing terminology, concepts and practices from an applied perspective. Emphasis is on the activities performed by marketing managers to address real world marketing problems. Primary emphasis is on the identification of marketing opportunities and the planning and execution of marketing mix activities required to target these opportunities. Marketing mix topics include development and management of products/services, price setting and management, supply chain and distribution channel management, and management of integrated marketing communications. Special emphasis is given to ethical, socially-responsible and sustainable decision making and business practices. Course is designated for non-business majors.

Prerequisite(s): For non-business majors only.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 3660 - Advertising Management

3 hours

Advertising for business executives; creation of primary demand, stimuli, promotional programs, media selection, appropriation and evaluation.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

### MKTG 3700 - Marketing Metrics

3 hours

Calculate, understand and interpret fundamental metrics or indicators of performance in marketing contexts. The pedagogical method is hands-on analysis of mini-cases, problems and exercises, using hand calculation as well as computer worksheets.

Prerequisite(s): MKTG 3650 (may be taken concurrently, but completion is recommended).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 3710 - Marketing Research and Analytics

3 hours

Market-research based marketing decision making (e.g. segmentation, targeting, positioning, marketing planning, profitability management, and assessing and ROI of marketing campaigns) using qualitative and quantitative analysis techniques. Enhance knowledge and skills in data-based decision making, qualitative and quantitative analysis, statistic, and marketing intelligence in the context of marketing application. Uses hands-on experiential learning methods to impart and strengthen the required skills and knowledge.

Prerequisite(s): DSCI 3710 and MKTG 3700 (must be completed with a grade of C or higher prior to enrolling in MKTG 3710).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MKTG 3720 - Digital Marketing Fundamentals

3 hours

Students are expected to garner an appreciation for the role of digital technologies - including the internet, mobile devices, display marketing, and other emerging technologies - for creating competitive advantages in the global marketplace. Reviews concepts and methods pertinent to digital marketing, including the evolution of some key technologies and methods, and their importance in the role of marketing.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 3881 - Personal Professional Development

1 hour

Emphasis is on career development including preparation of professional resumes, developing interviewing skills and utilizing UNT placement office facilities and services. Guest speakers from various industrial settings familiarize students with professional opportunities in marketing.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

# MKTG 4020 - Ticket Operations in the Sport Entertainment Industry

3 hours

Explores how organizations in the professional sport entertainment industry can develop ticket sales strategies. Emphasis is on understanding principles and trends in ticket sales and teaching students the practice of selling. Subjects discussed in the course are pricing strategies, sales techniques, CRM software programs in ticket sales, technological advances in the sales industry (e.g. mobile phone apps, etc.), and ticket price strategies.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4120 - Consumer Behavior

3 hours

A survey of individual and organizational decision making in the acquisition, consumption and disposition of goods and services, with selected applications in market segmentation, marketing communications and marketing management. Topics include consumer and organizational behavior models and decision processes; internal influencing forces of motivation, perception, learning, personality, lifestyle and attitudes; external influencing forces of culture, subculture, demographic, social class, reference group and household.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 4230 - International Brand Strategies in the Sport Entertainment Industry

3 hours

Introduction to brands that allow students to become acquainted with brand strategies within the international sport entertainment insdustry. Students will learn the concepts of branding and how it pertains to the international sport entertainment industry. Students will be introduced to topics such as brand equity, tangible and intangible components of branding, brand communities, brand extensions, and brand growth strategies. A strong emphasis is placed upon case studies to better understand how sport organizations have used their brands to generate revenue. By the end of the course, students will be abble to apply their knowledge of international sport branding to the development of a brand strategy report that would allow a US based sport organization to expand to a foreign market.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## MKTG 4240 - Corporate Partnerships in the Sport Entertainment industry

3 hours

Explores how organizations in the sport entertainment industry can develop corporate partnerships. Emphasis is on understanding principles in corporate partnerships and/or sponsorships and student application of the materials in class. Discusses the evolution of sponsoring in the sport entertainment industry, sponsorship objectives, the sponsorship acquisition process, sponsorship activation strategies, ambush marketing, and sponsorship evaluation. Student groups develop a sponsorship proposal on behalf of a client.

Prerequisite(s): None.

## MKTG 4280 - Global Marketing Issues and Practice

3 hours

Students examine marketing decision making in an international context. Course emphasizes issues and concepts relevant to firms competing in the global marketplace, including problems and opportunities arising from the economic, legal/political, sociocultural, geographic and technological environments. Specific topics include multinational distribution, international product adaptation and cross-cultural consumer behavior. Requires a project emphasizing using and refining secondary data collection skills. Students may be required to work in a group context.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4325 - Fan Engagement Strategies in the Sport Entertainment Industry

3 hours

The course serves as an introduction course to fan relationship management that allow students to become acquainted with the unique deep emotional connections that people maintain with their sport entretainment organizations. Fans are the driving force of the sport entertainment industry, generating revenue directly through tickets, hospitality and merchandise, and directly through sponsorship and media rights. The course is aimed to allow students to examine current efforts of leading sport leagues around the world to market their organization to their fan bases and the different ways they have done so. By the end of the course, students will be able to apply their knowledge of fan relationshp management to the development of a fan engagement report for the benefit of a sport entertainment organization.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4330 - Strategic Brand Management

3 hours

Course concentrates on strategic and operational issues related to brand management—an important aspect of marketing function—its integration in the organization, management of portfolio of brands, environmental scanning, identification and creation of value to offer to consumers, budgeting, planning, and control issues. Specific areas include research, data management, analyses for planning and decision making, decisions in the areas of product/service offering, pricing, communication (advertising, sales promotion, sponsorship and publicity), channels, ethics and global implications, among others.

Prerequisite(s): MKTG 3650 and MKTG 3700 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4470 - Business-to-Business Marketing

3 hours

Focuses on developing the concepts, skills and strategies needed to successfully compete in business environments where organizations rather than individual consumers are the customers. Emphasis is placed on specialized knowledge and tools for developing marketing and sales strategies in business-to-business markets. Topics include organizational buyer behavior, team selling, relationship marketing, business market segmentation and communication.

Prerequisite(s): Consent of department.

Open only to students admitted into the BBA in marketing with a concentration in professional selling or the minor in professional selling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MKTG 4520 - Marketing Channels and Strategic Partnerships

3 hours

An examination of strategic issues involved in managing marketing channels. Topics include channel design, supply chain management and the external channels environment. Marketing channel strategy is extended to the use of strategic alliances and other collaborative distribution relationships for global competitive advantage. Special attention is directed to resource and technology interdependencies, exchange governance and relationship bench-marking.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4570 - Professional Selling Analytics

3 hours

Numbers based approach to understanding and presenting solutions to provide customer value propositions. Students learn financial and economic principles to estimate demand, forecast trends and develop cost effective solutions to customer needs. Students also learn how to use popular selling system and software solutions to optimize selling effectiveness, customer relationships, and time and territory management.

Prerequisite(s): Consent of department.

Open only to students admitted into the BBA in marketing with a concentration in professional selling or the minor in professional selling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MKTG 4600 - Retailing

3 hours

Principles and methods; store location and layout; sales promotion; buying and pricing; personnel management; credit; stock control.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4620 - E-Commerce Marketing Tools and Applications

3 hours

Explores the evolution of the Internet and the Internet's ensuing role in marketing. Introduction to web design, web authoring and web-based marketing applications.

Prerequisite(s): MKTG 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4630 - Retailing II

3 hours

Building on concepts from MKTG 4600, this course emphasizes an analytical perspective to evaluating and improving performance of retail entities. Topics include planning, allocation, buying, pricing, and store productivity.

Prerequisite(s): MKTG 3650, MKTG 4600

## MKTG 4670 - Advanced Professional Selling

3 hours

Focuses on building lasting customer partnerships through advanced sales practices. Emphasis is placed on consultative selling strategies and joint problem solving to create superior customer value. Students learn through a combination of classroom discussions, student presentations and sales call simulations.

Prerequisite(s): Consent of department.

Open only to students admitted into the BBA in marketing with a concentration in professional selling or the minor in professional selling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4770 - Sales Force Design and Management

3 hours

Emphasis on designing and implementing a sales force strategy for complex business environments. Covers the responsibilities of sales executives, field sales managers and individual sales people. Topics include sales force structure, multi-channel strategy, territory design and management, sales force compensation, motivation, leadership and mentoring. Also examines ethical and legal issues related to selling activities.

Prerequisite(s): Consent of department.

Open only to students admitted into the BBA in marketing with a concentration in professional selling or the minor in professional selling.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4800 - Internship in Marketing

3 hours

Supervised work in a job related to student's career objective or equivalent.

Prerequisite(s): MKTG 3650 and departmental consent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4805 - Internship in Professional Selling

1-3 hours

Supervised work in a job related to student's career objective or equivalent.

Prerequisite(s): Consent of department.

Open only to students admitted into the BBA in marketing with a concentration in professional selling or the minor in professional selling. The student must complete a minimum of 240 hours of work for internship credit (15 hours per week fall or spring; 24 hours per week summer). Graded.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4810 - Special Topics in Marketing or Logistics

3 hours

Investigation, analysis and discussion of a variety of topics that are important in marketing and logistics. Topics may include supply chain management, transportation, logistics, distribution and channel management, product development and management, sales management, consultative and team selling, promotion, market segmentation and opportunity analysis, and strategic pricing.

Prerequisite(s): Completion of 9 hours of upper-division marketing courses.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### MKTG 4880 - Advanced Marketing Management

3 hours

Application of concepts, tools and procedures employed by practicing marketing managers. Specific attention is given to product development and management, promotion development and management, channel selection and management, physical distribution management and price setting and management. Students acquire skills in the essentials of case analysis and written as well as oral presentation of their analysis. Oral presentations may be made using electronic media. Groups may be required for case work.

Prerequisite(s): MKTG 3700, MKTG 3710.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4890 - Applied Marketing Problems

2 hours

Capstone marketing course. Students work in team settings to analyze cases and to develop a comprehensive marketing plan, requiring integration of a wide range of marketing principles and practices. The cases, as well as the integrated marketing plan, require students to identify market opportunities and challenges, formulate actionable plans to address organizational strengths and weaknesses, and execute a marketing mix strategy. Requires both oral and written presentation of cases, as well as the marketing plan.

Prerequisite(s): MKTG 3650, MKTG 3700, MKTG 3710 and graduating senior status.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### MKTG 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## MKTG 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Materials Science and Engineering**

## MTSE 1100 - Discover How and Why Materials "Matter"

3 hours (2;0;1)

Course serves as the heart of the MSE first year experience. Topics include rationale for materials choices, composition and design of everyday items and how materials science and engineering drives innovation. Basic analysis and experimental design. A team-based hands-on project teaches the student to think critically and creatively by applying a range of analysis techniques borrowed from many engineering and science disciplines.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MTSE 2000 - Stuff Matters: Materials and Civilization

3 hours

Specifically designed for non-science and non-engineering students and meets University Core Curriculum requirements for Natural Sciences. Materials have defined the "age" in which we live throughout history, e.g. "Stone" age, "Bronze" age, "Iron" age, "Silicon" age. Materials breakthroughs and failures continue to shape our everyday lives. In this course, students will learn the basics of materials science: processing/structure/property/performance relationships. This course involves in-class and hands-on demonstrations, and guest lecturers. Students will examine historical and contemporary issues for materials scientists. Materials such as metals and their alloys, ceramics, polymers, and composites will be discussed in context of our daily lives. Students will work in teams to address modern materials issues.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 2900 - Introduction to Materials Science Research

1-3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MTSE 2910 - Introduction to Materials Science Research

1-3 hours

Individualized laboratory instruction. Students may begin training on laboratory research techniques.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MTSE 3000 - Fundamentals of Materials Science and Engineering - I

3 hours

Introduces the fundamentals of materials science and engineering, including atomic interactions, introduction of crystalline and non-crystalline structures, the concept of materials defects, the evolution

of microstructure/structure, the influence of composition and processing on microstructure, and how composition and structure impact the properties of a wide variety of engineering materials.

Prerequisite(s): CHEM 1410/CHEM 1430 or CHEM 1415/CHEM 1435.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MTSE 3001 - Fundamentals of Materials Science and Engineering - II

3 hours

This course covers the following in detail: metal alloy processing and classification; ceramic structure, properties, and processing; polymer processing and applications; composite material principles, classification, preparation and properties; corrosion degradation mechanisms, electrochemical reactions, and protection methods; electrical properties of metals, semiconductors, and dielectrics; thermal properties of metals and non-metals; magnetic material fundamentals, properties and applications; optical material fundamentals, properties and applications.

Prerequisite(s): MTSE 3000 (may be taken concurrently). Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 3003 - Fundamentals of Materials Science and Engineering Laboratory

1 hou

Laboratory designed to introduce students to the fundamentals of materials science and engineering. Students gain hands-on experience with processing and characterization of metals, ceramics, and polymers. Topics include optical metallography, tensile testing, hardness testing, impact testing, heat treating, melting and casting. Students perform experiments, analyze results, write reports, and give presentations.

Prerequisite(s): None.

Corequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

## MTSE 3010 - Bonding and Structure

3 hours

Amorphous and crystalline structures in metals, ceramics and polymers, point defects in crystals, structure determination by X-ray diffraction.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MTSE 3020 - Microstructure and Characterization of Materials

3 hours

Introduction to dislocations, grain boundaries, surfaces and multiphase microstructures. Optical and electron microscopic characterization of microstructures.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MTSE 3030 - Thermodynamics and Phase Diagrams

3 hours

First three laws of thermodynamics; phase equilibria, reaction equilibria and solution theory. Principles and applications of phase diagrams.

Prerequisite(s): MTSE 3000.

## MTSE 3040 - Transport Phenomena in Materials

3 hours

Principles of transport phenomena (momentum, heat and mass transport) in materials processes including heat, mass and momentum transport. Emphasis on applications of appropriate differential equations and boundary conditions to solve real materials processing problems.

Prerequisite(s): MATH 3410, MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MTSE 3050 - Mechanical Properties of Materials

3 hours

Macroscopic mechanical response of ceramics, metals, polymers and composite materials, with an introduction to the underlying microstructural processes during deformation and fracture. Geometrical considerations and size effects of structural components for mechanical testing; resultant stresses, strains, and deflections of components.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MTSE 3060 - Phase Transformations in Materials

3 hours

Principles of structural transformations in materials.

Thermodynamics and kinetics of nucleation, growth, precipitation and martensitic reactions.

Prerequisite(s): MTSE 3010, MTSE 3030, MTSE 3040.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MTSE 3070 - Electrical, Optical and Magnetic Properties of Materials

3 hours

Bonding and the electronic structure and properties of metallic, ceramic, semiconducting and polymeric materials.

Prerequisite(s): ENGR 3450 and MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MTSE 3080 - Materials Processing

3 hours

Basic principles and strategies for processing metals, ceramics, polymers, composites and electronic materials.

Prerequisite(s): MTSE 3040.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MTSE 3090 - Materials Science and Engineering Laboratory I

1 hour (0:1)

Laboratory designed to introduce students to some of the most common materials testing and characterization methods. Topics include optical metallography, tensile testing, hardness testing, impact testing, heat treating, melting and casting.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70; Lab (LF): \$20

# MTSE 3100 - Materials Science and Engineering Laboratory II

1 hour (0;1)

Sequel laboratory designed to continue to introduce students to some of the most common materials testing and characterization methods. Topics include differential scanning calorimetry, rheology, powder processing and sintering, density, scanning electron microscopy, and x-ray diffraction.

Prerequisite(s): MTSE 3090.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MTSE 3110 - Materials Aspects of Quantum Mechanics

3 hours

Provides a basic understanding of the materials aspects of quantum mechanics concepts as it applies to engineering students. Quantum mechanics was once mostly of interest to physicists and chemists. Nowadays, the concepts and techniques of quantum mechanics are essential in many areas of engineering and science such as materials science, nanotechnology, electronic devices, and photonics. This course provides a substantial introduction to the materials aspects of quantum mechanics and its applications. It is specifically designed to be accessible to students and technical professionals over a wide range of engineering backgrounds.

Prerequisite(s): MATH 1710 and MTSE 3000; PHYS 1420 or PHYS 2220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MTSE 3200 - Materials & Civilization

3 hours

This course is specifically designed for non-materials science and engineering students. Materials have defined the "age" in which we live throughout history, e.g. "Stone" age, "Bronze" age, "Iron" age, "Silicon" age. Materials breakthroughs and failures continue to shape our everyday lives. In this course, students will learn the basics of materials science: processing/structure/property/performance relationships. This course involves in-class and hands-on demonstrations, and guest lecturers. Students will examine historical and contemporary issues for materials scientists. Materials such as metals and their alloys, ceramics, polymers, and composites will be discussed in context of our daily lives. Students will work in teams to address modern materials issues.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MTSE 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

Academic (AF) per nour: \$32.70

## MTSE 4010 - Physical Metallurgy Principles

3 hours

Physical metallurgy principles with a focus on understanding structure-property relationships in metals and alloys. Topics include structure, dislocations, mechanical behavior, grain boundaries, annealing, recrystallization, grain growth, diffusion, phase diagrams, transformations, strengthening mechanisms, fatigue, creep and fracture. Emphasis on the basic structure-property-processing relationships in metals and how they differ from other material classes

Prerequisite(s): MTSE 3010, MTSE 3030, MTSE 3040.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

### MTSE 4020 - Materials in Medicine

2 hours

Science and engineering of materials having medical applications. Provides students with an understanding of the challenges that materials (metals, polymers and ceramics) face/create during short-and long-term contact with mammalian physiology. Develops the student's understanding of the relationships controlling acceptance or failure of a given material in the body. Exposes students to strategies used in current and future biomaterials.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MTSE 4030 - Ceramic Science and Engineering

3 hours

Emphasis on structure-property relationships: chemical bonding, crystal structures, crystal chemistry, electrical properties, thermal behavior, defect chemistry. Processing topics: powder preparation, sol-gel synthesis, densification, toughening mechanisms. Materials topics: glasses, dielectrics, superconductors, aerogels.

Prerequisite(s): MTSE 3010, MTSE 3020, MTSE 3040.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MTSE 4040 - Computational Materials Science

3 hours

Introduction to the basic principles used to simulate, model and visualize the structure and properties of materials. Topics include the various methods used at different length and time scales ranging from the atomistic to the macroscopic.

Prerequisite(s): MTSE 3010, MTSE 3030, MATH 3410.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MTSE 4050 - Polymer Science and Engineering

3 hours

Chemical structures, polymerization, molar masses, chain conformations. Rubber elasticity, polymer solutions, glassy state and aging. Mechanical properties, fracture mechanics and viscoelasticity. Dielectric properties. Polymer liquid crystals. Semi-crystalline polymers, polymer melts, rheology and processing. Thermal analysis, microscopy, diffractometry and spectroscopy of polymers. Computer simulations of polymer-based materials.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MTSE 4060 - Materials Selection and Performance

3 hours

Integration of structure, properties, processing and performance principles to formulate and implement solutions to materials engineering problems.

Prerequisite(s): MTSE 3030, MTSE 3040, MTSE 3050.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MTSE 4070 - Electronic Materials

3 hours

Intensive study of electronic, optical and magnetic properties of materials with an emphasis on the fundamental physics and chemistry associated with these material systems.

Prerequisite(s): MTSE 3000, MATH 3410.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MTSE 4090 - Senior Design I

2 hours

Provides students with experience in "real world" engineering design that draws on many of the skills that have been mastered during their studies in the Department of Materials Science and Engineering at the University of North Texas. Students exhibit an ability to design a system, component or process to meet a desired need. Two-course sequence with the first course (this course, MTSE 4090) providing the preliminary work required to complete a design project (determining project scope, technical background and literature review, planning a project, considering safety, environmental and ethics in design, preliminary design and presenting design work both orally and in writing).

Prerequisite(s): MTSE 3010, MTSE 3020, MTSE 3030, MTSE 3040, MTSE 3050, MTSE 3070, MTSE 3080.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 4100 - Senior Capstone Project

3 hours

Provides every student with experience in "real world" engineering design that draws on many of the skills that have been mastered during their studies in the Department of Materials Science and Engineering at the University of North Texas. Students will exhibit an ability to design a system, component or process to meet a desired need. Two-course sequence with the second course (this course, MTSE 4100) providing time for completion of a design project setup during the first course (evaluating the project plan from last semester, performing work toward completion of project, and presenting progress of work both orally and in writing).

Prerequisite(s): MTSE 4090.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MTSE 4110 - Metal Additive Manufacturing: Processes and Materials Science Fundamentals

3 hours

Additive manufacturing is the formalized term for what used to be called rapid prototyping and what is now popularly called 3D Printing. This course will emphasize the fundamentals of additive manufacturing processes focusing on metals. The broad range of additive manufacturing processes, devices, capabilities and materials that are available will be discussed in this course. The course will also cover some basics of solidification, solid-solid phase transformations, and the broad physical metallurgy associated with AM processes.

Prerequisite(s): MTSE 3000 or equivalent. May be taken concurrently.

# MTSE 4120 - Micro-electro-mechanical-systems (MEMS): Materials, Devices and Applications

3 hours (2;1)

This course is designed to provide an introduction to conventional micro-electro-mechanical systems (MEMS), where the course starts with an overview of the semiconducting properties of silicon, the workhorse of the microelectronics industry. The impact of continued miniaturization on transistor performance is highlighted according to Moore's Law. Moving from Silicon as an electronic material, its mechanical properties are discussed which has been pivotal in the creation of the field of MEMS. A review of microfabrication technology conventionally used to form MEMS structures and devices using batch-fabrication is provided, which includes topics such as: photolithography, etching, physical vapor deposition, chemical vapor deposition, surface micromachining, and bulk micromachining. Soft materials and thick film processes are also discussed that have been key enablers for microfluidics and BioMEMS. The practical applications of MEMS for sensors and actuators are highlighted, where electrostatic, thermal, piezoelectric and magnetic transduction schemes are used for actuation and sensing, including for RF wireless systems and bio-related applications for Lab-on-Chip (LOC). Students will gain a broad perspective in the area of miniaturized systems for sensors and actuators. The laboratory modules are intended to reinforce the concepts discussed in the lectures, with practical hands-on learning exercises. The lectures and accompanying lab modules will help cultivate interdisciplinary perspectives with hands-on exercises developed for the students.

Prerequisite(s): PHYS 1710. CHEM 1410/CHEM 1430 or CHEM 1415/CHEM 1435 or equivalent.

May not be counted toward a major or minor in Materials Science and Engineering.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MTSE 4500 - Internship in Materials Science

3 hours

Supervised industrial internship requiring a minimum of 150 hours of work experience.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 4580 - Materials for a Sustainable Environment

3 hours

Properties of renewable and nonrenewable, sustainable and nonsustainable materials, effects of product application and needs on material choices for a sustainable environment; degradation mechanisms; and influence of the environment on mechanisms.

Prerequisite(s): PHYS 1710/PHYS 1730, MATH 1710. CHEM 1415 or equivalent or CHEM 1410/CHEM 1430.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 4620 - Scanning Electron and Ion Microscopy

3 hours

Introduction to the theoretical and applied aspects of scanning electron and ion microscopy. Introduces a variety of analytical techniques that may be exploited when characterizing engineering materials using scanning electron and ion microscopes, including imaging, energy dispersive X-ray microanalysis, electron backscattered diffraction and focused ion beam techniques.

Prerequisite(s): MTSE 3000 and MTSE 3020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 4900 - Special Topics in Materials Science and Engineering

1-3 hours

Lectures, laboratory or other experiences covering specially selected topics in materials science and engineering.

Prerequisite(s): MATH 1710, CHEM 1410/CHEM 1430.

May be repeated as topics vary. Maximum of 8 credits allowed.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MTSE 4910 - Materials Science Research

1\_3 hours

Introduction to research; may consist of an experimental, theoretical or review topic.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MTSE 4920 - Cooperative Education in Materials Science

3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objectives.

Prerequisite(s): 12 hours of credit in materials science; student must meet employer's requirements and have consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MTSE 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Mathematics**

## MATH 340 - Integrated Pre and Beginning Algebra

4 hours (5;0;0)

General overview of basic arithmetic and beginning algebra: fractions, decimals, percentages, integers, solving equations, linear equations, graphing and polynomials.

Prerequisite(s): Consent of department.

Students may not enroll in this course if they have credit for any other UNT mathematics course. Credit in this course does not fulfill any degree requirement.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 350 - Beginning Algebra

3 hours

The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving.

Prerequisite(s): Consent of department.

Student may not enroll in this course if they have credit for any other UNT mathematics course. Credit in this course does not fulfill any degree requirement.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 1100 - Algebra

(MATH 1314 or MATH 1414)

3 hours (3;0;2)

Designed to build technical proficiency in algebra for students who will need strong algebra skills in a higher level mathematics course. Study of polynomial, radical, rational, logarithmic and exponential functions with applications; building functions from data; systems of equations. Note that MATH 1100 at UNT does not satisfy the mathematics component of the core curriculum. Students who feel they acquired solid algebra skills in high school are strongly encouraged to take the mathematics placement exam to begin in a higher-level mathematics course.

Prerequisite(s): Two years of high school algebra and one year of geometry, and consent of department; or a grade of C or better in MATH 1581 or MATH 1681.

A grade of C or better in MATH 1100 is required when MATH 1100 is a prerequisite for other mathematics courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 1180 - College Math for Business, Economics and Related Fields

(MATH 1324)

3 hours (3;0;1)

Topics from algebra (linear equations, quadratic equations, functions and graphs, inequalities), mathematics of finance (simple and compound interest, annuities), linear programming, matrices, systems of linear equations, applications to management, economics and business.

Prerequisite(s): Two years of high school algebra and one year of geometry, and consent of department. Students who feel they acquired solid algebra skills in high school are strongly encouraged to take the mathematics placement exam to see if they may begin in MATH 1190 instead.

A grade C or better in MATH 1180 is required when MATH 1180 is a prerequisite for other mathematics courses.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### MATH 1190 - Business Calculus

(MATH 1325)

3 hours

Differential and integral calculus with emphasis on applications to business.

Prerequisite(s): Two years of high school algebra and consent of department; or MATH 1100 or MATH 1180 with a grade of C or better.

**Core Category:** Mathematics

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 1350 - Mathematics for Elementary Education Majors I

(MATH 1350)

3 hours

Concepts of sets, functions, numeration systems, different number bases, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking.

Prerequisite(s): MATH 1100 or MATH 1180 with a grade of C or better

Only for students requiring course for teacher certification.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

# MATH 1351 - Mathematics for Elementary Education Majors II

(MATH 1351)

3 hours

Concepts of geometry, probability and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking.

Prerequisite(s): MATH 1350.

Only for students requiring course for teacher certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 1580 - Survey of Mathematics with Applications

(MATH 1332)

3 hours

Topics include probability, statistics, algebra, logic and the mathematics of finance. Additional topics are selected from geometry, sets, cryptography, fair division, voting theory and graph theory. Emphasis is on applications. Recreational and historical aspects of selected topics are also included. Technology is used extensively. MATH 1580 is not intended to prepare students for calculus, science, engineering or business courses.

Prerequisite(s): Two years of high school algebra and one year of high school geometry and consent of department.

Students may not receive credit for both MATH 1580 and MATH 1581 .

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 1600 - Trigonometry

(MATH 1316)

3 hours

Trigonometry based on both right triangles and the unit circle: graphs of trigonometric functions; inverse trigonometric functions; trigonometric identities and equations; laws of sines and cosines; polar coordinates; DeMoivre's theorem; vectors.

Prerequisite(s): MATH 1100 with a grade of C or better.

MATH 1600 and MATH 1610 together cover approximately the same material as MATH 1650. Students who already have credit for MATH 1650 may not receive credit for MATH 1600.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 1610 - Functions, Graphs and Applications

3 hours

Preparatory course for calculus: algebra and graphs of functions; properties and graphs of polynomials and rational functions; graphs and applications of exponential and logarithmic functions; applications of trigonometric functions and graphs; sequences, series and their applications.

Prerequisite(s): MATH 1600.

MATH 1600 and MATH 1610 together cover approximately the same material as MATH 1650. Students who already have credit for MATH 1650 may not receive credit for MATH 1610.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 1650 - Pre-Calculus

(MATH 2312 or MATH 2412)

5 hours

Preparatory course for calculus: trigonometric functions, their graphs and applications; sequences and series; exponential and logarithmic functions and their graphs; graphs of polynomial and rational functions; general discussion of functions and their properties.

Prerequisite(s): MATH 1100 with a grade of C or better.

MATH 1650 covers approximately the same material as MATH 1600 and MATH 1610 together. Students who already have credit for both MATH 1600 and MATH 1610 may not receive credit for MATH 1650

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### MATH 1680 - Elementary Probability and Statistics

(MATH 1342)

3 hours (3;1)

Introductory course to serve students of any field who want to apply statistical inference. Descriptive statistics, elementary probability, estimation, hypothesis testing and small samples.

Prerequisite(s): TSI complete.

Students may not receive credit for both MATH 1680 and MATH 1681.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

# MATH 1681 - Elementary Probability and Statistics with Algebra Review

(MATH 1442)

4 hours (4;1)

Alternate version of MATH 1680 for students identified in the mathematics placement process as requiring supplemental instruction to strengthen their algebra skills.

Prerequisite(s): Consent of department.

Students may not enroll in this course if they have received credit for MATH 1100, MATH 1650 or MATH 1710 with a grade of C or better. Students may not receive credit for both MATH 1680 and MATH 1681.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 1710 - Calculus I

(MATH 2313 or MATH 2413)

4 hours (3;0;2)

Limits and continuity, derivatives and integrals; differentiation and integration of polynomial, rational, trigonometric, and algebraic functions; applications, including slope, velocity, extrema, area, volume and work.

Prerequisite(s): A grade of C or higher in MATH 1650; or a grade of C or higher in both MATH 1600 and MATH 1610.

Core Category: Mathematics

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 1720 - Calculus II

(MATH 2314 or MATH 2414)

3 hours (3;0;2)

Differentiation and integration of exponential, logarithmic and transcendental functions; integration techniques; indeterminate forms; improper integrals; area and arc length in polar coordinates; infinite series; power series; Taylor's theorem.

Prerequisite(s): A grade of C or higher in MATH 1710.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 1780 - Probability Models

3 hours

Probability theory, discrete and continuous random variables, Markov chains, limit theorems, stochastic processes, models for phenomena with statistical regularity.

Prerequisite(s): MATH 1710.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 2000 - Discrete Mathematics

(MATH 2305)

3 hours

Introduction to proof-writing, logic, sets, relations and functions, induction and recursion, combinatorics and counting techniques, discrete probability, and graphs.

Prerequisite(s): MATH 1710 (may be taken concurrently by math majors).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 2100 - Functions and Modeling for Secondary Mathematics Instruction

3 hours

In-depth study of topics in secondary school mathematics. Emphasis is on modeling with linear, exponential and trigonometric functions; curve fitting; discrete and continuous models. Exploratory work with presentations of findings is an integral part of the course. Pedagogical uses of appropriate technology are explored.

Prerequisite(s): MATH 1710, MATH 1720 (may be taken concurrently) and TNTX 1100 (may be taken concurrently), or consent of the Teach North Texas advisor.

## MATH 2700 - Linear Algebra and Vector Geometry

(MATH 2318 or MATH 2418)

3 hours

Vector spaces over the real number field; applications to systems of linear equations and analytic geometry in En, linear transformations, matrices, determinants and eigenvalues.

Prerequisite(s): A grade of C or higher in MATH 1720.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### MATH 2730 - Multivariable Calculus

(MATH 2315 or MATH 2415)

3 hours

Vectors and analytic geometry in 3-space; partial and directional derivatives; extrema; double and triple integrals and applications; cylindrical and spherical coordinates.

Prerequisite(s): A grade of C or higher in MATH 1720.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### MATH 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### MATH 2910 - Special Problems

1-3 hours

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### MATH 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by freshman or sophomore honors students under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### MATH 3000 - Real Analysis I

3 hours

Introduction to mathematical proofs through real analysis. Topics include sets, relations, types of proofs, continuity and topology of the real line.

Prerequisite(s): A grade of C or better in MATH 1720 and MATH 2000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3010 - Seminar in Problem-Solving Techniques

1 hour

Problem-solving techniques involving binomial coefficients, elementary number theory, Euclidean geometry, properties of polynomials and calculus.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3021 - Seminar for SOA Exam I/Probability

1 hour

Seminar to prepare students for the Probability exam administered by the Society of Actuaries.

Prerequisite(s): MATH 2730 and consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 3022 - Seminar for SOA Exam 2/Financial Mathematics

1 hour

Seminar to prepare students for the Financial Math exam administered by the Society of Actuaries.

Prerequisite(s): MATH 1720, FINA 3770 and consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 3350 - Introduction to Numerical Analysis

3 hours

Description and mathematical analysis of methods used for solving problems of a mathematical nature on the computer. Roots of equations, systems of linear equations, polynomial interpolation and approximation, least-squares approximation, numerical solution of ordinary differential equations.

Prerequisite(s): MATH 2700. Computer programming ability.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 3400 - Number Theory

3 hours

Factorizations, congruencies, quadratic reciprocity, finite fields, quadratic forms, diophantine equations.

Prerequisite(s): MATH 3000 or MATH 2000 or CSCE 2100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3410 - Differential Equations I

3 hours

First-order equations, existence-uniqueness theorem, linear equations, separation of variables, higher-order linear equations, systems of linear equations, series solutions and numerical solutions.

Prerequisite(s): MATH 1720 (with a grade of C or better), MATH 2700 recommended (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3420 - Differential Equations II

3 hours

Ordinary differential equations arising from partial differential equations by means of separation of variables; method of characteristics for first-order PDEs; boundary value problems for ODEs; comparative study of heat equation, wave equation and Laplace's equation by separation of variables and numerical methods; further topics in numerical solution of ODEs.

Prerequisite(s): MATH 2730, MATH 3410.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3510 - Abstract Algebra I

3 hours

Groups, rings, integral domains, polynomial rings and fields.

Prerequisite(s): MATH 3000; MATH 2700 (may be taken concurrently).

#### MATH 3610 - Real Analysis II

3 hours

Continuation of MATH 3000. Topics include derivatives, integrals, and limits of sequences of functions.

Prerequisite(s): MATH 3000 and MATH 2700 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### MATH 3680 - Applied Statistics

3 hours

Descriptive statistics, elements of probability, random variables, confidence intervals, hypothesis testing, regression, contingency tables.

Prerequisite(s): MATH 1710. MATH 1720 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### MATH 3740 - Vector Calculus

3 hours

Theory of vector-valued functions on Euclidean space. Derivative as best linear-transformation approximation to a function. Divergence, gradient, curl. Vector fields, path integrals, surface integrals. Constrained extrema and Lagrange multipliers. Implicit function theorem. Jacobian matrices. Green's, Stokes', and Gauss' (divergence) theorems in Euclidean space. Differential forms and an introduction to differential geometry.

Prerequisite(s): MATH 2700, MATH 2730.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3850 - Mathematical Modeling

3 hours

Difference equations, dynamical systems, proportionality, model fitting, experimental modeling, simulation modeling, probabilistic modeling, optimization, dimensional analysis, modeling using graph theory.

Prerequisite(s): MATH 1720. Corequisite(s): MATH 2700.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 3860 - Financial Mathematics

3 hours

The mathematical theory of interest with applications to investments and corporate finance. Topics include present and future values; annuities and variable cash flows; yield rates; amortization schedules; loans; valuation of stocks, bonds and other securities; and the assessment of corporate financial performance using standard financial methods.

Prerequisite(s): MATH 1720 with a C or better, MATH 3680 (may be taken concurrently) and FINA 3770 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### MATH 4010 - Introduction to Metamathematics

3 hours

Introduction of the syntax and semantics of propositional logic and first-order logic. Topics include quantifier elimination, compactness and completeness theorems, Craig's interpolation theorem, elementary submodels, partial recursive functions, Gödel numbering, decidability of theories, Peano arithmetic, Robinson's system and Gödel's incompleteness theorems.

Prerequisite(s): MATH 3000. MATH 3510 or MATH 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 4050 - Advanced Study of the Secondary Mathematics Curriculum

3 hours

Study of mathematical topics in the secondary curriculum from an advanced viewpoint. Discussion of the relationship between secondary and collegiate curricula. Combinatorics. The Euclidean algorithm, congruence classes, and prime factorization. Modeling with differential equations. Conic sections. Pedagogical techniques.

Prerequisite(s): MATH 2100 and MATH 3000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 4060 - Foundations of Geometry

3 hours

Selections from synthetic, analytic, projective, Euclidean and non-Euclidean geometry.

Prerequisite(s): MATH 3000.

Prior or concurrent enrollment in MATH 3510 or MATH 3610 is strongly recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 4100 - Fourier Analysis

3 hours

Application-oriented introduction to Fourier analysis, including Fourier series, Fourier transforms, discrete Fourier transforms, wavelets, orthogonal polynomials and the Fast Fourier Transform (FFT) algorithm. The theoretical portions of the course emphasize interconnections and operator algebraic formalism. Applications are chosen from among differential equations, signal processing, probability and high precision arithmetic.

Prerequisite(s): MATH 1720, MATH 2700. MATH 2730 and MATH 3410 are recommended (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 4200 - Dynamical Systems

3 hours

One-dimensional dynamics. Sarkovskii's theory, routes to chaos, symbolic dynamics, higher-dimensional dynamics, attractors, bifurcations, quadratic maps, Julia and Mandelbrot sets.

Prerequisite(s): MATH 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## MATH 4430 - Introduction to Graph Theory

3 hours

Introduction to combinatorics through graph theory. Topics introduced include connectedness, factorization, Hamiltonian graphs, network flows, Ramsey numbers, graph coloring, automorphisms of graphs and Polya's Enumeration Theorem. Connections with computer science are emphasized.

Prerequisite(s): MATH 3000 or MATH 2000 or CSCE 2100.

## MATH 4450 - Introduction to the Theory of Matrices

3 hours

Congruence (Hermitian); similarity; orthogonality, matrices with polynomial elements and minimal polynomials; Cayley-Hamilton theorem; bilinear and quadratic forms; eigenvalues.

Prerequisite(s): MATH 2700.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 4500 - Introduction to Topology

3 hours

Point set topology; connectedness, compactness, continuous functions and metric spaces.

Prerequisite(s): MATH 3610.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 4510 - Abstract Algebra II

3 hours

Topics from coding theory, quadratic forms, Galois theory, multilinear algebra, advanced group theory, and advanced ring theory.

Prerequisite(s): MATH 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

# MATH 4520 - Introduction to Functions of a Complex Variable

3 hours

Algebra of complex numbers and geometric representation; analytic functions; elementary functions and mapping; real-line integrals; complex integration; power series; residues, poles, conformal mapping and applications.

Prerequisite(s): MATH 2730.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 4610 - Probability

3 hours

Combinatorial analysis, probability, conditional probability, independence, random variables, expectation, parameterized distributions, limit theorems, joint distributions, conditional distributions, and correlation.

Prerequisite(s): MATH 2730 and either MATH 3680 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 4650 - Statistics

3 hours

Sampling distributions, point estimation, interval estimation, hypothesis testing, goodness of fit tests, regression and correlation, analysis of variance, and non-parametric methods.

Prerequisite(s): MATH 4610. MATH 3680 or at least a 4 on the AP Statistics test.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### MATH 4810 - Biocomputing

3 hours

Introduction to computational problems inspired by the life sciences and overview of available tools. Methods to compute sequence alignments, regulatory motifs, phylogenetic trees and restriction mans.

Prerequisite(s): MATH 1720.

Same as BIOL 4810 and CSCE 4810.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### MATH 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## MATH 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## Mechanical and Energy Engineering

# MEEN 1000 - Discover Mechanical and Energy Engineering

2 hours

Introductory course in Mechanical and Energy Engineering (MEE). Topics include experiences of practicing engineers; engineering ethics, professional conduct, and values; and an introduction to the principle disciplines of MEE taught through a hands-on energy-concentrated project.

Prerequisite(s): MATH 1650 (with grade of C or better).

Required for the BS degree in mechanical and engineering at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 1110 - Mechanical and Energy Engineering Practice

1 hour

Introduction to the practice of mechanical and energy engineering, applications of the subject, presentation of the work of the faculty and practicing engineers, seminars on "real world" projects, ethics and professional orientation.

Prerequisite(s): MATH 1650 or the equivalent (with a grade of C or better) or concurrent enrollment in MATH 1710.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 1210 - Mechanical and Energy Engineering Practice II

1 hour

Continuation of MEEN 1110. Applications of mechanical and energy engineering, presentations by faculty and practicing engineers, professional orientation, professional ethics.

Prerequisite(s): MATH 1650 (with a grade of C or better).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2110 - Engineering Data Analysis

3 hours

Designed for engineering students to use statistical methods for engineering problem solving. Discusses using techniques for the analysis of experimental data and interpretation of problems related to mechanical and energy engineering. Statistical techniques used include analysis of variance, hypothesis testing, factorial design, linear regression and correlation.

Prerequisite(s): MATH 2700 with a grade of C or better; MEEN 1000 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2130 - Statics and Dynamics

4 hours

Statics of particles and rigid bodies. Concepts of force, moments, free body diagrams, equilibrium and friction with engineering applications. Kinematics and kinetics of particles and rigid bodies. Energy and impulse momentum methods applied to particles and rigid bodies. Plane motion of rigid bodies and force analysis of linkages.

Prerequisite(s): MATH 1720, PHYS 1710, PHYS 1730.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2210 - Thermodynamics I

3 hours

PHYS 1710 Zeroth, first and second laws of thermodynamics with applications to engineering and energy conversion, open and closed systems, thermodynamic properties of simple substances, equations of state, thermodynamic properties of mixtures, psychrometrics and psychrometric charts.

Prerequisite(s): MATH 1720 with a grade of C or better; PHYS 1710 with a grade of C or better; MEEN 1000 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2240 - Programming for Mechanical Engineers

3 hours

Introduces engineering students to problem solving, algorithm development and programming in MATLAB and Simulink. Examples of applications in mechanical engineering are given. Interactive course taught in a computer classroom.

Prerequisite(s): MEEN 1000 with a grade of C or better.

Corequisite(s): MATH 2700.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 2250 - Computer Aided Engineering

3 hours (2;3)

Computational techniques applied to engineering analysis, design and technical visual communication for engineering practice. Contains two interrelated modules: computer aided design (CAD) and numerical methods (NM). The CAD module surveys engineering drawing techniques with emphasis on modern computer-driven solid object parametric modeling. The NM module includes constrained and unconstrained optimization, simulation and solution of simple differential equations, symbolic manipulation, and application of finite element analysis.

Prerequisite(s): MATH 2700 (with a grade of C or better) and CSCE 1020 (with a grade of C or better).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2301 - Mechanics I

3 hours

Basic concepts of forces in equilibrium and how to apply them to engineering systems. Distributed forces and loads. Frictional forces. Inertial properties. Equilibrium of particles and finite sized bodies. Bending moments in beams.

Prerequisite(s): PHYS 1710 and PHYS 1730 with a grade of C or better; MEEN 1000 with a grade of C or better .

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEEN 2302 - Mechanics II

3 hours

Formulate and solve problems that involve forces that act on bodies which are moving. Understand kinematics and kinetics of particles and rigid bodies in two and three dimensions; equations of motion; motion relative to rotating coordinate systems. Understand the energy conservation principles.

Prerequisite(s): MEEN 2301 with a grade of C or better; MATH 1720 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2332 - Mechanics III

3 hours

Basic concepts of stress and strains. The influence of loading direction and location on the deformation of structures. Understand the impact of loads on designs. Understand failure criteria for designs.

Prerequisite(s): MEEN 2301 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 2900 - Special Problems in Mechanical and Energy Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems.

Prerequisite(s): Consent of instructor.

Each course may be repeated for 6 credit hours. For elective credit only; may not be substituted for required MEEN courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEEN 2910 - Special Problems in Mechanical and Energy Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems.

Prerequisite(s): Consent of instructor.

Each course may be repeated for 6 credit hours. For elective credit only; may not be substituted for required MEEN courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3100 - Manufacturing Processes

3 hours (2;3)

Major manufacturing processes, their capabilities, analysis and economics. Study of the fundamentals of engineering processes in manufacturing as related to design and production and materials properties. Traditional and non-traditional manufacturing process and selection optimization. Students are given laboratory assignments in material removal, forming, casting, joining, forging and computeraided machining.

Prerequisite(s): MEEN 2332 with a grade of C or better; MTSE 3000 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$6

## MEEN 3110 - Thermodynamics II

3 hours

Introduction to steam and gas cycles, improvements on cycles, advanced thermodynamics cycles, psychrometrics and psychrometric charts, chemical reactions and chemical equilibria, combustion, flame temperature.

Prerequisite(s): MEEN 2210 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3120 - Fluid Mechanics

3 hours

Fundamental concepts and properties of fluids; hydrostatics; basic equations of fluid flow in differential and integral form. Dimensional analysis, potential and viscous flow. Viscous boundary layers, pipe flow, turbulence and fluid flow correlations for objects of simple shape.

Prerequisite(s): MATH 2730, MATH 3410, MEEN 2210, and MEEN 2332 all with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEEN 3125 - Thermal Engineering Projects

2 hours (0:6)

Project component of the thermal science courses in the curriculum. Students work in teams to complete engineering practice projects. The theoretical aspects of this course are given in MEEN 2210, MEEN 3110 and MEEN 3120.

Prerequisite(s): MEEN 2210.

Corequisite(s): MEEN 3110, MEEN 3120.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### **MEEN 3130 - Machine Elements**

3 hours

Applications of the principles of mechanics and mechanics of materials to machine design. The elements of machines are analyzed in terms of their dynamic behavior. Selection and sizing of machine elements. Students use the finite element technique for the analysis of machines and their components.

Prerequisite(s): ENGR 1304 with a grade of C or better; MEEN 2332 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3135 - Mechanical and Energy Engineering Projects

3 hours (1:6)

Project component of the thermal and solid mechanics courses in the curriculum. Students work in teams to complete engineering practice projects. Practical manufacturing theories and practices are covered. Students are trained to use various manufacturing tools including milling, drilling, cutting and welding machines during the lab hours.

Prerequisite(s): MEEN 2210, ENGR 2332.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3210 - Heat Transfer

3 hours

Basic concepts of steady and unsteady conduction. Elements of radiation. Black and gray body radiation. F-factor analysis. Thermal boundary layers, convection, heat transfer correlations. Combined modes of heat transfer. Simple heat exchange devices and systems.

Prerequisite(s): MEEN 3120; MEEN 3110; MEEN 3250 all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3220 - Thermal-Fluid Science for Buildings

3 hours

Basic principles of thermodynamics, heat transfer, and fluid mechanics. Students learn first and second laws of thermodynamics, refrigeration cycles, conduction, convection and radiation heat transfer in buildings, heat exchangers, fluid flow in pipes, and pump and fan theories.

Prerequisite(s): MATH 2730 or equivalent courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3230 - System Dynamics and Control

3 hours

Review of basic modeling techniques of the dynamic behavior of mechanical and electrical systems. Linear dynamics. Block diagrams. Feedback and compensation. Computer simulations of steady-state and dynamic behavior. Root locus and frequency response methods. Vibration analysis, control and suppression.

Prerequisite(s): MATH 3410; MATH 2700; MEEN 2302, all with a grade of C or better.

## MEEN 3240 - Mechanical and Energy Engineering Laboratory I

2 hours (1;3)

Principles of experimentation. Measurement techniques and instruments. Statistical analysis of experimental data and error analysis. Presentation of data and report writing. Students perform a series of experiments in areas of mechanical engineering and undertake a project in which they design an experiment to obtain data

Prerequisite(s): MATH 3410; MEEN 2210; MEEN 2110, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$6

# MEEN 3242 - Mechanical and Energy Engineering Laboratory II

1 hour (0;3)

Continuation of MEEN 3240. Principles of experimentation. Students perform a series of experiments in key areas of mechanical and energy engineering including convection, heat and energy transfer, experimental aerodynamics, thermal cycles, refrigeration, control of thermal systems, and alternative energy technologies (solar energy, fuel cells and wind power).

Prerequisite(s): MEEN 3240 with a C or better; MEEN 3120 with a C or better; MEEN 3210 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$6

## MEEN 3250 - Analytical Methods for MEE Engineers

3 hours

Applications of mathematical methods and computational techniques to typical engineering problems. Topics include analysis of linear systems, numerical integration of ordinary differential equations, conditions for optimality and an introduction to finite element analysis.

Prerequisite(s): MATH 3410 with a grade of C or better; MEEN 2240 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4010 - Thermal Energy Storage (TES)

3 hours

Thermal energy storage (TES) systems with focus on applications of thermodynamics, fluid flow and heat transfer. Discussion of various types of thermal energy storage technologies and methods. Topics include solar energy and TES, sensible TES, latent TES, cold TES, seasonal TES, environmental impacts of TES, and energy and exergy analysis of thermal energy storage systems.

Prerequisite(s): MEEN 3120 with a grade of C or better; MEEN 3210 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4110 - Renewable Energy

3 hours

Introduction to the physics, systems and methods of energy conversion from non-conventional energy sources, such as solar, geothermal, ocean-thermal, biomass, tidal, hydroelectric, wind and wave energy. Advantages and disadvantages of alternative energy sources and engineering challenges for the harnessing of such forms of energy. Energy storage. Fuel cells.

Prerequisite(s): MEEN 3110; MEEN 3210, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEEN 4112 - Fundamentals of Nuclear Engineering

3 hours

Atomic physics and the structure of the atom. Radioactivity. Interactions of neutrons with matter, nuclear cross-sections. Nuclear fuels and fuel elements. Elements of nuclear reactors. Components and operation of nuclear power plants. Notable accidents of nuclear reactors. Breeder reactors.

Prerequisite(s): MEEN 3110; MEEN 3120, MEEN 3210, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEEN 4120 - Aerospace Fundamentals

3 hours

Introduction to the fundamental knowledge used in the aerospace industry. Topics include orbital mechanics, basic aerodynamics, guidance and control methods, flight dynamics, and 6 Degree of Freedom (6-DoF) motion and simulation for aircraft and missiles.

Prerequisite(s): MATH 2700; MEEN 3120; MEEN 3230; MEEN 2240, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEEN 4130 - Failure of Deformable Bodies

3 hours

Continuum mechanics approach to failure mechanisms in deformable solid bodies with their system design applications and use of engineering plasticity fundamentals to describe the permanent deformation in solids. The indentation hardness tests are related to plasticity. The fracture, fatigue, and creep modes-of-failure analysis seeks to explain the mechanism, the use in mechanical systems design, service reliability, and their interrelation.

Prerequisite(s): MEEN 2332 with a grade of C or better, MTSE 3000 with a grade of C or better.

Same as MEET 4130.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4140 - Finite Element Analysis

3 hours (3;2;1)

A numerical technique for finding approximate solutions to engineering solids and structural problems. The displacement method of finite element analysis using the iso-parametric formulation. Geometric modeling of solids and structures. Numerical coding with MATLAB for simple structural, fluid, and thermal analyses. Practice with commercial finite element software such as ABAQUS or ANSYS.

Prerequisite(s): MATH 3410; MEEN 2332; MEEN 2302, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MEEN 4150 - Mechanical and Energy Engineering Systems Design I

3 hours (2;3)

Advanced treatment of engineering design principles with an emphasis on product and systems design, development and manufacture. Mimics "real world" environment with students working in teams to prepare product specification, develop several concepts, perform detailed design, and construct prototypes subject to engineering, performance and economic constraints.

Prerequisite(s): EENG 2610; MEEN 3130; MEEN 3210; MEEN 3230; MEEN 3242, all with a grade of C or better.

Corequisite(s): MEEN 3100

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70; Lab (LF): \$6

# MEEN 4151 - Manufacturing of Renewable Biocomposites for Lightweight Energy Efficient Structure

3 hours

Manufacturing processes for renewable lightweight biocomposite products, including wood and other bio-based composites, for energy efficient structure, such as building structure.

Prerequisite(s): MEEN 2301 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4152 - Composites and Lightweight Structures

3 hours

Materials, mechanics and failure criteria of anisotropic materials (composites) and cellular solids.

Prerequisite(s): MEEN 2332 with a grade of C or better; MEEN 2240 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEEN 4160 - Mechanical Vibrations

3 hours

Review of dynamics for particle systems and rigid bodies; dynamic response of single and multiple degree of freedom and discrete mass systems; concept of natural frequencies and mode shapes for free, damped, and un-damped systems; free, forced, and random vibrations; mathematical techniques to model and design mechanical systems.

Prerequisite(s): MATH 1720 with a grade of C or better; MEEN 2302 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4170 - Advanced Solid Mechanics

3 hours

This course introduces the basic principles on advanced mechanics of materials. This course will enable senior level undergraduate students to understand the fundamental solid mechanics and solve linear elastic problems of solids and structures.

Prerequisite(s): MEEN 2332 with a C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4180 - Feedback Control Systems

3 hours

Overview of feedback controls, modeling of dynamics systems, dynamic responses. Analysis and design of control systems, PID control, frequency response design and introduction to digital control. Various control systems design principles and case studies

Prerequisite(s): MEEN 2240 with a C or better. MEEN 3230 with a C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4190 - Experimental Design in Engineering

3 hours

The course is designed for the senior engineering students, especially the graduate students, to use appropriate statistical methods for experiments, such as manufacturing, engineering testing, material synthesis, and etc. for engineering problem solving. The knowledge learned from the course is to help the students use minimum experimental effort to obtain the most meaningful results, and to

make an appropriate conclusion. The techniques learned from the course will include data description, design value determination, analysis of variance, comparative experiments, linear regression, randomized block, correlation analysis, and factorial design. The practical applications of these techniques will be discussed using the actual experimental data and interpretation of the problems.

Prerequisite(s): MEEN 2110 with C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MEEN 4250 - Capstone Design in Mechanical and Energy Engineering

3 hours (0;9)

Capstone Core course in Mechanical and Energy Engineering (MEE) culminating the experience of the Bachelor of Science degree in MEEN, and a direct continuation of MEEN 4150, MEEN Design I. Student teams complete product design, development, and manufacturing projects conceived to promote the common good of society. Patterned on a professional work-place environment that allows students to make connections between different areas of knowledge. Students learn decision-making strategies that include ethical analysis by planning and managing resources while adhering to an overall project schedule. As a major learning outcome of this capstone course, students are able to express ways that exposure to different ideas, perspectives, and viewpoints enriches their thinking.

Prerequisite(s): MEEN 4150 and MEEN 3100 with a grade of C or better

Required for the BS degree in mechanical and energy engineering at UNT.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$6

### MEEN 4300 - Intermediate Thermodynamics

3 hours

Axiomatic presentation of the law of thermodynamics including corollaries and applications related to energy conversion, the exergy method and entropy dissipation method for the evaluation of thermodynamic systems and cycles, thermodynamic equilibrium and stability, irreversible thermodynamics, chemical equilibria and applications in combustion.

Prerequisite(s): MEEN 3110; MEEN 3120; MEEN 3210, all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4310 - Intermediate Heat Transfer

3 hours

Advanced heat conduction and radiation for one-, two- and three-dimensional systems. Mathematical descriptions including separation of variables, Duhamel's Theorem, Green's function, and Laplace Transformation. Radiative properties of particulate media, semitransparent media, and one-dimensional gray media.

Prerequisite(s): MEEN 3110; MEEN 3120; MEEN 3210, all with a grade of  $\boldsymbol{C}$  or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4315 - Nanoscale Energy Transport Process

3 hours

Microscopic heat carriers and transport; material waves; energy states in solids; statistical description of thermodynamics; waves; particle transport process; semiconductor materials; interfacial phenomena for non-conventional liquids.

Prerequisite(s): MEEN 3110; MEEN 3120; MEEN 3210, all with a grade of C or better.

## MEEN 4320 - Building Energy Systems

3 hours

Course on heating and cooling of buildings with focus on application of thermodynamics, fluid dynamics and heat transfer. Topics may include psychometric processes, basics of fluid flow, heat transfer in buildings, heating and cooling energy calculations, HVAC air and water distribution equipment and systems, energy-efficient design of buildings, simulation programs and LEED building design.

Prerequisite(s): MEEN 3120, MEEN 3210 for mechanical and energy engineering and other engineering students. College graduation from related departments (Engineering, Architecture, Physics, etc) or equivalent qualification of a college degree for external participants or consent of department of external participants.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4330 - Introduction to Combustion Science and Engineering

3 hours

Fundamental concepts and properties of fuels and combustion; fuel types; conservation laws; combustion thermodynamics and stoichiometry; chemical energy and equilibrium; adiabatic flame temperature; combustion kinetics; transport processes; ignition processes; flames classification; flame propagation; deflagrations and detonations; combustion applications; combustion in furnaces, boilers and engines; energy efficiency calculations; pollutant formation; and environmental impacts.

Prerequisite(s): MEEN 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEEN 4332 - Fundamentals of Air Pollution Engineering

3 hours

Fundamental theories of air pollution and atmospheric science. Air pollution causes and impacts; atmospheric chemistry and physics; meteorology; and an introduction to air quality models. Control technology of particulate and gaseous air pollutants; process design variables; and industrial and engineering applications of control technologies.

Prerequisite(s): MEEN 3110 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4335 - Computational Simulation of Building Energy Systems

3 hours

Lecture on simulation programs for analysis of building energy loads and system performance, analysis of multizone structure using one hourly simulation program, building energy analysis for existing buildings, building load calculation, building envelop, HVAC systems, electrical system and central plant simulation technique.

Prerequisite(s): MEEN 3120 and MEEN 3210 for mechanical and energy engineering and other engineering students. College graduation from related departments (Engineering, Architecture, Physics, etc) or equivalent qualification of a college degree for external participants or consent of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4340 - Energy Efficiencies and Green Building Design for Commercial Buildings

3 hours

Lecture course on the knowledge to be commissioning agents for LEED new construction, ASHRAE auditors for LEED existing buildings operations and maintenance, and ASHRAE modelers for LEED-NC. Students learn about ASHRAE standard 90.1. mechanical load design, illumination and efficacy, plumbing systems, commissioning, ASHRAE audits, energy efficiency and green programs to develop understanding of commercial buildings from an MEP Design Consultant perspective.

Prerequisite(s): MEEN 3120 and MEEN 3210 for mechanical and energy engineering and other engineering students. College graduation from related departments (Engineering, Architecture, Physics, etc) or equivalent qualification of a college degree for external participants.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4350 - Energy Efficiencies and Green Building for Residential Buildings

3 hours

Lecture course on residential building science. Students learn about performance testing, visual verification, RESNET standards, ENERGY STAR for new homes, LEED for homes and energy audits of existing buildings.

Prerequisite(s): MEEN 3120 and MEEN 3210 for mechanical and energy engineering and other engineering students. College graduation from related departments (Engineering, Architecture, Physics, etc) or equivalent qualification of a college degree for external participants.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4410 - Energy Harvesting System Design

3 hours

Energy harvesting is the conversion of ambient energy present in the environment into electrical energy. Energy harvesting system has a wide range of applications, including energy efficiency enhancement for a system, embedded power source for wireless sensor networks, embedded power for biomedical devices. Introduces the design of energy conversion and storage systems from mechanical energy, including mechanical vibrations, thermal energy, and other energy sources.

Prerequisite(s): MEEN 3230 and ENGR 2405 (or EENG 2610) all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4415 - Smart Materials and Structures

3 hours

Introduction to smart materials and structures, such as piezoelectric materials, shape memory alloys, magnetostrictive materials, adaptive structures, and active vibration control systems. Covers their material properties, modeling methods, and engineering applications in sensors, actuators, energy harvesting, and biomedical devices.

Prerequisite(s): MEEN 3230 and ENGR 2405 (or EENG 2610) all with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4460 - Fundamentals of Oil and Gas

3 hours

The course provides an overview and history of the oil and gas industry and petroleum engineering, including nature of oil and gas reservoirs, petroleum exploration and drilling, formation evaluation, well completions and production, surface facilities, reservoir mechanics, and improved oil recovery. It introduces the importance of ethical, societal, and environmental considerations and current events on activities in the petroleum industry.

Prerequisite(s): MEEN 3120 with a C or better.

#### MEEN 4470 - Geothermal Heat Pumps

3 hours

Introduction to the fundamental principle, calculation and design methods of various geothermal heat pump systems. The whole building energy modeling of geothermal heat pumps system. Prediction of long-term performance of ground loop heat exchanger Annual energy consumption and Electric Peak demand. Borehole field configurations.

Prerequisite(s): MEEN 3210 with a C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4480 - Energy Materials

3 hours

This course will describe how advanced materials make possible efficient energy harvesting (solar cells) and energy storages (batteries, supercapacitors). Also the course introduces some principles for device applications, and advanced materials for future energy technologies.

Prerequisite(s): MTSE 3000.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MEEN 4488 - Introduction to Microfluidics

3 hours

Fluid mechanics in microsystems, flow simulations, materials and methods for fabrication of microfluidic systems, surface tension, viscosity, diffusion, flow characterization, valves, mechanical and electrokinetical pumps, microfilters, mixing, chemical microreactors, dispensing, separation, detection.

Prerequisite(s): MEEN 3120 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4510 - Electronic Manufacturing Technologies

3 hours

Introduces the complete field of electronics manufacturing to students. Topics include an introduction to the electronics industry, electronic components, interconnections, printed wiring boards, and soldering and solderability. Automated assembly, including leaded component insertion and surface mount device placement, is covered. Packaging techniques such as wire bonding, flip chip, electromagnetic interference, thin films deposition, electrostatic discharge prevention, testability and electronic stress screening are covered. A variety of manufacturing systems are covered.

Prerequisite(s): MEEN 3100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MEEN 4710 - Polymer Additive Manufacturing: Materials, Manufacturing and Performance

3 hours

Emphasizes the fundamentals of additive manufacturing processes focusing on polymers. Polymer types, rheology of 3D printing sources in powder, resin and filaments are discussed. Equipment and machinery parameters and processing conditions needed are investigated. The broad range of additive manufacturing processes, devices, capabilities and materials that are available are discussed.

Prerequisite(s): MTSE 3000 or equivalent; MEEN 3120, MEEN 3130, MEEN 3210.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# MEEN 4720 - Advanced Experimental Design and Analysis in Engineering

3 hours

Designed for the senior engineering students, especially the graduate students, to use appropriate statistical methods for experiments, such as manufacturing, engineering testing, material synthesis, and etc. for engineering problem solving. The knowledge learned from the course is to help the students use minimum experimental effort to obtain the most meaningful results, and to make an appropriate conclusion. Techniques learned include data description, design value determination, analysis of variance, comparative experiments, linear regression, randomized block, correlation analysis and factorial design. The practical applications of these techniques are discussed using the actual experimental data and interpretation of the problems.

Prerequisite(s): MEEN 2110 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### MEEN 4730 - Advanced Solid Mechanics

3 hours

Introduces advanced aspects of mechanics of materials. Once completed, students are able to solve complex solid mechanics problems such as torsion, bending of beam and stability problems.

Prerequisite(s): MEEN 2332.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4740 - Feedback Controls of Dynamic Systems

3 hour

Introduces the fundamental principles of modeling, analysis and control of dynamic systems. Topics include: mathematical modeling of dynamic systems, including mechanical, electrical, fluid and thermal systems; Laplace transform solution of differential equations; transfer functions and system responses in time and frequency domain; control systems design; state-space based analysis and design of control systems; and computer simulation for modeling and control system design (Matlab/Simulink).

Prerequisite(s): MEEN 3230.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4750 - Automotive Manufacturing Processes and Production Systems

3 hours

Manufacturing processes, sheet metal forming processes, metal casting processes, material removal processes, manufacturing processes for plastic, and composite materials. Joining methods, automation of manufacturing processes and operations, computer integrated manufacturing systems, product design and manufacturing of CAD/CAM/CIM, CNC machines, fundamentals of assembly line concepts (manual and automated), fundamentals of manufacturing systems (group technology, cellular manufacturing, flexible manufacturing systems), manufacturing process quality control, inspection and quality methods, lean six sigma in manufacturing.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4760 - Introduction to Robotics and Automation

3 hours

Introduction to robotics, mechatronics and manufacturing automation. Robotic mechanisms and modeling, forward and inverse kinematics, manipulator dynamics, systems modeling, sensors and actuator integration, trajectory planning, vision, sensors and classical feedback control. MATLAB is used for project-based learning. Students are given laboratory project assignments in robotics and automation

Prerequisite(s): MEEN 2240 and MEEN 3230.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4770 - Computational Fluid Dynamics

3 hours

Provides an introduction to computational fluid dynamics and heat transfer. The aim is to teach the fundamentals of the computational approach to study fluid flow problems and to provide a deeper understanding of the physical models and governing equations of fluid dynamics. Also present an opportunity to learn the basic skills of programming solutions to differential equations. The structure and performance of commercial software for applications in analysis and design of thermo-fluid systems also are discussed.

Prerequisite(s): MEEN 3210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4800 - Topics in Mechanical and Energy Engineering

3 hours

Varying topics in mechanical and energy engineering.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4810 - Topics in Mechanical and Energy Engineering

3 hours

Varying topics in mechanical and energy engineering.

Prerequisite(s): Consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4890 - Directed Study in Mechanical and Energy Engineering

1-3 hours

Study by individuals or small groups. Plan of study must be approved by supervising faculty. Written report is required.

Prerequisite(s): MEEN 2210.

May be repeated for 6 credit hours, but a maximum of 3 credit hours apply to major.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4900 - Special Problems in Mechanical and Energy Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems.

Prerequisite(s): Consent of instructor.

May be repeated for 6 credit hours, but a maximum of 3 credit hours from MEEN 4900-MEEN 4910 apply to major.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

# MEEN 4910 - Special Problems in Mechanical and Energy Engineering

1-3 hours

Individual instruction in theoretical, experimental or research problems.

Prerequisite(s): Consent of instructor.

May be repeated for 6 credit hours, but a maximum of 3 credit hours from MEEN 4900-MEEN 4910 apply to major.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

## MEEN 4920 - Cooperative Education in Mechanical and Energy Engineering

1 hour (0;0;3)

Supervised field work in a job directly related to the student's major, professional field of study or career objectives. Summary report required.

Prerequisite(s): None.

May be repeated for credit. Grades will not be included in student's major GPA calculation.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEEN 4930 - Undergraduate Research

3 hours

Undergraduate research project under the supervision of faculty advisor. Written report is required. These 3 credits can be counted as a technical elective course (only for students in the Grad Track program).

Prerequisite(s): Consent of department; enrollment in the Grad Track program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEEN 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Mechanical Engineering Technology**

## **MEET 2900 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEET 3550 - Geometrical Dimensioning and Tolerancing

3 hours (2:3)

Provides expanded explanations of dimensioning and tolerance methods and practices as defined by ASME National Standards (Y415-2009) and others. Tolerance of form, of position, datum, concentricity, symmetry, and gauging concepts for product, product equipment, and tooling design will be covered to reduce guesswork in manufacturing processes and thus improve quality, lower costs and ensure timely deliveries of manufacturing operations.

Prerequisite(s): ENGR 1304 and MFET 3110 or MEEN 3110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEET 3650 - Design of Mechanical Components

3 hours

Design and selection of machine elements.

Prerequisite(s): ENGR 2332.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 3750 - Digital Manufacturing

3 hours

This course aims to apply the fundamental and technological knowledge of Digitalization and Additive Manufacturing. Basic knowledge of materials behavior and manufacturing processes is required. As a learning outcome, the student will develop the ability to design, configure, and implement processes of additive manufacturing and 3D-scanning.

Prerequisite(s): ENGR 1304, MFET 3110.

Corequisite(s): ENGR 3450.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **MEET 3940 - Fluid Mechanics Applications**

3 hours (2:3)

Study of incompressible fluid mechanics, including pressure, force and velocity; hydraulic fluid power circuits and systems as used in industrial applications.

Prerequisite(s): ENGR 2302.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70; Lab (LF): \$20

#### MEET 3990 - Applied Thermodynamics

3 hours

Principles of energy balance and substance behavior as related to different engineering systems. Topics include gas laws, laws of thermodynamics, relationship between thermodynamics variables, thermodynamic tables and charts, power cycle and various applications.

Prerequisite(s): CHEM 1410, CHEM 1430, ENGR 2332.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4050 - Mechanical Design

3 hours (2;3)

Elements, principles and graphic representation techniques of the design process. Design methodology and process in applied engineering design. Design problem identification, refinement and analysis in the development of machines.

Prerequisite(s): MEET 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4100 - Fundamentals of Product and Process Design Development

3 hours

Design planning and strategies, reverse engineering, integration of product and manufacturing development, materials selection, and design for manufacturing assembly.

Prerequisite(s): MFET 3110 and MEET 3650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4130 - Failure of Deformable Bodies

3 hours

Continuum mechanics approach to failure mechanisms in deformable solid bodies with their system design applications and use of engineering plasticity fundamentals to describe the permanent deformation in solids. The indentation hardness tests are related to plasticity. The fracture, fatigue, and creep modes-of-failure analysis seeks to explain the mechanism, the use in mechanical systems design, service reliability, and their interrelation.

Prerequisite(s): ENGR 2332, ENGR 3450.

Same as MEEN 4130.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4140 - Engineering Vibration in Mechanical Systems

3 hours

Introduction to the application of engineering vibrations for engineering technologists, including topics of harmonic motion and resonance. Analysis and application of multidegree of freedom discrete systems is introduced together with the automotive case study of shock absorbers.

Prerequisite(s): ENGR 2302.

#### MEET 4350 - Heat Transfer Applications

3 hours

Principles of energy transfer by heat; conduction, free and forced convection, radiation, condensation and boiling heat transfer; combined heat transfer; introduction to heat exchanger; simple numerical techniques and computer applications.

Prerequisite(s): MEET 3940, MEET 3990.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4360 - Experimental Thermal Sciences

3 hours (2;3)

Applications of thermal-fluid sciences based on fluid mechanics, thermodynamics and heat transfer areas with an emphasis on experimental approach. Measurement and instrumentation techniques: measurement of temperature, pressure, flow and thermal- and transport-properties, fundamentals of data acquisition, fundamentals of numerical analysis. Major engineering applications of thermal-fluid sciences: power cycles, refrigeration cycles, HVAC systems, heat exchangers.

Prerequisite(s): MEET 3940, MEET 3990 and MEET 4350 or concurrent enrollment.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4370 - Power Plant Equipment and Systems

3 hours

Introduction to equipment used in the power, process and renewable industries. Valves, piping, pumps, compressors, generators, turbines, motors, lubrication systems, heat exchangers, furnaces, boilers, cooling towers, separators, reactors and distillation columns are covered. The utilization of this equipment within systems is covered.

Prerequisite(s): Junior standing in the College of Engineering.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4780 - Senior Design I

1 hour

Project teams specify, plan and design a product or process. Written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): MEET 4050, MEET 4350, MFET 4210 (any may be taken concurrently with MEET 4780).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4790 - Senior Design II

3 hours (1;4)

Implement, test and demonstrate a product or process. Oral and written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): MEET 4780.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

### MEET 4900 - Special Problems

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4910 - Special Problems

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### MEET 4920 - Cooperative Education

1 hour

A supervised industrial internship requiring a minimum of 150 hours of work per experience.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 3 semester credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## MEET 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Media Arts

# MRTS 1310 - Introduction to Broadcast, Cable and Internet Technology

(COMM 1335)

3 hours

Introduction to the historical, programming, physical, legal, social, and economic aspects of broadcasting, cable, and internet technologies.

Prerequisite(s): Pre-major status in media arts (PMRT) or CBCM (PCBM) and completion of 12 hours of UNT course work or accepted in transfer with a GPA of 2.75 or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 1320 - Introduction to Film Studies

DRAM 2366 OR COMM 2366

3 hours

An introduction to film studies. Areas of study include the production, distribution and reception of film with a special emphasis on film form.

Prerequisite(s): Pre-major in media arts (PMRT) and completed 12 hours of UNT course work or accepted in transfer with a GPA of 2.75 or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 2010 - Introduction to Media Arts Writing

(COMM 2339)

3 hours

Introduction to media writing and study of the basic theories, methodologies, techniques, principles and formats for the scripting of narrative and non-narrative media, including "New Media." Related software for screenplay, television, industrial and multimedia writing is explored. Required writing course for all MRTS pre-majors.

Prerequisite(s): Pre-major in media arts (PMRT) or CBCM major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 2210 - Introduction to Media Arts Production

3 hours (3;3)

Introduction to basic techniques. Audio, television (studio and location) and single-camera video and film methods are investigated. Includes production exercises and experiments.

Prerequisite(s): Pre-major in converged broadcast media (PCBM), or major in Media Arts (MRTS).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 2400 - Digital Media Writing

3 hours (3;1)

Emphasis on formats, styles, and how to research content/material. Introduction to converged broadcast information writing with emphasis in talk magazine, sports, long-form documentary and news formats.

Prerequisite(s): CBCM pre-major status and completion of 12 hours of UNT course work or accepted in transfer with a GPA of 2.75 or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

May be repeated for credit up to a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# MRTS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3210 - Audio Production

3 hours (2;3)

Audio production concepts and techniques using audio laboratory studio equipment.

Prerequisite(s): MRTS/CBCM major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 3220 - Multi Camera Studio Production

3 hours (2;4)

Studio production concepts and techniques using multi-camera studio equipment.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210 and 2.75 GPA  $\,$ 

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 3230 - Film Style Production

3 hours (3;3)

Basic single-camera production concepts and techniques using small format video cameras and editing equipment.

Prerequisite(s): MRTS/CBCM major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3300 - Radio and Television Announcing

3 hours

Announcer qualifications, techniques and professional standards. Practice in delivery for all program and commercial announcing situations.

Prerequisite(s): MRTS/CBCM major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3330 - Sports Broadcasting I

3 hours

Production techniques for radio and television involved in the broadcasting of sports events. Topics include pre-production, producing sports for radio and television, sports announcing, and evaluating sports programming. Course may involve covering sports events through KNTU-FM and NTTV. Focuses on covering football, men and women's basketball, and other fall sports.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210 and junior standing.

#### MRTS 3340 - Sports Broadcasting II

3 hours

Production techniques involved in the broadcasting of sports events for radio and television. Topics include preproduction, producing sports for radio and television, sports announcing and evaluating sports programming. Course may involve covering sports events through KNTU-FM and NTTV. Focuses on covering men's and women's basketball, baseball and other spring sports.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210 and junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 3360 - Social Media Strategies

3 hours

Introduces students to digital media tools and platforms for the purposes of collaboration, research, analysis and communication.

Prerequisite(s): MRTS/CBCM major status or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3410 - Intermediate Topics in Media Studies

3 hours

Rotating topics in Media Studies at the intermediate level. Representative topics may include: Perspectives in Game Studies, Diversity in American Film, Video Game Histories.

Prerequisite(s): MRTS or CBCM Major Status and 2.75 Cumulative GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 3445 - Video Game Histories

3 hours

Video game history from both the dominant industry perspective of upgrading technology and alternative viewpoints including gendered, nonlinear, and material histories.

Prerequisite(s): MRTS/CBCM Major Status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3465 - American Film History

3 hours

A survey of film in America, from its beginnings to its contemporary manifestations, focused on its aesthetic sociocultural, and industrial contexts. The class includes readings, screenings, and discussions of American "independent" films as well as mainstream Hollywood releases.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 3470 - International Film History to 1945

3 hours (3:0:3)

Aesthetic, technological and industrial development of film from 1896 to 1945, including the cinemas of North and South American, Europe, Asia, and Africa. Concentrates on the narrative film.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3475 - International Film History from 1945

3 hours (3;0;3)

Aesthetic, technological and industrial development of film from 1945 to present, including the cinemas of North and South America, Europe, Asia, and Africa. Concentrates on the narrative film.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 3482 - Radio Practicum

1-3 hours

Supervised work in the on-campus radio broadcasting activities of the university's radio station, KNTU-FM 88.1 FM. Students learn various production techniques and the operations related to the station's various platforms which include broadcast, web site and social media.

Prerequisite(s): Consent of department and junior standing.

May be repeated for credit; however, no more than 6 hours of total credit for MRTS 3482, MRTS 3483, MRTS 3501, MRTS 3502, MRTS 4480, MRTS 4900 and MRTS 4910 may be applied to the 42 hours of MRTS credit required for the degree. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3500 - Video Photography, Editing and Reporting for Digital Media

3 hours (3;1)

Introduction to shooting, writing, editing and producing (both audio and video) skills targeting information programming including documentary, sports, magazine formats and news across multiple platforms and distribution modes.

Prerequisite(s): CBCM/MRTS major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 3501 - Television Practicum

1 hou

Supervised work in the on-campus television activities of the Department of Media Arts, such as NTTV (North Texas Television). Students learn various production techniques and the operations of a television station but do not check out production equipment or reserve television studio time without specific approval from the practicum instructor.

Prerequisite(s): MRTS/CBCM major status, consent of department and junior standing.

May be repeated for credit; however, no more than 6 hours of total credit for MRTS 3482, MRTS 3483, MRTS 3501, MRTS 3502, MRTS 4480, MRTS 4900 and MRTS 4910 may be applied to the 42 hours of MRTS credit required for the degree. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3502 - Advanced Television Practicum

2 hours

Supervised work in the on-campus television activities of the Department of Media Arts, such as NTTV (North Texas Television). Students are designated as "producers" and have the primary responsibility of originating programs, supervising and performing day-to-day production activities, checking out equipment and working with the instructor on special projects and assignments. Students participate in developing Internet-based news, sports and entertainment programming based on original work.

Prerequisite(s): MRTS/CBCM major status, consent of department and junior standing.

May be repeated for credit; however, no more than 6 hours of total credit for MRTS 3482, MRTS 3483, MRTS 3501, MRTS 3502, MRTS 4480, MRTS 4900 and MRTS 4910 may be applied to the 42 hours of MRTS credit required for the degree. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3525 - Content Development for Digital Media

3 hours (3;1)

Advanced production of news and informational content for radio, television and the Internet. Project-oriented curriculum giving advanced students experience creating podcasts, marketing video, mini docs and other digital content for cross-platform distribution.

Prerequisite(s): CBCM or MRTS major status, MRTS 2210 and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3560 - Interviewing and Performance for Electronic News

3 hours

Theory of broadcast communication as applied to television and radio news and public affairs. Focus on interviewing skills with emphasis on researching topics, developing interview format and streaming Internet interviews. Teaches voice and on-camera performance for radio and television, including live in studio and from the field, for use in both news and public affairs environment. Extensive hands-on experience.

Prerequisite(s): MRTS/CBCM major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3610 - Film and Television Analysis

3 hours (2:4)

Introduces students to various qualitative methods used to study film and television, such as semiotics, structuralism, ideology and psychoanalysis.

Prerequisite(s): MRTS/CBCM major status and MRTS 1320; or consent of department and 2.75 GPA.

This course serves as a pre-requisite for many 4000 level studies courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 3615 - Understanding Media Industries

3 hours

Introduction to the organization and function of the major media industries across societies, nations and time periods. Provides students with knowledge of how media industries operate, why they work as they do, and the broader theoretical and practical implications of media industry structure and function.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

This course serves as a prerequisite for many 4000 level studies courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3620 - Digital Media and Society

3 hours

Overview of development, organization and operation of different digital media technologies, platforms and industries. Analyzes broader concepts related to identity, community, and privacy.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

This course serves as a prerequisite for many 4000 level courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 3630 - Perspectives on Video Games

3 hours

Analyzes video games that come from the humanities and social sciences using a variety of methods.

Prerequisite(s): MRTS/CBCM Major Status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 3640 - Scene Analysis

3 hours

Studies and analyzes scenes from 24 narrative feature films. Scenes will be studied and analyzed from the perspective of the Screenwriter, the Director, the Cinematographer, the Actor, and the Editor

Prerequisite(s): MRTS/CBCM Major Status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### MRTS 3650 - Advanced Audio Production

3 hours (2:3)

Advanced training in the art and technique of audio production in radio and other media.

Prerequisite(s): MRTS 3210. MRTS/CBCM major status.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4105 - History of Broadcasting in Britain

3 hours

The British Broadcasting Corporation (BBC) and how its history and evolution directly impacted the development of the U.S. broadcasting industry.

Prerequisite(s): MRTS/CBCM Major Status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 4106 - Contemporary Broadcasting in Britain

3 hours

Current state of British media across multiple platforms with a focus on the impact and influence American media has played in recent years. Significant attention is given to film, television, and entertainment in the current media landscape.

Prerequisite(s): MRTS/CBCM Major Status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 4110 - U.S. Radio History

3 hours (2;3)

Overview of the technical, economic, regulatory, and social factors influencing the development of U.S. radio broadcasting from its inception to the present. Critical analysis of radio program forms and strategies.

Prerequisite(s): MRTS/CBCM major status.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4120 - U.S. Television History

3 hours (2:3)

Overview of the technical, economic, regulatory, and social factors influencing the development of U.S. television from its inception to the present. Critical analysis of television program forms and strategies.

Prerequisite(s): MRTS/CBCM major status and MRTS 3610, MRTS 3615, or MRTS 3620 and 2.75 GPA.

## MRTS 4125 - History and Theory of Film Remakes

3 hours

The cultural and industrial logics behind film remakes from their origins as "dupes" at the turn of the 20th century to their current iteration as reboots in the 21st century.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4140 - Intermediate Film Production

3 hours (3:2)

Scripting, preproduction, cinematography, directing, editing and using 4K Digital Cinema equipment.

Prerequisite(s): MRTS majors only; MRTS 3210 and MRTS 3230 with a grade of B or better and consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4150 - Cinematography

3 hours

Cinematography is an advanced, hands-on film production course. Working with high-end cameras and lighting kits, students explore an array of aesthetic shooting and lighting techniques. Additionally, students receive immersive training in the technical aspects of lighting and camerawork.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210 and 2.75 GPA

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4165 - Podcasting

3 hours

Content will cover podcast history and genres, audio storytelling, recording and editing, digital delivery techniques, legal issues, audio equipment, and podcast distribution. Student podcasts will be produced utilizing both audio studio and audio location sound equipment, and audio editing.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3210 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4200 - Media Aesthetics and Design Thinking

3 hours

Exploration of aesthetic dimensions of television, film, and other visual media.

Prerequisite(s): MRTS/CBCM major status, MRTS 3230 and 2.75

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4215 - British Cinema and Television

3 hours

Theories of British national identity and how these are reflected in its cinema and television of the 1990s and beyond. Political and cultural discourses, as well as race (incl. regional specificities) and gender.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4220 - Post-War European Film

3 hours

Examines three major film movements that developed in Europe after WWII: Italian Neorealism, the French New Wave, and British New Wave. Identifies the historical and cultural influences behind these

film movements and explores the aesthetics of each movement and how these aesthetics reflect the philosophical and/or political ideals of the filmmakers.

Prerequisite(s): MRTS 3610. MRTS/CBCM major status.

 $Course \ specific \ fees \ (in \ addition \ to \ tuition \ and \ mandatory):$ 

Academic (AF) per hour: \$60.72

#### MRTS 4225 - Women in Film

3 hours

The development of feminist film theories and their continued impact on contemporary global cinema. Addresses a wide range of topics as they relate to women in film, including agency, violence, sexuality, spirituality and social politics.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4240 - Hitchcock Films

3 hours

Focuses on films directed by Alfred Hitchcock tracking the development of Hitchcock's career from the early days in Britain through his studio successes in America. Detailed analyses of specific Hitchcock films and engagement with the various debates about authorship, genre, psychoanalysis and film which have been staged in relation to Hitchcock's work.

Prerequisite(s): MRTS/CBCM major status and MRTS 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4245 - Documentary, Visual Anthropology and Immersive Storytelling

3 hours

Analyze and interrogate human storytelling, anthropology, documentary and immersive media by seeking to understand the personal and mediated spaces where we define ourselves, our culture and that of others. Examine personal and cultural storytelling roles as individuals, media producers and consumers.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4250 - Cinema Beyond the West

3 hours

Explores the various forms and styles of contemporary world cinema. Different ideologies of foreign narratives that explore diverse subject matter, issues, and conflicts. The historical development of cinema is examined in specific countries while considering its political and social influences up through present day.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4320 - Media Law and Regulations

3 hours

An introduction to the laws and regulations affecting broadcasting, cable, film and digital media and analyzes the ways that Hollywood has shaped the laws, regulations, and culture of the U.S.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 is recommended.

## MRTS 4340 - History of the Documentary

3 hours (3:2)

Overview of the history of the documentary film from 1895 to the present in context of historical and political events of the time. Examination of the evolution of the style and form, including the impact of production technology on the process.

Prerequisite(s): MRTS/CBCM major status and junior standing.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 4350 - Media Authors

3 hours (3;0;3)

Examines film, television, games, or other media art from the point of its authorial creation. Rotating topics may include the work of specific directors, screenwriters or producers.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610 and 2.75 GPA.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4360 - Global Media

3 hours

Study of global media and communication theories. Students analyze press and media systems; international media industries; the sources and flow of international media content and news; advertising and branding; and media influence on audiences around the world.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4400 - Advanced Film Production

3 hours (2;3)

Techniques of planning and production; production of a film project.

Prerequisite(s): MRTS majors only and MRTS 4140.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

## MRTS 4405 - Documentary Production

3 hours

The production of a creatively crafted and technically proficient short documentary from idea through the final edit and public screening. Range of styles and approaches to documentary filmmaking, ethical considerations, appropriate preproduction planning and scheduling, and obtaining permissions and clearances in advance of production.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 2210 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4410 - Topics in Digital Media Studies

3 hours

Rotating topics in digital media studies. Representative topics include social media, mobile media, online platforms, and video games.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610, MRTS 3615, or MRTS 3620 and 2.75 GPA.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4411 - Video Production Topics

3 hours

Rotating topics in video production. Representative topics include documentary production and music for television production.

Prerequisite(s): Prerequisites vary with topic, but include MRTS/CBCM major status, MRTS 2210 and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4412 - Film Production Topics

3 hours

Rotating topics in film production. Representative topics include lighting for cinematography and directing for film.

Prerequisite(s): Prerequisites vary with topic, but include MRTS major status, MRTS 2210 and consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4413 - Audio Production Topics

3 hours

Rotating topics in audio production. Representative topics include music for film and television and digital audio effects.

Prerequisite(s): MRTS/CBCM major status, MRTS 3210 and 2.75 GPA.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4415 - Topics in Film and Television Studies

3 hours

Rotating topics in film and television studies. Topics may include studies of specific genres, national cinemas, or production periods.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610 and 2.75 GPA.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4420 - Media Programming

3 hours

Provides an understanding of programming for media, including the theories and strategies of program selection, format, scheduling and evaluation.

Prerequisite(s): MRTS/CBCM major status, and 2.75 GPA.

MRTS 3615 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4425 - Audience Research

3 hours

Covers the current audience research methodologies and theories, the ratings industry and analysis processes, including sampling methods, data collection methods, quantitative methods, qualitative methods, theories of audience behaviors, gross measures, cumulative measures, on-line audience research, and global audiences.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 is recommended.

#### MRTS 4428 - Mobile Media

3 hours

Relevant theories and updated information about mobile media. Mobile media diffusion, mobile media economy, mobile media marketing, and mobile app development.

Prerequisite(s): MRTS/CBCM Major Status, MRTS 3610 or MRTS 3615, and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4430 - Media Management

3 hours

Provides an understanding of the many tasks and duties involved in media management in the broadcast, cable and telecommunication industries. Includes classroom lectures/discussions, guest speakers and individual case study assignments and projects.

Prerequisite(s): MRTS/CBCM major status, MRTS 3615 and 2.75 GPA

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4435 - Media Marketing and Branding

3 hours

Provides an overview and understanding of the principles, theories and technique of promotion, marketing and branding as applied to television and other electronic media. The focus is creative, handson, and industry oriented.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4440 - Media Sales

3 hours (3;2)

Economics, standards and ethics of advertising in the electronic media, including the use of broadcast research to develop an advertising campaign.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 is recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4445 - Media in the 21st Century

3 hours

Examines the concept of human communication, broadcast communication, media consumption, media and news in the 21st century, including global media styles, propaganda and blogging. Also an analysis of how widespread mistrust of the media influences the manner in which journalists do their jobs, with a focus on First Amendment rights, freedom of information, and access to government and business.

Prerequisite(s): MRTS/CBCM major status.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4450 - Topics in Media Industry Studies

3 hours

Rotating topics in media industry studies. Topics may include digital distribution, social and mobile media industries, production cultures, and case studies of industry leaders.

Prerequisite(s): MRTS/CBCM major status, MRTS 3615 and 2.75 GPA. Other prerequisites may vary with topic.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4455 - Media Ethics

3 hours

Examines ethical questions and dilemmas faced by today's media professionals. Strong emphasis on how to implement and use an effective ethical decision-making process in the broadcast arena. Includes extensive use of case studies, class discussions, role playing, research and writing.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

MRTS 3615 recommended.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4460 - Intermediate Screenwriting

3 hours

Intermediate-level study of the methodologies, theories, principles, formats, skills and techniques of writing scripts for narrative features from concept to completed script using formatting-relevant software.

Prerequisite(s): MRTS/CBCM major status and MRTS 2010.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4465 - Writing for Television

3 hours

An introduction to creating and writing for half-hour and hour-long series through individual and collaborative TV writers' room environments.

Prerequisite(s): MRTS/CBCM major status and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4470 - Topics in Media Writing

3 hours

Rotating topics in MRTS writing. Topics include science-fiction screenwriting, critical studies writing and media report writing.

Prerequisite(s): Prerequisites vary with topic, but include MRTS/CBCM major status, consent of department, and MRTS 2010.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4480 - Internship in Media Arts

1-3 hours

Supervised off-campus work experience in a job that relates to student's career objective.

Prerequisite(s): MRTS major status, junior or senior classification with a minimum of 12 hours completed in the major including MRTS 2210; or CBCM major status, junior or senior classification with a minimum of 15 hours completed in the major including MRTS 3500. Both majors require a 2.75 GPA, meet employer's requirements and receive consent of department.

May be repeated for credit; however, no more than 6 hours of total credit for MRTS 3482, MRTS 3483, MRTS 3501, MRTS 3502, MRTS 4480, MRTS 4900 and MRTS 4910 may be applied to the 42 hours of MRTS credit required for the degree. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4500 - Advanced Screenwriting

3 hours

Creation, treatment, writing, and revision of a full-length motion picture screenplay or teleplay. Students are expected to complete a 90- to 120-minute script.

Prerequisite(s): MRTS/CBCM major status, MRTS 2010 and consent of department.

#### MRTS 4515 - Teen Media

#### 3 hours

A critical examination of various youth media and cultures in postwar America. The course addresses popular teen films and TV and considers how young people use, value, produce, and find meaning in media across different contexts.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610, MRTS 3615 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4520 - African-American Film

#### 3 hours

Examines the representations of African-American characters and concerns throughout the history of American film.

Prerequisite(s): MRTS/CBCM major status and MRTS 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4530 - Gender and Sexuality in the Horror Film

#### 3 hours

Examines the history of the horror film, focusing on issues related to how the genre configures gender and sexuality.

Prerequisite(s): MRTS/CBCM major status and MRTS 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4540 - Lesbian, Gay and Queer Film and Video

#### 3 hours

Examines the representation of lesbian, gay and queer characters and concerns throughout the history of American film.

Prerequisite(s): MRTS/CBCM major status and MRTS 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4550 - Cinema Verite

## 3 hours

Examines the development of this major style in documentary, from its introduction in 1960 to its present use in nonfiction film and television. Outlines its history in detail and explores its employment in reality television, fiction film and television drama.

Prerequisite(s): MRTS/CBCM major status, MRTS 3610 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4650 - Location Recording and Post Sound Production

### 3 hours

Concepts and practices of location sound recording and post sound mixing as they relate to the overall film production concept.

Prerequisite(s): MRTS/CBCM major status and MRTS 3210; MRTS 3650 preferred.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4670 - Media Economics

### 3 hours

Analysis of the economic aspects of the media industries, particularly film, television and other industries; accomplished through readings, in-class discussions and individual projects.

Prerequisite(s): MRTS/CBCM major status, MRTS 3615 and 2.75 GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4740 - Theories and Techniques of Visual Editing

#### 3 hours

Overview of some of the most useful editing techniques, theories and trends in the history and current practice of film and television. The craft of editing will be introduced using digital nonlinear editing systems.

Prerequisite(s): MRTS/CBCM major status and MRTS 3230.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

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MRTS 4745 - Advanced Visual Editing

#### 3 hours

Designed for students wishing to pursue a career as a professional television or film editor. Topics include: understanding editor and assistant editor responsibilities, professional editing terms and concepts, working with high resolution workflows, and on-line vs off-line editing. Additional topics: genre editing, versioning and deliverables. Students who pass the course become eligible for the Avid Certified Professional Exam.

Prerequisite(s): MRTS or CBCM major status, MRTS 4740 and 2.75 UNT GPA.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4750 - Advanced Video Production

#### 3 hours (2:3)

Advanced directing, postproduction editing, producer responsibilities and creative programs.

Prerequisite(s): MRTS/CBCM major status and MRTS 3220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4760 - Documentary Preproduction

#### 3 hours

The design of documentary productions of all types, in both film and video. Topics include the selection of subjects, research techniques, proposal writing, location scouting, funding and budgeting. Several case histories are examined and excerpts from a variety of documentary productions are screened.

Prerequisite(s): MRTS/CBCM major status and MRTS 3230.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4810 - Directing Narrative Media

### 3 hours

Major theories and skills needed to direct narrative film and video.

Prerequisite(s): MRTS/CBCM major status and MRTS 3220, MRTS 3230, and consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4820 - Producing and Managing Narrative Media

### 3 hours

Major theories and skills needed for the producing and production management of narrative media from concept through exhibition.

Prerequisite(s): MRTS/CBCM major status and MRTS 1320, MRTS 3220 and MRTS 3230.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4850 - Television News Producing

### 3 hours (3;3

Theory and practice of producing television newscasts in a station environment. Provides basic TV news management, content design and development for broadcast and exposure to other media career paths.

Prerequisite(s): MRTS/CBCM major status and MRTS 2210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### MRTS 4900 - Special Problems

1-3 hours

Problem must be approved by department chair.

Prerequisite(s): MRTS/CBCM major status and consent of department.

May be repeated for credit; however, no more than 6 hours of total credit may be applied to the 42 hours of MRTS credit required for the degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### MRTS 4910 - Special Problems

1-3 hours

Problem must be approved by department chair.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210 and consent of department.

May be repeated for credit; however, no more than 6 hours of total credit may be applied to the 42 hours of MRTS credit required for the degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4911 - Special Problems in Video Production

1–3 hours

Individual study topics to be proposed by the student and approved by media arts department faculty and Production Committee prior to commencing work.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210, consent of faculty member and consent of department.

May be repeated for credit; however, no more than 6 hours of total credit may be applied to the 42 hours of MRTS credit required for the degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4912 - Special Problems in Film Production

1-3 hours

Individual study topics to be proposed by the student and approved by MRTS faculty and Production Committee prior to commencing work.

Prerequisite(s): MRTS/CBCM major status, MRTS 2210, consent of faculty member and consent of department.

May be repeated for credit; however, no more than 6 hours of total credit may be applied to the 42 hours of MRTS credit required for the degree

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## MRTS 4913 - Special Problems in Audio Production

1-3 hours

Individual study topics to be proposed by the student and approved by MRTS faculty and Production Committee prior to commencing

Prerequisite(s): MRTS/CBCM major status, MRTS 2210, consent of faculty member and consent of department.

May be repeated for credit; however, no more than 6 hours of total credit may be applied to the 42 hours of MRTS credit required for the degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### MRTS 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

# Merchandising

## MDSE 2350 - Trend Analysis and Forecasting

3 hours

Comprehensive overview of apparel product development, including researching and interpreting fashion direction, analyzing comparable market offerings, and developing color, style and fabric trends. Customer conversion, revenue optimization, global collaboration, and selling innovation are explored.

Prerequisite(s): None.

#### MDSE 2490 - Introduction to Retail Merchandising

3 hours

Survey of the retail industry including development, merchandising and distribution of apparel products. Introduction to terminology, resources, industry participants and career opportunities.

Prerequisite(s): None.

#### MDSE 2650 - Textiles for Apparel

3 hours

Fibers, fabric, construction and finishes applied to selection, use and care of apparel fabrics.

Prerequisite(s): None.

#### MDSE 2750 - Consumers in a Global Market

3 hours

Cross-cultural comparisons using systems, human needs, and consumer behavior frameworks are integrated with critical, empirical and creative thinking processes to develop a global perspective that is sensitive to diverse consumers' needs and preferences for products and services in a global market. This class helps students gather the tools necessary for full engagement in the undergraduate experience by having them examine their own value systems and compare and contrast them with other cultures' in a consumption context. Requires students to think critically, articulate views, cultivate self-awareness, balance and an openness to change, and engage with others in thoughtful and well-crafted communication.

Prerequisite(s): None.

Core Category: Component Area Option or Social and Behavioral Sciences

## MDSE 2790 - Talent Development

3 hours

Examines the impact of business environments on professional and career effectiveness in the merchandising and digital retailing fields. Topics include effective business communication, ethical decision making and leadership development.

Prerequisite(s): None.

## MDSE 3350 - Historic Costume

3 hours

Survey of costume from ancient civilization to the present. Emphasis on technological, cultural and social influences on historic and contemporary styles.

Prerequisite(s): Junior standing recommended.

#### MDSE 3370 - Social Psychology of Dress and Appearance

3 hours

Theoretical frameworks are examined and used to interpret the meanings of dress in cultural patterns, social organizations, social interactions and personal identities. Current fashion trends are analyzed and interpreted through the study of popular culture and everyday life.

Prerequisite(s): None.

#### MDSE 3510 - Profit-Centered Merchandising

3 hours 3

Introduction to buying, merchandise planning and control, and pricing.

Prerequisite(s): MATH 1100 or higher with grade of C or better, ACCT 2010 with grade of C or better. Requires Excel proficiency. Students must submit verified Excel course completion from a third-party provider two weeks prior to enrollment. See MDR website for more information.

#### MDSE 3650 - Advanced Textiles

3 hours (2;2)

Evaluate aesthetic, durability, comfort, care, and safety problems associated with consumer textile products. Use AATCC and ASTM standards and procedures, basic research methods, technical and consumer literature, and computer applications to prepare a comprehensive textile product evaluation report.

Prerequisite(s): MDSE 2650 or HFMD 2655 with a grade of C or better.

#### MDSE 3750 - Consumer Studies

3 hours

Exploration of motivations influencing consumer purchase and use of products and services. A comprehensive theoretical and practical knowledge base is used to investigate various individual and environmental factors as they relate to the consumer purchase process and its outcomes.

Prerequisite(s): None.

#### MDSE 4001 - New York Study Tour for Merchandising and Digital Retailing

3 hours

Experience fashion and home furnishings industries through visits to manufacturing facilities, retail establishments, museums, historical structures, and industry support organizations in New York. Pre-trip and post-trip classes required. Students may get program credit for up to two study tour classes.

Prerequisite(s): C or better in MDSE 2490, DRTL 2090, or HFMD 2400; or RETL 2550; approval of application; good standing; and consent of college.

# MDSE 4002 - Dallas Study Tour for Merchandising and Digital Retailing

3 hours

Experience merchandising industries through visits to manufacturing facilities, retail establishments, museums, historical structures, and industry support organizations in and around Dallas. Students may get program credit for up to two study tour classes.

Prerequisite(s): C or better in MDSE 2490, DRTL 2090, HFMD 2400, or RETL 2550; approval of application; good standing and consent of college.

## MDSE 4003 - Global Discovery: Hong Kong/China

3 hours

Experience fashion and home furnishings industries through visits to manufacturing facilities, retail establishments, museums, historical structures, and industry support organizations in Hong Kong and China. Pre-trip and post-trip classes required. Students may get program credit for up to two study tour classes

Prerequisite(s): C or better in MDSE 2490, DRTL 2090, HFMD 2400, RETL 2550; approval of application; good standing; and consent of college.

#### MDSE 4004 - Global Discovery: Europe

3 hours

Experience fashion and home furnishings industries through visits to manufacturing facilities, retail establishments, museums, historical structures, and industry support organizations in Europe, primarily in Paris and London. Pre-trip and post-trip class meetings required. MDR students may get program credit for up to two study tour classes

Prerequisite(s): C or better in MDSE 2490, DRTL 2090, or HFMD 2400; MDSE 3350 and MDSE 3370; approval of application; good standing; and consent of college.

#### MDSE 4010 - Global Sourcing

3 hours

An overview of global sourcing in the textile and apparel industries and the factors affecting global sourcing product concept to distribution with an emphasis on global issues. Major topics include the textile and apparel complex and its history, international trade and the effects of trade policy, the sourcing process, selection of sourcing locations and partners, sourcing regions of the world, and current trends.

Prerequisite(s): Major or minor in consumer experience management, merchandising, home furnishings merchandising, digital retailing, or retailing; C or higher in MDSE 2490, DRTL 2090, HFMD 2400 or RETL 2550.

#### MDSE 4020 - E-Passport: Virtual Study Abroad

3 hours

Parallel experiences are provided for resident (e-passport) and study abroad students (passport) who participate in SMHM's study abroad experiences. Collaborative cultural immersion is experienced through authentic experiences, online and personal interactions, and appropriate assignments.

Prerequisite(s): C or higher in MDSE 2490, DRTL 2090, or HFMD 2400, or RETL 2550; or consent of instructor.

#### MDSE 4250 - Product Development

3 hours (2;2)

Analysis of the new apparel production process, including quality issues relative to development and production of ready-to-wear apparel. Concepts include apparel components, sizing, costing, and production planning.

Prerequisite(s): MDSE 2350 with a grade of C or better.

## MDSE 4510 - Advanced Buying, Planning and Allocation

3 hours

In-depth study of planning, buying and distributing merchandise to retail stores.

Prerequisite(s): C or higher in MDSE 3510.

## MDSE 4560 - Sustainable Strategies in Merchandising

3 hours

Comprehensive application of sustainability practices for product development and retail design in apparel and home furnishings enterprises.

Prerequisite(s): A grade of C or better in MDSE 2490, DRTL 2090, HFMD 2400 or RETL 2550

#### MDSE 4660 - Advanced Application

3 hours

Capstone course requiring students to apply theory, principles and practices to solve industry case studies. Emphasis on problem solving, case analysis, creative thinking, fact finding, data analysis and data interpretation.

Prerequisite(s):

Digital Retailing, Home Furnishings Merchandising, Merchandising and Retailing majors: DRTL 2090, HFMD 2400, MDSE 2490 or RETL 2550; MDSE 3510, MDSE 3750, plus 9 additional hours in major with C or higher.

**Consumer Experience Management majors:** DRTL 2090; MDSE 4010; plus 9 additional hours in major with C or higher.

#### MDSE 4850 - Brand Development

3 hours

Students plan, develop and present private label apparel or home furnishings products using a multi-functional team approach. Includes application of computer software.

Prerequisite(s): Major in consumer experience management, digital retailing, home furnishings merchandising, merchandising or retailing. C or higher in DRTL 2090, HFMD 2400; MDSE 2490 or DRTL 2090; and RETL 2550 plus 9 additional hours in the major.

#### MDSE 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

#### MDSE 4910 - Special Problems

1-3 hour

Prerequisite(s): None.

#### MDSE 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Merchandising, Hospitality and Tourism

## CMHT 2560 - Food Retailing: Issues and Trends

3 hours

Critical examination of the unique issues and trends across various food retail formats. Emphasis on innovation, evolving business models, technology, and changing consumer expectations.

Prerequisite(s): None.

# CMHT 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

#### CMHT 3450 - Effective Leadership Communication

3 hours

Principles of effective leadership communication will be explored as students develop, deliver, and evaluate professional presentations.

Prerequisite(s): None

## **CMHT 3950 - Creating Consumer Experiences**

3 hours

Exploration of the dynamic merging of retail merchandising, hospitality, and entertainment industries to create total consumer experiences. Topics include evolution of consumption, symbolic consumption, ritual consumption, sensory consumption, consumer efficiency; entertainment, thematic, lifestyle and value experiences; branding, brand extension and strategic alliance; and global experiential retailing.

Prerequisite(s): None.

Same as CEXM 3950.

# CMHT 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

#### CMHT 4000 - Global Discovery in Merchandising and Hospitality Management

1–3 hours

Experience fashion, home furnishings, and hospitality industries through visits to manufacturing facilities, retail establishments, museums, historical structures, hotels, restaurants and industry support organizations. Includes field study in industry centers for fashion, home furnishings, hospitality, or other selected U.S. or international destinations. Pre-trip and post-trip classes required.

Prerequisite(s): DRTL 2090, HFMD 2400, HMGT 1500, MDSE 2490, or RETL 2550; approval of application, good standing and consent of college.

Credit varies depending upon length of field study and destination. No more than 3 hours of field study may be used to fulfill degree requirements.

## CMHT 4750 - Managing a Diverse Workforce

3 hours

Workforce diversity provides strength in the current global business environment. Investigates the concepts, policies and practices facing professionals in the global workplace. Effective workplace interactions result when personnel hold a global perspective that incorporates an appreciation and understanding of human diversity. Personnel who perceive themselves as global employees are a critical element in business success. Managing a diverse workforce requires working effectively with people who vary by nationality, ethnicity, culture, religion, gender, language, age, abilities and unique personal characteristics. This diverse workforce may be employed in one locale, region or nation, or it may span several countries or the world.

Prerequisite(s): Senior standing.

Course is open to students in any major, and is to be taken during last year of course work.

#### CMHT 4790 - Internship in Merchandising and Hospitality Management

3 hours

Hospitality Management majors only: Supervised work experience in business, agencies or institutions as related to major field, requiring a minimum of 300 hours of work experience. Course requirements include Internet-based assignments, experiential activities and scheduled lecture times on campus. A student may not enroll in more than four additional classes during either long term/semester (fall/spring). During the combined summer sessions, students may not be enrolled in more than 12 total hours including CMHT 4790. All students must attend a pre-internship orientation the semester prior to enrolling in CMHT 4790.

Merchandising, Home Furnishings Merchandising, and Digital Retailing majors only: Supervised work experience in business, agencies or institutions as related to major field, requiring a minimum of 300 hours of work experience. Course requirements include assignments, experiential activities and scheduled lecture times on campus. A student may not enroll in more than three additional classes during either long term/semester (fall/spring). During the combined summer sessions, students may not be enrolled in more than one additional class during any term in which they are enrolled in CMHT 4790. All students must attend a pre-internship orientation the semester prior to enrolling in CMHT 4790.

Prerequisite(s): **Hospitality management majors:** hospitality management with senior standing, minimum Major/Professional Field GPA of 2.25, MDSE 2790, completion of 500 documented work hours in the hospitality industry prior to enrolling in CMHT 4790 and consent of instructor; must take CMHT 4790 in the last semester of coursework.

Merchandising, home furnishings merchandising and retailing majors: merchandising, home furnishings merchandising or retailing majors with advanced standing in major, MDSE 3510, MDSE 2790, plus 24 additional hours in required major courses (not program electives) with a grade of C or better, minimum major GPA of 2.50, and consent of instructor.

**Digital retailing majors:** major in digital retailing with advanced standing in major, MDSE 3510, MDSE 2790, plus 24 additional hours in required major courses (not program electives) including DRTL 2080 and DRTL 4070 with a grade of C or better, minimum major GPA of 2.50, and consent of instructor.

**Consumer experience management majors:** major in consumer experience management with advanced standing in major; MDSE 2790 with a grade of C or better and GPA of 2.0

# CMHT 4800 - Seminar in Merchandising, Hospitality and Tourism

3 hours

Seminar covering a broad range of research topics impacting the merchandising, hospitality, and tourism industries. Explore current trends through concentrated reading, industry connections, and group discussion

Prerequisite(s): Advanced standing.

#### Middle School Education

## EDME 3380 - Teaching and Learning in the Middle Grades

#### 3 hours

Provides teacher candidates with the knowledge and skills to teach young adolescents at the middle school level. Topics include young adolescent development; the middle level philosophy and school organization; middle level curriculum, instruction and assessment teaching skills; and middle level professional roles.

Prerequisite(s): Admission to the teacher education program (includes participation in a field-based program), an adolescent/lifespan development course, and an educational-application computer course.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDME 4103 - Student Teaching in Grades 4-8

#### 3 hours

Teaching under supervision in grades 4 through 8.

Prerequisite(s): Admission to teacher education; all program course work with the exception of (a) student teaching; (b) EDEE 4890 and (c) EDSP 4350 (as required for certification).

Required for those seeking grades 4–8 certification. See Student Teaching Program for details. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDME 4104 - Student Teaching in Grades 4-8

#### 3 hours

Teaching under supervision in grades 4 through 8.

Prerequisite(s): Admission to teacher education; all program course work with the exception of (a) student teaching; (b) EDEE 4890 and (c) EDSP 4350 (as required for certification).

Required for those seeking grades 4–8 certification. See Student Teaching Program for details. Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDME 4330 - Science in Grades 4-8

#### 3 hours

Subject matter background and material organization for an integrated science program in the upper-elementary and middle school. Students experience first hand the scope and sequence of science education.

Prerequisite(s): Admission to the teacher education program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDME 4340 - Social Studies in Grades 4-8

#### 3 hours

Principles of teaching social studies in the upper-elementary and middle school. Students observe social studies instruction and materials in real settings, apply principles of social studies instruction in classroom settings, and experience first-hand the scope and sequence of the curriculum in an upper-elementary or middle-school setting. Assignments, directed field experience and other class activities take place in a school setting.

Prerequisite(s): EDEE 3320 and EDME 3380. Admission to the teacher education program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDME 4351 - Teaching Mathematics in Grades 4-8

#### 3 hours

Offers candidates a constructivist approach to helping students develop a knowledge of mathematics in grades 4–8. Teaching strategies are presented with developmental activities that are used with middle grade students. Students reflect on what it means to teach mathematics and explore the factors that influence teaching.

Prerequisite(s): Admission to the teacher education program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDME 4890 - Inquiry into Classroom Practice**

#### 3 hours

Emphasis on reflective inquiry as teacher candidates relate theory and research to their own teaching experiences. Addresses the following topics: inquiry into curricular content and structure, pedagogical practices, assessment approaches, student diversity, equity issues, and professional communication and engagement.

Prerequisite(s): Successful completion of early student teaching and current placement in a field site for student teaching.

Corequisite(s): Must be taken concurrently with student teaching.

Required for student teaching.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDME 4951 - Honors College Capstone Thesis**

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Military Science

## MILS 1141 - Foundations of Leadership

1 hour (1;3)

Fundamental concepts of leadership in a profession in both classroom and outdoor laboratory environments. The study of time management skills, basic drill and ceremony, physical fitness, rappelling, leadership reaction course, first aid, making presentations and marksmanship. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in independent physical fitness training, plus optional participation in a weekend field training exercise.

Prerequisite(s): None.

## MILS 1142 - Introduction to Leadership

1 hour (1;3)

Application of principles of leadership through participation in physically and mentally challenging exercises with upper-division ROTC students. Course focuses on communication skills, organizational ethics, and study and time management techniques. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

Prerequisite(s): None.

#### MILS 1180 - Leadership Laboratory

1 hour (0;3)

Practical laboratory of applied leadership and skills. Student-planned, -organized and -conducted training, oriented toward leadership development. Laboratory topics include marksmanship, small unit tactics, multi-tiered programs focused on individual skill levels.

Prerequisite(s): None.

Uniform and equipment provided, no fee. May be repeated for credit.

#### MILS 2251 - Individual/Team Development

2 hours (2;1)

Application of ethics-based leadership skills and fundamentals of ROTC's Leadership Development Program. Develop skills in oral presentations, concise writing, event planning, coordination of group efforts, advanced first aid, land navigation, and military tactics. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

Prerequisite(s): None.

#### MILS 2252 - Individual/Team Military Tactics

2 hours (2:3)

Introduction to individual and team aspects of military tactics in small unit operations. Includes use of radio communications, making safety assessments, movement techniques, planning for team safety/security, and pre-execution checks. Concurrent enrollment in MILS 1180 leadership lab and mandatory participation in individual physical fitness training, plus optional participation in a weekend field training exercise.

Prerequisite(s): None.

## MILS 2291 - Conference Course

2 hours

Independent study designed to supplement the military science curricula by a student's concentrated study in a narrower field of military skill or subject matter.

Prerequisite(s): Consent of program director.

May be repeated for credit. Does not count for PE credit.

#### MILS 2292 - Conference Course

1 hour

Independent study designed to supplement the military science curriculum by a student's concentrated study in a narrower field of military skill or subject matter.

Prerequisite(s): Consent of program director.

May be repeated for credit. Does not count for PE credit.

#### MILS 2343 - Leadership Training Camp (LTC)

3 hour

A rigorous five-week summer camp conducted at an Army post, stresses leadership, initiative and self-discipline. No military obligation incurred. Completion of MILS 2343 qualifies a student for entry into the Advanced Course. Three different cycles offered during the summer, but spaces are limited by the Army. Candidates can apply for a space any time during the school year prior to the summer.

Prerequisite(s): None.

Open only to students who have not taken all four of MILS 1141, MILS 1142, MILS 2251 and MILS 2252 and who pass an ROTC physical examination. Pass/no pass only.

#### MILS 3341 - Leadership I

3 hours

Development of ability to evaluate situations, plan and organize training, learn military tactics, review case studies in leadership management and develop teaching and briefing skills.

Prerequisite(s): Consent of program director.

Corequisite(s): Concurrent enrollment in MILS 1180 mandatory.

#### MILS 3342 - Leadership II

3 hours

Practical application of squad and platoon leadership in tactical situations; operation of small unit communications systems. Development of the leaders' ability to express themselves, analyze military problems, and prepare and deliver logical solutions. Demanding physical fitness training and performance-oriented instruction, in preparation for Summer Field Training.

Prerequisite(s): Consent of program director.

Corequisite(s): Concurrent enrollment in MILS 1180 mandatory.

## MILS 3443 - Leadership Development Assessment Course

4 hours

A five-week off-campus field training course stressing the practical application of leadership management, with emphasis on tactical and technical military field skills.

Prerequisite(s): MILS 3341, MILS 3342.

Open only to students who have successfully completed MILS 3341 and MILS 3342, Pass/no pass only.

## MILS 4341 - Advanced Leadership I

3 hours

Stresses leadership qualities necessary of Command and Staff functions and operations. Plan and conduct meetings, briefings and conferences. Introduction to the Army Logistical System and the Personnel Management System. Preparation of after-action reports. Plan and conduct physical training programs.

Prerequisite(s): Consent of program director.

Corequisite(s): Concurrent enrollment in MILS 1180 mandatory.

## MILS 4342 - Advanced Leadership II

3 hours

Provides students with a basic working knowledge of the Military Justice System with emphasis on company-level actions and requirements, including Law of Land Warfare. Examines the ethical standards, professional roles, responsibilities, and uniqueness of the profession of officership.

Prerequisite(s): Consent of program director.

Corequisite(s): Concurrent enrollment in MILS 1180 mandatory.

#### MILS 4391 - Conference Course

3 hours

Independent study on an individual basis on current topics in military science. Performance will be assessed by oral examination, written test or research paper as arranged.

Prerequisite(s): Consent of program director.

May be repeated for credit.

# Music Applied Private Lessons (Concentration)

#### MUAC 1501 - Piano

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1502 - Organ

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1503 - Voice

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1504 - Violin

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1505 - Viola

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1506 - Cello

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1507 - Double Bass

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1508 - Flute

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1509 - Oboe

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1511 - Clarinet

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

## MUAC 1512 - Saxophone

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1513 - Bassoon

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1514 - French Horn

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1516 - Trumpet

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1517 - Trombone

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAC 1518 - Euphonium

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1519 - Tuba

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1521 - Percussion

1-3 hour

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1522 - Harp

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1526 - Jazz Guitar

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 1527 - Guitar

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAC 1528 - Harpsichord

1-3 hours

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 1532 - Jazz Piano

1 hour

Lower-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAC 1540 - Private Lessons (Concentration) in Electronics

2 hours

Students who have been accepted with electronics as their concentration instrument meet with their private instructor on a weekly basis to gain expertise in electronics. Study includes a variety of approaches to create audio and audio/visual music using electronic devices including computing devices (computers/tablets/phones), electronic audio hardware (analog synthesizers/digital controllers), and audio/arts technology software (audio production/video production/music programming languages). Lessons may include study in electronics performance, production, engineering and creativity.

Prerequisite(s): Consent of instructor.

MUAC 3540

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3501 - Piano

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3502 - Organ

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3503 - Voice

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3504 - Violin

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3505 - Viola

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3506 - Cello

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3507 - Double Bass

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3508 - Flute

1–3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3509 - Oboe

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3511 - Clarinet

1\_3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3512 - Saxophone

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3513 - Bassoon

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3514 - French Horn

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3516 - Trumpet

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3517 - Trombone

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3518 - Euphonium

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3519 - Tuba

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3521 - Percussion

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAC 3522 - Harp

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3526 - Jazz Guitar

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3527 - Guitar

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3528 - Harpsichord

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3531 - Jazz Piano

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3532 - Jazz Saxophone

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3533 - Jazz Voice

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3536 - Jazz Trumpet

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAC 3537 - Jazz Trombone

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAC 3538 - Jazz Bass

1-3 hours

Upper-level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for concentrations are 2 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAC 3539 - Jazz Composition and Arranging

1-3 hours

Upper level applied music, private lessons. Variable credit for concentrations.

Prerequisite(s): Consent of instructor.

## Music Applied Private Lessons (Major)

#### MUAM 1501 - Piano

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1502 - Organ

1\_5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1503 - Voice

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1504 - Violin

1–5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1505 - Viola

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1506 - Cello

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1507 - Double Bass

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1508 - Flute

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1509 - Oboe

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 1511 - Clarinet

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 1512 - Saxophone

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

Prerequisite(s): None. 659

#### MUAM 1513 - Bassoon

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1514 - French Horn

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1516 - Trumpet

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1517 - Trombone

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 1518 - Euphonium

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAM 1519 - Tuba

1–5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1521 - Percussion

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1522 - Harp

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1527 - Guitar

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 1528 - Harpsichord

1-5 hours

Lower-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 3501 - Piano

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAM 3502 - Organ

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3503 - Voice

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3504 - Violin

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3505 - Viola

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 3506 - Cello

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3507 - Double Bass

1–5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3508 - Flute

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3509 - Oboe

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3511 - Clarinet

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3512 - Saxophone

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 3513 - Bassoon

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAM 3514 - French Horn

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3516 - Trumpet

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3517 - Trombone

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3518 - Euphonium

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAM 3519 - Tuba

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAM 3521 - Percussion

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3522 - Harp

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3527 - Guitar

1-5 hours

Upper-level applied music, private lessons. Variable credit for majors. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAM 3528 - Harpsichord

1-5 hour

Upper-level applied music, private lessons. Variable credit for majors.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for majors are 2–4 credit hours per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

# Music Applied Private Lessons (Secondary)

#### MUAS 1501 - Piano

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1502 - Organ

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1503 - Voice

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 1504 - Violin

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1505 - Viola

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1506 - Cello

1–2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1507 - Double Bass

1-2 hour

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1508 - Flute

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1509 - Oboe

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1511 - Clarinet

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 1512 - Saxophone

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAS 1513 - Bassoon

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1514 - French Horn

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1516 - Trumpet

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1517 - Trombone

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 1518 - Euphonium

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1519 - Tuba

1–2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1521 - Percussion

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1522 - Harp

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1524 - Vocal Coaching

1–2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1525 - Baroque Harp

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 1526 - Jazz Guitar

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAS 1527 - Guitar

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1528 - Harpsichord

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 1531 - Keyboard Continuo Playing

1-2 hours

Lower-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3501 - Piano

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3502 - Organ

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUAS 3503 - Voice

1\_2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3504 - Violin

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3505 - Viola

1-2 hour

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3506 - Cello

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3507 - Double Bass

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3508 - Flute

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAS 3509 - Oboe

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3511 - Clarinet

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3512 - Saxophone

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3513 - Bassoon

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3514 - French Horn

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3516 - Trumpet

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3517 - Trombone

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3518 - Euphonium

1-2 hour

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3519 - Tuba

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3521 - Percussion

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3522 - Harp

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

#### MUAS 3523 - Functional Piano

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

### **MUAS 3524 - Vocal Coaching**

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3525 - Baroque Harp

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3527 - Guitar

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries. Classical guitar.

Prerequisite(s): Enrollment only by audition.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUAS 3528 - Harpsichord

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUAS 3531 - Keyboard Continuo Playing

1-2 hours

Upper-level applied music, private lessons. Variable credit for secondaries.

Prerequisite(s): None.

Curriculum requirements in Music Applied Private Lessons for secondaries are 1 credit hour per term/semester. Exceptions must have the consent of the dean of the College of Music. May be repeated for credit.

## **Music Audio Engineering**

## MUAE 2100 - Sound Engineering

3 hours

Introductory exploration and practice in sound engineering. Concepts in sound physics and acoustics are demonstrated and explored within a variety of audio production techniques and studio workflows, facilitating collaborative creative engagement in sound and music media.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUAE 3100 - Introduction to Digital Audio Workstation Techniques

3 hours

Project-based learning of basic to intermediate level techniques in audio, MIDI and audio-visual production using industry standard software applications.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUAE 3200 - Advanced Digital Audio Workstation Techniques

3 hours

Continuation of MUAE 3100. Project-based learning of advanced level techniques in audio, MIDI and audio-visual production using industry standard software applications.

Prerequisite(s): MUAE 3100 (relevant DAW section) or consent of instructor (upon demonstration of intermediate proficiency with relevant DAW).

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUAE 4100 - Mixing and Mastering

3 hours

Advanced techniques in recording production meeting professional standards in delivery of audio mix masters. Techniques in signal flow, signal processing, frequency utilization in mixing, and loudness mastering are explored, in addition to delivery of professional audio master delivery formats.

Prerequisite(s): MUAE 2100.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUAE 4200 - Album Making, Pre- to Post-Production

3 hours

Advanced team songwriting, demo recording, recording, editing, mixing and mastering to produce a full-length class compilation album. Professional producers invited as guest speakers. Field trips to outside professional studios. Introduction to album release and marketing business topics.

Prerequisite(s): MUAE 3100, MUAE 3200 and MUJS 3950; or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## **Music Career and Entrepreneurship**

#### **MUCE 2900 - Special Problems**

1-3 hours

Special Problems

Prerequisite(s): Consent of College

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4000 - Music Business and Entrepreneurship

3 hours

Provides students with a hands-on experience in planning and launching a musical venture. Upon completion, students will have compiled a professional portfolio, created or improved their own web sites, and will have implemented a plan of action for a music business plan based on their specific interests and needs. Students may also be referred to other UNT faculty and alumni for more information and potential networking opportunities to support their ventures. Through readings, lectures, case studies, assignments, classroom and guest presentations, students become acquainted with the entrepreneurial strategies and diverse trends used to embark in professional music careers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4010 - Marketing for Musicians

3 hours

Designed to help students develop marketing skills and an understanding of techniques and strategies required to promote their artistry or musical venture. Upon completion, students will have created a plan of action for an extensive marketing plan including a SWOT analysis, customer analysis, competitor analysis, marketing plan goals, branding strategy, product/service strategy, price strategy, placement, promotion and measuring strategies, as well as allocation of costs and marketing plan timeline. Students will have also completed a marketing consulting projecting by researching a case study with an existing musical organization and preparing recommendations to improve their marketing campaign. Students may also be referred to other UNT faculty and alumni for more information and potential networking opportunities to support their marketing plan development. Through readings, lectures, case studies, assignments, classroom and guest presentations, students become acquainted with the marketing strategies and current trends that successful musicians implement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4020 - Music Leadership and Performing Arts Management

3 hours

Provides students with the tools and resources to create, develop, facilitate, and evaluate performing arts organizations. Engages students in a series of project activities including fundraising, volunteering, and private consulting for a local non-profit that allows them to gain hands-on experience. Case studies focus on real-life situations faced by arts organizations as exemplified in the required textbook and the Eastman Case Studies. Upon completion, students will have developed essential skills in performing arts administration including board relations, management of volunteers, audience development, organizational management and leadership, venue management, and strategic planning for mission driven organizations. Students also develop an understanding of the structure of music and arts non-profit organizations, as well as the relationship between, leaders, volunteers, marketing and fundraising. Through readings, lectures, case studies, assignments, classroom and guest presentations, students become acquainted with the arts management strategies and diverse trends used to embark in professional performing arts administration careers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4030 - Music Entrepreneurship Practicum/ Internship

3 hours

Provides an opportunity for students to develop hands-on experiences in the music industry. Interns receive mentorship from music and business professionals, make connections, and build practical skills to manage and promote their careers. These experiences also help students develop a professional portfolio with a track record of music business and arts administration experience, making them more competitive in the marketplace. A variety of internship opportunities are available through several musical organizations in the vibrant DFW community. Students are placed with an organization based on their interests and goals and are given an internship contract for the semester. The contract is signed by the student, the internship organization mentor, and the Director, Dr. Claure.

Prerequisite(s): MUCE 4000 and students must be placed with approval from faculty in order to be matched appropriately.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCE 4040 - Music Law and Finance

3 hours

Students learn to describe the legal-musical ecosystem, identify legal conflicts of interest, explain key legal concepts and issues including copyright and business entities, examine and evaluate typical music industry contracts, and have an understanding of finance management skills including budgeting, long-term saving options, tax preparation, salary negotiation, etc. Students do not simply learn about the course topics (listed below) but they also experience them firsthand through various projects and assignments. Students write a contract, create a budget, create a crowdfunding campaign, etc. In-depth case studies are used to further explore music law topics. A variety of guest speakers who are experts in their fields share their expertise and experience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCE 4050 - Artist Management and Touring

3 hours

Designed to help students understand the roles of a manager and the management team and their significance in the development of an artist's career. Students learn why an artist needs a manager, the keys to finding the right one, what a typical management contract looks like, artist income streams, how to tour, and strategies for planning and developing an artist's career. Examines the principles of leadership dynamics and motivation in order to focus and empower current and potential managers. Students learn to apply these concepts in order to begin self-managing or to lead them to careers in artist and talent management. Unlike many talent management courses, this course is designed not just for commercial musicians but classical musicians as well and explores the unique issues that face classical performing arts management. In addition to readings and case studies, guest lecturers from various classical music and commercial music talent agencies are brought in to discuss the realities facing today's artists and artist managers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUCE 4060 - Beginning Digital Audio Production for Music Entrepreneurs

3 hours

Basic introduction to concepts and techniques of song production using industry standard DAW (Digital Audio Workstation) software. Real-life individual and team projects provide an experiential overview of MIDI sequencing, audio recording, editing, mixing and mastering. Professional producers invited as guest speakers. Field trips to outside professional studios.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCE 4070 - Business of Music in Media

3 hours

A practical study of music industry around visual-music media production discussing career options, roles and responsibilities, sources of revenue, copyright, publishing, recording and production, contracts, business strategies, and evolving paradigms (business and creative) affecting producers of music for media.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4890 - Studies in Music Entrepreneurship

1-3 hours

Organized classes specifically designed to accommodate the needs of students and demands of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUCE 4900 - Special Problems

1-3 hours

Special problems in music entrepreneurship

Prerequisite(s): Consent of College.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **MUCE 4910 - Special Problems**

1-3 hours

Special Problems in music entrepreneurship

Prerequisite(s): Consent of College.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## **Music Composition**

## **MUCP 1180 - Contemporary Materials and Techniques I**

2 hours (2;2)

Basic technical and creative skills, survey of recent music literature.

Prerequisite(s): Concurrent enrollment in MUTH 1400/MUTH 1410 or MUTH 1500/MUTH 1510, or successful completion of MUTH 1500/MUTH 1510.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 1190 - Contemporary Materials and Techniques II

2 hours

Continuation of MUCP 1180.

Prerequisite(s): MUCP 1180. MUTH 1500/MUTH 1510 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## **MUCP 2080 - Secondary Composition I**

1 hour (1;0)

Writing small works in contemporary styles.

Prerequisite(s): MUCP 1180. Consent of college.

Corequisite(s): Concurrent enrollment in MUCP 2200 required.

May be repeated for credit, contingent on a grade of B or better. Primarily for non-composition majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCP 2180 - Intermediate Composition I

1 hour (1:0)

Writing in small forms for simple media in contemporary styles.

Prerequisite(s): MUCP 1180 and MUCP 1190 (with grades of B or better); MUTH 1400, MUTH 1410, MUTH 1500 and MUTH 1510 (with a grade of B or better); acceptance at the concentration level on an instrument or voice.

Corequisite(s): Concurrent enrollment in MUCP 2200 required.

For composition majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## **MUCP 2190 - Intermediate Composition II**

1 hours (1;0)

Writing in small forms for simple media in contemporary styles.

Prerequisite(s): MUCP 1180 and MUCP 1190 (with grades of B or better); MUTH 1400, MUTH 1410, MUTH 1500 and MUTH 1510 (with a grade of B or better); acceptance at the concentration level on an instrument or voice.

Corequisite(s): Concurrent enrollment in MUCP 2200 required.

For composition majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCP 2200 - Composition Seminar

1 hour

Weekly meeting for students enrolled in sophomore-level composition lessons. Includes survey of contemporary repertoire, discussion of compositional techniques, and professional development for composers.

Prerequisite(s): None.

Corequisite(s): Concurrent enrollment in one of the following courses: MUCP 2080, MUCP 2180, MUCP 2190

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 2900 - Special Problems**

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 3090 - Class Composition**

3 hours (2;1)

Beginning problems in composition; composition and study of contemporary materials and techniques.

Prerequisite(s): MUTH 2500 and MUTH 2510 or consent of instructor.

For non-composition majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 3180 - Advanced Composition I

2-3 hours (3:0)

Continuation of MUCP 2190. Extended works for larger combinations of instruments or voices.

Prerequisite(s): MUCP 2190 (with a grade of B or better); MUTH 2500 and MUTH 2510 (with a grade of B or better); consent of college following sophomore composition jury.

For composition majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 3190 - Advanced Composition II

2–3 hours (0;3)

Continuation of MUCP 3180.

Prerequisite(s): MUCP 3180 (with a grade of B or better).

For composition majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 3320 - Instrumentation**

3 hours

Basic ranges, transpositions and terminology; transcriptions for instrumental combinations. Score study and rehearsal attendance required.

Prerequisite(s): MUTH 2500, MUTH 2510. MUCP 2190 or MUCP 3090 (with a grade of B or better); or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCP 3670 - Introduction to Electroacoustic Music

3 hours (3;1)

Study of the theory and practice of electroacoustic composition, including a survey of the literature, audio techniques and studio hardware/software use. Course projects on electroacoustic music applications, practical exercises and original composition.

Prerequisite(s): 6 hours of composition or consent of college.

#### **MUCP 4080 - Secondary Composition II**

2-3 hours (3;0)

Writing small works in contemporary styles.

Prerequisite(s): MUCP 2080 or MUCP 3090, or equivalent.

For non-composition majors. May be repeated for credit, contingent on a grade of B or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 4180 - Advanced Composition III**

2-3 hours (0:3)

Continuation of MUCP 3190. Advanced projects for various media.

Prerequisite(s): MUCP 3190 (with a grade of B or better).

For composition majors only. May be repeated for credit, contingent on a grade of B or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 4195 - Senior Composition Capstone Project**

3 hours (1;0;2)

Continuation of MUCP 4180. Production of senior composition capstone project.

Prerequisite(s): MUCP 4180 (with a grade of B or better) and consent of college following the senior recital hearing. Successful completion of the Upper Division Exam (UDE).

Individual instruction.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 4320 - Orchestration

3 hours

Historical survey of orchestrational practices, with emphasis on contemporary approaches. Creation of original works or transcriptions for orchestra. Score study and rehearsal attendance required.

Prerequisite(s): MUCP 3320 (with a grade of B or better) and MUCP 2190, or equivalent.

Meets with MUCP 5320.

Primarily for composition majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 4590 - Intermedia Performance Arts

2 hours

Introduction to intermedia performance through class performance, repertoire analysis, historical context and readings of critical texts. Production and performance of individual and group projects in the presentation of intermedia compositions, emphasizing computer music media and utilizing the resources of the Merrill Ellis Intermedia Theater. Open to undergraduate students in music and other related fields in the arts, humanities and sciences.

Prerequisite(s): Consent of college.

Corequisite(s): MUEN 4595

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCP 4685 - Topics in Composition

3 hours

Advanced projects in composition focusing on compositional techniques, practices, and analytical approaches.

Prerequisite(s): Prerequisite(s): MUCP 3180, MUCP 4080, or equivalent.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 4690 - Topics in Computer Music Media

3 hours

Advanced studies in computer music and related media focusing on compositional techniques, interactive systems, software tools, hardware design, performance practices, and analytical approaches. May be repeated for credit.

Prerequisite(s): Prerequisite(s): MUCP 3670 or equivalent.

Same as MUCP 5690.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUCP 4695 - Topics in Contemporary Music

3 hours

Advanced research in contemporary music focusing on repertoire, contemporary practices, and analytical approaches. May be repeated for credit.

Prerequisite(s): MUTH 2500 & MUMH 3510 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUCP 4890 - Studies in Music Composition

1-3 hours

Organized classes specifically designed to accommodate the needs of students and demands of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 4900 - Special Problems**

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUCP 4910 - Special Problems**

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

#### MUCP 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **Music Education**

#### MUED 1130 - Foundations in Music

1 hour (2;0)

Development of musical concepts and skills in listening and performance through use of elementary school music program materials and activities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUED 2310 - Musicianship for Teaching I

2 hours (2;0)

Overview of foundational principles in music education. Explores these principles in terms of the skills, characteristics and attributes of the musician teacher.

Prerequisite(s): None.

A prerequisite for Musicianship for Teaching II and III.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUED 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUED 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUED 3100 - Musicianship for Teaching II

3 hours (3;0)

Comprehensive study of musical elements, structures, forms, genres and exemplary literature as related to basic principles of child development. Explores instruction of the child in terms of the skills, characteristics and attributes of the musician teacher.

Prerequisite(s): MUED 2310 or consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUED 3200 - Musicianship for Teaching III

3 hours

Teaching methods and responsibilities common to choral and instrumental instruction in secondary schools. Covers such aspects as psychology of young adults, recruitment procedures, rehearsal management, concert programming, performance preparation, fund raising and adjudicated events, as well as furthering the musical and instructional development of the musician teacher.

Prerequisite(s): MUED 2310 and MUED 3100 or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUED 4103 - Advanced Techniques and Materials for Elementary General Music Instruction

3 hours

Techniques for instructional planning (K–6) utilizing aspects of various teaching approaches (Orff, Kodaly, Dalcroze and eclectic). Principles of sequentially organized materials and activities for the young learner in general music.

Prerequisite(s): MUED 2310 and MUED 3100, or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

# MUED 4109 - Methods and Materials for Teaching Instrumental Music in Elementary Schools

#### 3 hours

Rehearsal objectives, instructional techniques and materials specific to beginning band and orchestra; rehearsal management and organization; visual and aural diagnostic skills for teaching performance fundamentals; lab school field experience.

Prerequisite(s): MUED 2310, MUED 3100, MUED 3200 and MUAG 3800. As applicable: MUAG 1102-MUAG 1202, MUAG 1117, MUAG 1121-MUAG 1221 and MUAG 1125-MUAG 1225 and MUAG 1224, or consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUED 4203 - Secondary Choral Methods**

#### 3 hours

Pedagogical practices that complement the secondary choral music classroom, (grades 6–12), middle school—high school.

Prerequisite(s): MUED 2310, MUED 3200 and MUAG 3820 or consent of college. MUAG 3820 may be taken concurrently with MUED 4203.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUED 4209 - Music Performance: Instrumental

#### 3 hours (3:0)

Principles of music performance using the band and/or orchestra ensemble. Foundations of performance on band and/or stringed instruments, rescoring and arranging for band and/or orchestra, fundamentals of marching band, performance practices, and standard band and/or orchestra literature.

Prerequisite(s): MUED 3200. 7 credit hours from MUAG 1102, MUAG 1117, MUAG 1121, MUAG 1125, MUAG 1202, MUAG 1221, MUAG 1224 and MUAG 1225.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUED 4890 - Studies in Music Education

#### 1-3 hours

Organized classes specifically designed to accommodate the needs of students and demands of program development that are not met by the regular offerings. Short courses and workshops on specific topics organized on a limited-offering basis.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUED 4900 - Special Problems

#### 1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUED 4910 - Special Problems**

#### 1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUED 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Music Ensembles

#### MUEN 2602 - Brass Ensembles

1 hour (0;3)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **MUEN 2611 - Jazz Ensembles**

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 2621 - String Ensembles

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 2625 - Wind Ensembles

1 hour (0;2)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUEN 2626 - Mariachi Aguilas

1 hour (0;2)

Study of traditional and contemporary repertoire, focusing on the socio-cultural and stylistic aspects. Opportunities for performance on campus and in the local community.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUEN 3040 - Opera Theatre

1 hour (0;3)

Practical operatic experience in performing portions of or complete operas; integration of music, acting and staging of an opera.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 4530 - Vox Aquilae

1 hour (0;3)

Performance of less well-known vocal and instrumental music from the period 1200 to 1800.

Prerequisite(s): Consent of college.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 4540 - Collegium Musicum

1 hour (0:3)

Performance of less well-known vocal and instrumental music from the period 1200 to 1800.

Prerequisite(s): Consent of college.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 4585 - Nova Ensemble

1 hour (0:3)

Performance of contemporary chamber works for mixed ensembles.

Prerequisite(s): Consent of college: audition required.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUEN 4595 - Intermedia Performance Arts

1 hour (0;3)

Performance component of MUCP 4590, to be taken concurrently.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# Music History and Literature, Musicology

#### MUMH 1610 - Music as Communication

(MUSI 1307)

3 hours

Introduction to issues of music seen as a form of human communication with emphasis on developing listening skills and critical thinking. Includes discussion of Western and non-Western music based on case studies.

Prerequisite(s): None.

Open to majors in other fields. Must be taken prior to MUMH 3500-MUMH 3510.

**Core Category:** Creative Arts and Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 2040 - Music Appreciation

(MUSI 1306)

3 hours

Music masterpieces; elements of music, form and design; relation of music to other areas of cultural development; live and recorded performances.

Prerequisite(s): None.

For non-music majors.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUMH 2050 - Sounds and Cinema

3 hours

This course develops critical and analytical approaches to the soundtrack, music's role in the soundtrack, and the relation of soundtrack and imagetrack (especially relating to music) on small-scale and large-scale (narrative) levels. Previous experience with musical performance (including the ability to read music) is not required or expected.

Prerequisite(s): None.

**Core Category:** Creative Arts or Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUMH 2060 - History of Rock

3 hours

Explores key moments in the history of American popular music from 1945 to 2000. Previous experience with musical performance (including the ability to read music) is not required or expected.

Prerequisite(s): None.

**Core Category:** Creative Arts, Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 2900 - Special Problems

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUMH 3000 - Nineteenth-Century Music

3 hours

Music in romantic humanism; lectures, recordings, art works and live performances.

Prerequisite(s): None.

For non-music majors.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 3010 - Twentieth-Century Music

3 hours

Music since Impressionism; changing currents in culture and society. Lectures, recordings, art works and live performances.

Prerequisite(s): None.

For non-music majors.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUMH 3100 - Music, Gender, Sexuality

3 hours

This course explores various intersections between music, gender, and sexuality. Previous experience with musical performance (including the ability to read music) is not required or expected.

Prerequisite(s): None.

Core Category: Creative Arts or Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 3200 - Music as Politics

3 hours

This course explores various intersections between music, activism, and politics. Previous experience with musical performance (including the ability to read music) is not required or expected.

Prerequisite(s): None.

**Core Category:** Creative Arts or Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 3500 - Music History and Literature to 1750

3 hours (3;1)

Comprehensive coverage of stylistic developments, genres, and creative figures in Western art music from the Middle Ages to the mid-18th century.

Prerequisite(s): MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100, or MUMH 3200.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUMH 3510 - Music History and Literature Since 1750

3 hours (3;1)

Comprehensive coverage of stylistic developments, genres, and creative figures in Western art music from the Classic period to the present.

Prerequisite(s): MUMH 1610, MUMH 2050, MUMH 2060, MUMH 3100, or MUMH 3200 .

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUMH 4050 - Symphonic Literature

3 hours

Historical overview of the symphony as a genre from Haydn to the present; emphasis on skills for recognizing and analyzing symphonic genres and forms through score study and listening.

Prerequisite(s): MUMH 3500, MUMH 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUMH 4070 - Operatic Literature

3 hours

Historical overview of Western opera; emphasis on skills for recognizing and analyzing operatic styles and genres from both the musical and dramatic perspectives.

Prerequisite(s): MUMH 3500, MUMH 3510.

#### MUMH 4760 - Chamber Music Literature

3 hours

Chamber music from the Baroque to the present.

Prerequisite(s): MUMH 3500, MUMH 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUMH 4770 - Choral Literature

3 hours

Choral music from the Renaissance to the present.

Prerequisite(s): MUMH 3500 and MUMH 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUMH 4780 - American Music

3 hours

Music of American composers from colonial times to the present.

Prerequisite(s): MUMH 1610.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

# MUMH 4800 - Nazism, Judaism and the Politics of Classical Music in Germany

3 hours

Explores the connections between Nazi ideology, politics, anti-Semitism and classical music in Nazi Germany.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUMH 4810 - Jews, Judaism, Anti-Semitism and Opera

3 hours

Explores different roles of Jews in opera, including sympathetic representations by Jewish composers, and negative stereotyping by both Jewish and non-Jewish composers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUMH 4900 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 4910 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUMH 4920 - Senior Thesis in Music History

3 hours

Major research paper on a specialized topic in music history appropriate to advanced undergraduate standing.

Prerequisite(s): MUMH 1610, MUMH 3500, MUMH 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **Music Laboratories**

### MULB 1801 - A Cappella Choir

1 hour (0;5)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **MULB 1802 - Concert Choir**

1 hour (0;5)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MULB 1803 - Kalandra

1 hour (0;5)

This advanced auditioned treble choir is comprised of soprano and alto singers. Auditions for this ensemble will take place at the end of August, prior to the start of classes.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MULB 1805 - Orchestra

1 hour (0;6)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MULB 1806 - Wind Symphony

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MULB 1807 - Wind Orchestra

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MULB 1808 - Jazz Lab Band

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MULB 1809 - Wind Ensemble

1 hours (0;6)

The Wind Ensemble is dedicated to broadening the artistic level and interest of its members while performing challenging music of artistic and historical significance. The members of the ensemble are selected from the most talented musicians in the Wind Studies area. Through flexible instrumentation, members of the Wind Ensemble will broaden and expand performance skills to experience the highest level of music making.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MULB 1810 - Brass Band

1 hour (0;4)

The Brass Band provides students with the unique opportunity to perform in one of the most widely known wind mediums throughout the world. Similar to the British Brass Band, the American Brass Band provides its members the opportunity to develop the highest standards of technical and musical playing. Emphasis is given to the development of tone quality, intonation, rhythm, and virtuosic technique through performance of a wide variety of literature, including masterwork transcriptions, traditional marches, and original works.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MULB 1811 - Accompanying

1 hour (0;4)

Studio accompanying or sight-reading classes according to capability.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MULB 1812 - Marching Band

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MULB 1813 - Concert Band**

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MULB 1815 - Chorale

1 hour (0;5)

This unauditioned mixed choir is comprised of soprano, alto, tenor, and bass voices. Placement into this ensemble is through screening with the instructor.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MULB 1816 - University Singers**

1 hour (0;5)

Composed of 60-70 voices, primarily undergraduate students. Repertoire includes selections from a broad range of choral literature. Rehearsals: 4 hours per week. Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MULB 1817 - Jazz Guitar Laboratory**

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## **MULB 1818 - Jazz Repertory Laboratory**

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MULB 1819 - Jazz Keyboard Laboratory

1 hour (0:4

The Zebras--a contemporary jazz repertory ensemble including 4-5 horns, keyboardist, pianist, guitarist, bassist, drummer, percussionist and vocalist(s). Zebras meets twice weekly for 75 minutes and performs two or three times each semester.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MULB 1820 - Jazz Singers Laboratory**

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MULB 1821 - Latin Jazz Lab

1 hour (0;4)

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MULB 1822 - Electronics Ensemble**

1 hour

Students participating in the Electronics Ensemble perform using electronics including computers, tablets, smart phones, electronic instruments, and/or other electronic hardware devices and interfaces. This ensemble is required for Electronics Concentrations and is otherwise available by audition and through consultation with the student's area of concentration. The ensemble collaborates on group performances, but members may also be assigned to other performing ensembles as appropriate.

Prerequisite(s): Audition.

## **Music Theory**

## MUTH 1300 - Exploration in Music I

3 hours

Introduction to basic musicianship including elements of music, staff, clefs, key signatures, scales, time signatures and notation. Credit in this course may not be applied to a music degree.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 1350 - Exploration in Music II

3 hours

Introduction to basic musicianship course for the non-music major that covers analysis, part-writing, figured bass realization, and harmonization.

Prerequisite(s): MUTH 1300 or consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 1400 - Theory I

(MUSI 1311)

2 hours (2;0)

Large-lecture format. Introduction to analysis, part writing, figured bass realization, and harmonization beginning with melody and two-part exercises.

Prerequisite(s): Limited to current music majors, or with consent of instructor.

Corequisite(s): MUTH 1410.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 1410 - Aural Skills I

(MUSI 1116)

1 hour (2;1)

Reinforcement of theoretical concepts presented in MUTH 1400 via singing, ear training and conducting experiences.

Prerequisite(s): Limited to current music majors, or with consent of instructor.

Corequisite(s): MUTH 1400

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUTH 1500 - Theory II

(MUSI 1312)

2 hours (2;0)

Continuation of analysis, part writing, figured bass realization and harmonization covering harmonic vocabulary of 18th-century music and smaller forms of the Baroque period.

Prerequisite(s): MUTH 1400 and MUTH 1410, both with a grade of C or better.

Corequisite(s): MUTH 1510

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 1510 - Aural Skills II

(MUSI 1117)

1 hour (2;1)

Reinforcement of theoretical concepts presented in MUTH 1500 via singing, ear training, keyboard, and conducting experiences.

Prerequisite(s): MUTH 1400 and MUTH 1410, both with a grade of C or better.

Corequisite(s): MUTH 1500

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 2400 - Theory III

(MUSI 2311)

2 hours (2;1)

Analysis, part writing, figured bass realization and harmonization covering harmonic vocabulary of late eighteenth and nineteenth centuries, larger forms of the Baroque era and form of the Classic and Romantic eras.

Prerequisite(s): MUTH 1500 and MUTH 1510, both with a grade of C or better.

Corequisite(s): MUTH 2410.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 2410 - Aural Skills III

(MUSI 2116 or MUSI 2216)

1 hour (2:0)

Reinforcement of theoretical concepts presented in MUTH 2400 via singing, ear training, keyboard and conducting experiences.

Prerequisite(s): MUTH 1500 and MUTH 1510, both with a grade of C or better.

Corequisite(s): MUTH 2400

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### MUTH 2500 - Theory IV

(MUSI 2312)

2 hours

Analysis of the musical language of pieces composed in the 20th and 21st centuries.

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Corequisite(s): MUTH 2510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUTH 2510 - Aural Skills IV

(MUSI 2117 or MUSI 2217)

1 hour (2;0

Reinforcement of theoretical concepts presented in MUTH 2500 via singing, ear training, keyboard and conducting experiences.

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Corequisite(s): MUTH 2500

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

#### **MUTH 2900 - Special Problems**

1-3 hours

Prerequisite(s): Consent of college.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUTH 3410 - Sixteenth-Century Counterpoint

3 hours (3:0)

Contrapuntal procedures of 16th-century composers. Writing motets and madrigals in two to four voices.

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$50.19

## MUTH 3420 - Eighteenth-Century Counterpoint

3 hours

Contrapuntal procedures of 18th-century composers. Writing inventions, chorale preludes and other 18th-century forms.

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUTH 3510 - Form Analysis

3 hours

Structural principles of 18th- and 19th-century music determined by analysis of major composers' works, larger instrumental and vocal forms

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUTH 3530 - Form in 20th- and 21st-Century Popular Song

3 hours

Introduction to common forms of English-language popular song, from early country and blues to Top 40, hip hop, and experimental rock songs, focusing on formal schemas involving text, rhythm, harmony, and texture.

Prerequisite(s): MUTH 2400 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUTH 4370 - Schenkerian Analysis

3 hours (3;0)

Analysis of tonal music according to the theory of structural levels and methods of graphic analysis developed by Heinrich Schenker.

Prerequisite(s): MUTH 2400 and MUTH 2410, both with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUTH 4520 - Twentieth-Century Techniques

3 hours

Dodecaphonic and atonal set theory techniques as applied to representative works of the 20th century.

Prerequisite(s): MUTH 2500 and MUTH 2510, both with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUTH 4680 - Advanced Topics in Music Theory

3 hours

Investigation and research on subjects within the discipline of music theory and analysis. For advanced music students.

Prerequisite(s): MUTH 2500, MUTH 2510, MUMH 3500, MUMH 3510; or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

## MUTH 4900 - Special Problems

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### **MUTH 4910 - Special Problems**

1-3 hours

Open to advanced undergraduate students who are capable of developing a problem independently. Project is chosen by the student and instructor and developed through conferences and approved activities under the direction of the instructor, who may require a final project.

Prerequisite(s): Consent of college.

May be offered when other required courses are unavailable. Not open to graduate students.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$50.19

#### MUTH 4920 - Advanced Colloquium in Music Theory

3 hours

In consultation with the instructor, each student is to develop a major paper on a specialized topic in music theory, as appropriate to advanced undergraduate standing.

Prerequisite(s): None.

# **New College Partnership Studies**

#### NCPS 2010 - Applied Innovation Seminar I

1 hour (0;3)

The lower level in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students learn to research an organization in preparation for an interview or other meeting. They prepare professional communications such as emails and thank you notes, work on skills related to professional attire and dining, and learn how those vary in different kinds of work environments. Students examine their own skill sets and consider ways to expand those to meet needs in ever-changing work environments. They meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures and expert panels, students learn how practicing professionals encourage and implement innovation in the public and private sectors.

Prerequisite(s): Restricted to students admitted to the cohort.

May be repeated for credit for a maximum of 2 hours. After taking the seminar in the fall term, it is to be repeated in the spring term with additional speakers and skill development.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### NCPS 3010 - Applied Innovation Seminar II

hour (0:3)

Intermediate level in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students work with professionals to prepare electronic portfolios, resumes, and cover letters appropriate for their career mission and vision. They meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures, on-site visits, and expert panels, students learn how practicing professionals encourage and implement innovation in the public and private sectors.

Prerequisite(s): NCPS 2010; restricted to students admitted to the cohort.

May be repeated for credit for a maximum of 2 hours. After taking the seminar in the fall term, it is to be repeated in the spring term with additional speakers and skill development.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### NCPS 3050 - Project Collaboration

3 hours

An introduction to collaboration techniques as applied using a real-world project. Students will study theories and practices in collaborative thinking and idea generation. They will develop and execute effective collaborative project management to address complex systems.

Prerequisite(s): None.

Corequisite(s): NCPS 3051.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

#### NCPS 3051 - Project Collaboration Laboratory

1 hour

This is the laboratory associated with NCPS 3050 Project Collaboration. An introduction to collaboration techniques as applied using a real-world project. Students will study theories and practices in collaborative thinking and idea generation. They will develop and execute effective collaborative project management to address complex systems. In the laboratory, students will focus on solutions to a problem. Student teams will develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype.

Prerequisite(s): None.

Corequisite(s): NCPS 3050.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

### NCPS 4010 - Applied Innovation Seminar III

1 hour (0:3)

Upper level in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures, on-site visits, expert panels, and individual interviews, students learn how practicing professionals encourage and implement innovation in the public and private sectors.

Prerequisite(s): NCPS 3010; restricted to students admitted to the cohort

May be repeated for credit for a maximum of 2 hours. After taking the seminar in the fall term, it is to be repeated in the spring term with additional speakers and skill development.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### NCPS 4800 - New College Internship

1-6 hours

Supervised work in a job related to the student's life and career objectives.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$6.67

# **Nuclear Engineering Technology**

## **NUET 2900 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# **NUET 2996 - Honors College Mentored Research Experience**

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 3910 - Principles of Nuclear Technology**

3 hours

Introduction to nuclear technology and radiation physics; includes sources of radiation, its interaction with matter, and radiation detection and measurement.

Prerequisite(s): MATH 1720, PHYS 2220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 3920 - Nuclear Instrumentation and Measurement**

4 hours (3;2)

Measurement of radioactive materials commonly encountered in commercial nuclear facilities; includes engineering and scientific principles, measurement techniques and data analysis.

Prerequisite(s): NUET 3910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## NUET 3930 - Radiation Biology and Safety

4 hours (3;2)

The interaction of radioactive sources and living organisms; effects of both long- and short-term exposure to radiation; ionizing radiation, detection, measurement, shielding, exposure limiting, radiation handling and disposal.

Prerequisite(s): NUET 3910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **NUET 3970 - Electronic Devices and Controls**

3 hours (2;3)

Fundamentals of solid state electronic devices; their applications in amplifiers, digital logic, industrial controls and instrumentation; feedback and stability of electronic systems.

Prerequisite(s): ENGR 2405.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# NUET 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 4050 - Nuclear Reactor Theory**

3 hours

A study of neutron transport theory and neutron diffusion mechanics as applied to nuclear fission and reactor core's criticality analysis and behavior. Multi-region core configurations and group diffusion theory included

Prerequisite(s): MATH 1720, PHYS 3010, PHYS 3030.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$52.70

#### NUET 4780 - Senior Design I

2 hours

Project teams specify, plan and design a product or process. Written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): NUET 3930, NUET 4050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### NUET 4790 - Senior Design II

2 hours (1:3)

Implement, test, and demonstrate a product or process. Oral and written documentation required. Projects to be supplied by local industry whenever possible.

Prerequisite(s): NUET 4780.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### NUET 4850 - Computational Methods for Nuclear Engineering Technology

4 hours (3;3)

Computer design and analysis for nuclear reactors and shielding. Methodology and theory for codes representative of cross section preparation, criticality calculation, gamma ray shielding and dose estimation from air scattered radiation.

Prerequisite(s): NUET 3930, CSCE 1020 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## NUET 4880 - Health Physics and Radiation Protection

3 hours (2;3)

Study and analysis of current health physics issues, practices and implementation. Radiation protection guides for both external and internal exposure and the methodology for establishing guidelines are explored. Methods of evaluation of effectiveness, environmental sampling and protection methods for monitoring radiation are introduced.

Prerequisite(s): PHYS 1710/PHYS 1730; MATH 1720, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 4900 - Special Problems**

1-4 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **NUET 4910 - Special Problems**

1-4 hours

Prerequisite(s): None.

#### **NUET 4920 - Cooperative Education**

1 hour

Supervised industrial internship requiring a minimum of 150 hours of work per experience.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 3 semester credit hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### NUET 4930 - Reactor Engineering Design and Operation

4 hours

Theory and practice of commercial nuclear reactor operation. Overview of mass, momentum and energy conservation as it relates to nuclear power plants. Includes coupled neutronic/thermal models to study plant operations semi-quantitatively achieving an integrated plant understanding.

Prerequisite(s): NUET 3910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

# NUET 4940 - Electrical Power Generation and Transmission

3 hours

Electric energy production and transmission, including AC generator construction and operation, power transformers, transmission lines, and load-flow analysis; system modeling and computer applications.

Prerequisite(s): ENGR 2405.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 4950 - Nuclear Plant Systems**

3 hours

Design and analysis of nuclear power plant normal operation and emergency response from a system point of view. Emphasis on cooling systems for the reactor and spent fuel, normal and emergency power supply, spectrum of Design Basis Accidents.

Prerequisite(s): MEET 3940, MEET 3990, NUET 3910.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

#### **NUET 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## NUET 4970 - Modern Power Plant Design and Operation

3 hours

Study and analysis of modern power plant engineering and technology including fossil and nuclear fueled. Heat generated mechanical and electrical power operations with alternative energy resources.

Prerequisite(s): MATH 1710/MATH 1720, and MEET 3990 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$52.70

## **Operations and Supply Management**

#### **OPSM 3830 - Operations Management**

3 hours

Management of production emphasizing industrial enterprises; production objectives; design and improvement of processes, work methods, and physical facilities; use of measurements and standards; production planning and control; quality control; budgetary and cost control; materials management.

Prerequisite(s): DSCI 2710.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

# OPSM 4800 - Internship in Operations and Supply Management

3 hours

Supervised work in a job related to the student's career objectives.

Must be within two long terms/semesters of graduation at the time of the internship and have consent of department chair or internship director. Pass/no pass.

Prerequisite(s): OPSM 3830.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

### **OPSM 4810 - Purchasing and Materials Management**

3 hours

From original planning through delivery of finished products; purchasing, inventory control, receiving, storage, production control, traffic and materials handling.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## **OPSM 4820 - Manufacturing Planning and Control**

3 hour

In-depth coverage of the function of production planning and control, including such topics as material requirements planning, capacity planning, master production scheduling, forecasting, production activity planning and control, and project management.

Prerequisite(s): OPSM 3830.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

#### **OPSM 4830 - Productivity and Quality Management**

3 hours

Coverage of topics related to quality science and quality improvement including acceptance sampling, total quality management, process control and their impact on productivity.

Prerequisite(s): OPSM 3830.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## **OPSM 4850 - Lean Manufacturing**

3 hours

Involves the study and application of Lean principles. Emphasis is placed on material flow analysis, process and continuous improvement techniques, along with employee development and empowerment as integral aspects of Lean manufacturing. Addresses not only Lean manufacturing techniques as applied throughout production processes, but also the application of Lean extending upstream in coordination with suppliers. The associated integrative concepts of Lean provide the framework for the course.

Prerequisite(s): OPSM 3830.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$15.47

## **OPSM 4880 - Management of Projects and Systems**

3 hours

Investigation and study of the role of projects in contemporary organizations. Includes a presentation of the technical aspects pertaining to the management of complex projects and systems starting with conceptual design and advanced development, and continuing through detailed design, production and termination. Emphasis is placed on integrative concepts rather than isolated methodologies.

Prerequisite(s): OPSM 3830.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **Philosophy**

## PHIL 1050 - Introduction to Philosophy

(PHIL 1301)

3 hours

Survey of leading figures in the history of philosophy (from Ancient Greece, Medieval Europe, the Renaissance, Enlightenment, and the 20th century) and an examination of central areas of philosophy: metaphysics, epistemology, human nature, ethics, political theory and aesthetics.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 1400 - Ethics and Society

(PHIL 2306)

3 hours

Survey of basic ethical theories and exploration of such issues as abortion, euthanasia, national security and civil liberties, affirmative action, the death penalty, extramarital sex, pornography, animal rights, world hunger, and the environment.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 1800 - Philosophy of Self

3 hours

Examination of the nature of the self through a reading of classical and contemporary sources. Topics may include the relation of mind and body; the soul, self and society; non-Western notions of self, freedom and determinism; the unconscious; gender; and race.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 2050 - Logic and Critical Thinking

(PHIL 2303)

3 hours

Focus on critical thinking to develop the skills for making sound arguments and for evaluating the arguments of others in order to recognize the difference between arbitrary and well-reasoned judgments. Topics include deductive and inductive modes of practical reasoning, common fallacies, rules of inference, and the formal rules of logic.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 2070 - World Religions

(PHIL 1304)

3 hours

Philosophical and social dimensions of Hinduism, Buddhism, Taoism, Judaism, Christianity, Islam, and Humanism. Emphasizes the diversity of religious experience and traditions.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 2100 - Introduction to Judaism

3 hours

Examines the beliefs, practices, laws and movements of Judaism from Biblical times to the present, emphasizing the impact of modernity on the central texts and traditions.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 2310 - Introduction to Ancient Philosophy

(PHIL 2316)

3 hours

Introduction to the worldview of Antiquity through an examination of metaphysical, epistemological and ethical views in Ancient Greek philosophy including the pre-Socratics, Plato and Aristotle.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 2400 - Religion and American Society

3 hours

Subjects covered include religious pluralism in the United States, religion and civil rights, evolution and creationism, religion and gender, and religious response to cultural change.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 2500 - Environment and Society

3 hours

Explores ethical, ecological and political dimensions of such international environmental issues as atmospheric and water pollution, global climate change, industrial agriculture, deforestation, biodiversity loss, and the relationship between environmental issues and social and political concerns.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

PHIL 2600 - Ethics in Science

3 hours

Survey of the philosophical relationships between ethics (including political and cultural values) and science (as a practice and form of inquiry). Topics include research ethics, experimentation on animals, biotechnology, information technology, gender in science, religion and science, and science policy.

Prerequisite(s): None.

**Core Category:** Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# PHIL 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3100 - Aesthetics

3 hours

Examination of the theories of the beauty of nature and art in the history of philosophy as represented by or found in painting, sculpture, music, literature, film and television to understand the nature of aesthetic experience, artistic expression and the relation of art to nature, truth, ethics, culture, technology and gender.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 3120 - Social and Political Philosophy

3 hours

Examines how people should live together in communities and what legitimate governing institutions best promote the ideals of freedom, justice, rights, democracy, equality and happiness. Topics include civil and human rights, social contract theory, economic justice, group identity, race and gender.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3200 - Philosophy in Literature

3 hours

Examination of how philosophical themes arise in works of literary fiction and the differences between a philosophical and literary approach. Topics include personal identity, consciousness, Stoicism, skepticism, mysticism, free will, ethics and justice, life and death, and God.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3250 - Philosophy of Science

3 hours

Examination of what science is and how it works. Topics include the nature of scientific explanation, the distinction between science and pseudo-science, scientific progress, the aims of science, and the role of social and economic values in scientific theories and practices.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3300 - Symbolic Logic

3 hours

Symbolic analysis applied to logical problems, propositional logic, predicate logic and modal logic.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3310 - Ancient Philosophy

3 hours

Advanced examination of selected philosophical thought from the pre-Socratics through Plotinus including Plato and Aristotle.

Prerequisite(s): None.

#### PHIL 3320 - Medieval Philosophy

3 hours

Advanced examination of selected philosophical thought from Saint Augustine to the Renaissance. Philosophers might include Boethius, Anselm, Avicenna, Averroes, Aquinas, Duns Scotus, Grosseteste and William of Ockham.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3330 - Modern Philosophy

3 hours

Advanced examination of selected philosophical thought from the Renaissance to the 19th century including Continental rationalism, British Empiricism and Kant.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PHIL 3340 - Nineteenth-Century Philosophy

3 hours

Examination of major figures in European philosophy such as Hegel, Marx, Schopenhauer, Nietzsche and Kierkegaard. Topics include the nature of knowledge, religion, the role of history, political economy and the relationship of the individual to society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PHIL 3350 - Twentieth-Century Philosophy

3 hours

Selected major figures and themes in Anglo-American and Continental philosophy including analytic philosophy, logical positivism, linguistic analysis, ordinary language philosophy, process philosophy, existentialism, phenomenology, pragmatism and post-Analytic philosophy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3360 - American Philosophy

3 hours

Examination of the major American philosophies, including pragmatism and process philosophy. Figures might include C.S. Pierce, William James, John Dewey, George Herbert Mead, Alfred North Whitehead, Hilary Putnam and Richard Rorty.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PHIL 3400 - Ethical Theory

3 hours

Analysis of the important historical and contemporary theories of appropriate human conduct through a reading of major philosophers such as Aristotle, Aquinas, Hobbes, Hume, Kant, Mill and Nietzsche.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3440 - Bioethics

3 hours

Examines the philosophical, social, and legal issues arising in medicine, biotechnology, and the life sciences. Questions the definition and significance of life and death, the nature of personhood and identity, and the extent of human freedom and individual responsibility. Topics include cloning, gene therapy, xenotransplantation, enhancement technologies, human longevity, and transhumanism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3450 - Philosophy of Technology

3 hours

Examines the philosophical dimensions of making and using technology; the nature of technology; the role of technology in history and development; the politics of technology; the role of experiments and instruments in science; technology and nature; the ethical dimensions of biotechnology, information technology, and nanotechnology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3500 - Christianity and Philosophy

3 hours

Philosophical study of Christianity from its origins to the present, including Eastern Orthodoxy, Roman Catholicism, and Protestantism. Topics may include faith and reason, nature and grace, hope and redemption, love, evil and religious truth.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PHIL 3510 - Hebrew Bible

3 hours

Philosophical and ethical concepts of the Hebrew Bible compared with ancient pagan thought and subsequent Western culture. Concepts discussed include creation, revelation, holiness, faith, covenant, prophecy, idolatry, chosen people, justice, mercy, truth and peace.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# PHIL 3515 - David, Saul and Solomon: The Early Israelite Monarchy

3 hours

An overview of the early Israelite monarchy through the biographies of its first three kings: Saul ben Kish, David ben Jesse, and Solomon ben David. Analyzes the rise of the Israelite kingdom in its historic and social milieu using the books of Samuel and I Kings, combined with the most recent translations and archaeological evidence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 3520 - Early Christian Thought

3 hours

Selected first-century Christian documents in light of Dead Sea Scrolls, Roman mystery religions, and biblical and extra-biblical Hebrew, Aramaic and Greek writings.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3525 - Rabbinic Judaism

3 hours

An investigation of the fundamental principles of Jewish law, a system involving the interplay of biblical sources with evolving Rabbinic interpretations and traditions. Focuses on the major figures in the formation of Jewish Law, the core texts, and how it translates its theological insights into a practical working system that is relevant to the worlds of modernity and post-modernity.

Prerequisite(s): None.

#### PHIL 3530 - Kabbalah: Jewish Mysticism, Myth and Magic

3 hours

An introduction to Jewish mysticism, presented in historical survey through lectures and readings from seminal texts: Sefer Yetzirah, Book of Radiance, Book of the Pious, The Treatise on the Left Emanation, Sepher Zohar, and Book of Reincarnations. Explores the major topics of Jewish mysticism, including Jewish cosmogony, apocalypse and eschatology, theosophy, word-mysticism, meditation, and rituals of power.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3535 - Classical Jewish Thought: The 13 Principles of Faith

3 hours

Maimonides' Thirteen Principles of Faith has stood the test of time as Judaism's seminal statement of creed. Yet, this formulation aroused both opposition and debate among the leading Jewish philosophers of the medieval era. Explores these Principles in depth, utilizing the original sources of Maimonides, as well as those of Nahmanides, Saadia Gaon, Halevi and other commentators.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3540 - Judaism and Philosophy

3 hours

Introduction to a wide range of Judaic texts—biblical, medieval and modern—that address Jewish law, history and thought from diverse points of view.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3550 - Jewish Business Ethics

3 hours

Assesses the ethical and social impact management implications in the deployment of business strategy and tactics using a comparative Jewish perspective. Specific attention given to the rights and responsibilities of the firm, consumers, and society. Explores real-world decision-scenarios dealing with ethics, organizational compliance, societal marketing, and social responsibility cast against a backdrop of Jewish value systems.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3570 - Islam and Philosophy

3 hours

An examination of the major issues, figures, and texts of Islamic philosophy and theology, such as al-Kindi, al-Razi, al-Farabi, Ibn Sina (Avicenna), al-Ghazali, and Ibn Rushd (Averroes), as well as questions concerning the ultimate nature of the world, proofs of God's existence, reason and faith, ethics and the afterlife, science and politics, Islam and the modern world.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 3600 - Philosophy of Religion

3 hours

Examines the concepts, belief systems and practices of religions. Topics include religious experience, faith and reason, arguments for God's existence, the problem of evil, religious language, life after death, miracles, religion and science, and the conflicting claims of different religions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 3620 - Hinduism I: From the Vedas to the Gita

3 hours

An examination of South Asian philosophical and religious thought from earliest period in Indian history of the Indus Valley civilization to the religion of the Vedas, through the Upanishads, and classical period in Indian thought including the development of Buddhism and Jainism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 3630 - Jainism

3 hours

An examination of one of the world's oldest religious and philosophical traditions from its origins in the 6th century BCE to its influence on contemporary figures, including Mahatma Gandhi, Dr. Martin Luther King Jr., Nelson Mandela, and the Dalai Lama. Topics include pacifism and non-violence, self-control, non-materialism, compassion, meditation, and the relationship of the self to divine consciousness.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3635 - Bollywood

3 hours

Examination of Indian culture as manifested in the Hindi language film industry known as "Bollywood." Topics include South Asian religions, epics and classical drama, devotional songs, Hindi-Urdu poetry, poverty and urban life, crime, and romance. Course presupposes no previous knowledge of Indic religions or cinema.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 3650 - Religion and Science

3 hours

Examination of the complex historical and contemporary relationship between sciences and religions. Historical elements focus on the rise of modern science and "the Galileo Affair." Theories of the relationship between the disciplines are also studied. Contemporary issues may include cosmology, religion and ecology, intelligent design and evolution, stem cell research, and artificial intelligence.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3660 - Western Religion and the Environment

3 hours

Examines the assumptions, values, and attitudes of the Western religious tradition concerning nature and the environment from its Biblical sources and the typical ways these sources have been interpreted in the history of Western religions. Examines the contributions of Christianity, Judaism, and Islamic thought to ecotheology.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3665 - Eastern Religion and the Environment

3 hours

An examination of non-Western religious traditions for an environmental philosophy geared toward assessing global environmental issues with a focus on South Asian and East Asian philosophical and religious traditions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 3680 - Buddhism, Daoism, Shintoism

#### 3 hours

Philosophical study of East Asia from earliest times to the present, including ancient Chinese religion; Taoist, Confucian, Mohist and Legalist philosophies; Chinese Buddhism and Neo-Confucianism; the influence of Shinto, Buddhism and Neo-Confucianism upon medieval Japan; and Japanese philosophy since the Meiji Restoration.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3800 - Philosophy of Mind

#### 3 hours

Examination of the nature of perception and consciousness, the nature of mental events and mental states, and the relationship of the mind to the brain and the body. Topics include free will versus determinism, scientific reductivism, holism, the unconscious, behaviorism, artificial intelligence, free will, and the self.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4053 - Introduction to Subantarctic Biocultural Conservation

3 hours

Introduction to the subantarctic ecosystems and culture of southern South America (geography, climate, ethnography, environmental philosophy and ecology) and exposure to both the practical and theoretical aspects of biocultural conservation, including its interdisciplinary character integrating the sciences and humanities.

Prerequisite(s): Upper-level standing in the humanities or sciences.

Same as BIOL 4053.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4054 - Tracing Darwin's Path

#### 3 hours

Annual in-depth field course that introduces students to the sub-Antarctic biota, geography, history, cultures and ecosystems of the Cape Horn Biosphere Reserve using the Omora Ethnobotanical Park as a field site that demonstrates the integration of ecological science and field environmental ethics in a novel approach to bioculture diversity.

Prerequisite(s): Upper level academic standing and consent of department.

Same as BIOL 4054.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4100 - Epistemology

3 hours

Examines the nature of knowledge and justification. Issues include the relationship between knowledge and opinion, skepticism and the possibility of knowledge; the nature of truth and meaning; the roles of perception, social construction, and gender and ethnicity in knowing and believing.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4150 - Feminism

3 hours

An introduction to Anglo-American, French and international feminisms. Topics include gender essentialism and gender differences; the relation between theory and practice; the relation between the personal and the political; the gendering of the history of philosophy; women and conflict; and ecofeminist issues in food security and climate change in developing countries.

Prerequisite(s): None.

Core Category: Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4200 - Science, Technology and Society

3 hours

Examination of the interconnections among science, technology and society and the ways they mutually shape one another to the benefit and detriment of social life and the environment. Topics include the social values of science and technology; technology and social progress; expertise and democracy; colonialism; and environmental justice.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 4250 - Climate Change

3 hours

Examines the ethical and philosophical dimensions of climate change through an interdisciplinary exploration of such issues as climate justice, uncertainty and risk, individual and collective responsibilities for climate change and climate action, the role of science and technology in policy, and the ethics of geoengineering.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4300 - Philosophy of Food

3 hours

Examination of the philosophical dimensions of food, agriculture, animals, eating and taste to explore the nature and meaning of food, how we experience it, the social role it plays, its moral and political dimensions, and how we judge it to be delicious or awful.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PHIL 4400 - Metaphysics

3 hours

Examination of the ultimate nature of reality and the terms used to understand it, such as existence, substance, causality, space, time and identity. Themes include idealism, realism, naturalism and process metaphysics. Figures might include Plato, Aristotle, Aquinas, Locke, Leibniz, Kant, Hegel, Nietzsche, Heidegger, Whitehead and Derrida.

Prerequisite(s): None.

#### PHIL 4450 - Philosophy of Ecology

3 hours

Traces the development of ecology from its roots in 19th-century natural history through general ecology, restoration ecology, deep ecology and social ecology. Examines the central philosophical concepts of biological and cultural diversity; the relations between societies and their environments; environmental and social problems determined by losses in biocultural diversity; agriculture, land ethics and conservation; non-Western conceptions of nature and society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4500 - Existentialism

3 hours

Examination of humanity's place in the natural and social worlds. Emphasis on problems of freedom, authenticity, alienation, anxiety, affirmation, morality, religion and atheism. Figures typically include Kierkegaard, Nietzsche, Heidegger and Sartre.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4600 - Phenomenology

3 hours

Study of human experience and of the ways things present themselves to us in and through such experience. Examines phenomenology as a method of inquiry, a philosophical movement, and a study of the structures and conditions of experience. Figures typically include Husserl, Heidegger, Merleau-Ponty and Ricoeur.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 4650 - Philosophy of Water

3 hours

Examination of water issues at the interface of science, policy, philosophy, art and culture. Philosophical approaches include ethics, aesthetics and ontology of water; epistemological analysis of water conflicts; local and global governance theories.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4700 - Environmental Ethics

3 hours

Examination of appropriate human interventions in the natural world. Topics include the history of ideas behind environmental thought, the legal and moral standing of nature, animal rights and welfare, deep ecology, social ecology, environmental justice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4740 - Environmental Justice

3 hours

An examination of the philosophical foundations of the environmental movements in the US and around the world. Analyzes the interplay of social justice and environmental harms, considers multiple conceptions of justice, the equitable distribution of environmental, risks and benefits, environmental law and policy, participation in environmental decision making, and local knowledge and cultural differences.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4750 - Philosophy and Public Policy

3 hours

Explores how recent developments in moral theory, political philosophy, and philosophy of science and technology can clarify issues in public policy. Topics include the nature of government, the justification and limitations of collective action, the instruments of public policy, democracy and the economy, social costs and benefits, science and technology policy, computers and information policy, food and water policy, and environmental and development policy.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4775 - Latin American Philosophy

3 hours

A chronological study of Latin American philosophical thought from the sixteenth to the twentieth century focusing on themes related to national identity, history, and culture. Same as SPAN 4775.

Prerequisite(s): None Corequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PHIL 4800 - Postmodernism

3 hours

Examination of contemporary philosophers and writers who question the premise of Enlightenment thought that Reason will liberate us from superstition, tradition and hardships imposed by nature. Topics may include a critique of foundationalism, representational epistemology, historical progress and Eurocentrism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4950 - Internship

3 hours

Practical experience through employment or a volunteer position related to the study of philosophy and/or religion. This might include, but is not limited to, working with a law office, a church, an educational institution, or a branch of government. Directed by a faculty member of the department and a coordinating supervisor from the internship venue. May be repeated once for credit.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PHIL 4960 - Topics in Philosophy

3 hours

Advanced study of specific figures, themes or problems in philosophy and religion studies.

Prerequisite(s): None.

May be repeated for credit as topics vary each semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PHIL 4970 - Philosophy Capstone

3 hours

Seminar on philosophical writing and argument focusing on the comparative study of important figures in the history of philosophy.

Prerequisite(s): Senior standing and philosophy or religious studies major status; or consent of department.

Required course for philosophy majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PHIL 4975 - Theories of Religion

3 hours

An examination of religions in social, psychological, political, anthropological and other perspectives.

Prerequisite(s): Philosophy or religion major; or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **Physical Education**

### PHED 1000 - Scientific Principles and Practices of Health-Related Fitness

3 hours

Comprehensive presentation of the scientific fundamentals of developing a healthy lifestyle, including the epidemiology of disease and mortality in the United States, effects of physical activity and fitness on health, proper nutrition, addictive behaviors, prevention and treatment of obesity, mental health related to healthy lifestyles, and musculoskeletal health and disease. Instructional modalities include lecture, physical activity experiences, computer-assisted instruction using instructor-developed software and Internet resources and assessment of health risks and fitness.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1010 - Beginning Swimming

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1030 - Intermediate Swimming

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1040 - Advanced Swimming

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1080 - Diving

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1120 - Swim Conditioning

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1150 - Wrestling

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1160 - Self-Defense Activities

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1200 - Conditioning Exercises

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1210 - Weight Training

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1211 - Intermediate Weight Lifting

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1220 - Jogging

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1221 - Walking for Health and Fitness

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1230 - Aerobic Dance

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1240 - Cycling

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1250 - Pilates

1 hour

Designed to improve both physical and mental conditioning by focusing on improving flexibility and strength for the overall body. Students are provided with a basic working knowledge of Pilates positions, the benefits associated with Pilates and knowledge of basic skills needed to pursue independent training as part of a lifetime fitness program.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1260 - Yoga

1 hour

Introduces the ancient discipline of personal development that balances body, mind, and spirit. Students learn a series of physical postures as well as practical methods for relaxation, proper breathing, meditation, and concentration that promote health, alleviate stress, improve skeletal alignment, and increase muscular strength and flexibility.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1280 - Folk Dance

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1360 - Social Dance

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1420 - Country and Western Dance

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1440 - Intermediate Badminton

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1450 - Archery

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1470 - Beginning Badminton

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1480 - Beginning Bowling

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1490 - Intermediate Bowling

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1500 - Beginning Golf

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1510 - Intermediate Golf

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1540 - Handball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1570 - Beginning Racquetball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1580 - Outdoor Pursuits

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1590 - Beginning Tennis

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### PHED 1600 - Intermediate Tennis

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1610 - Advanced Tennis

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1640 - Beginning Fencing

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1650 - Intermediate Fencing

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1660 - Intermediate Racquetball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1700 - Women's Beginning Basketball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1710 - Intermediate Basketball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1711 - Men's Intermediate Basketball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1721 - Non-Traditional Sports/Games - Indoor

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1722 - Non-Traditional Sports/Games - Outdoor

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1740 - Soccer

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1741 - Men's Soccer

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1750 - Softball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1760 - Ultimate Frisbee

1 hour (1;3)

Teaches the fundamental skills and rules of Ultimate Frisbee as well as how to play the game and how to implement basic strategies used in the game. Emphasis placed on skills, rules, and participation in playing the game of Ultimate Frisbee.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1770 - Touch Football

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### PHED 1780 - Women's Beginning Volleyball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1781 - Men's Beginning Volleyball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1790 - Intermediate Volleyball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1791 - Men's Intermediate Volleyball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 1860 - Activity for the Atypical

1 hour

For students with acute or chronic physical and/or sensory impairments that may preclude them from participation in other physical education activity courses.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

#### PHED 1870 - Team Handball

1 hour

Elective activity course.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 2900 - Special Problems

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## PHED 2910 - Special Problems

1-3 hour

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## **Physics**

## PHYS 1210 - Conceptual Physics

(PHYS 1415)

3 hours (3;3)

Principles and applications of mechanics, heat, sound, light, electricity and atomic physics for the elementary education major.

Prerequisite(s): Interdisciplinary studies (elementary education) major status.

May not use both PHYS 1210 and PHYS 1315 to satisfy a laboratory science requirement.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

## PHYS 1270 - Science and Technology of Musical Sound

3 hours (3:2)

Sound production; nature of vibrations in percussion, string, and wind instruments. Sound propagation; sound speed; echoes. Sound intensity, physical and perceived. Sound pitch, physical and perceived; intervals. Complex sounds; harmonic series. Room acoustics; reverberation time; ideal listening rooms. Wave phenomena; interference and diffraction. Digital sound recording; musical scales; the human voice. Includes weekly laboratory exercises.

Prerequisite(s): MATH 1100 or above.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

#### PHYS 1315 - Introduction to the World of Physics

(PHYS 1410)

3 hours (3;3)

Basic principles and concepts of physics for the liberal arts major necessary to the understanding of our increasingly technological environment and the science on which it is based; current ideas concerning the micro world and the universe at large. Topics include mechanics; properties of matter; heat; sound; electricity and magnetism; light; and atomic, nuclear and fundamental particle physics. Includes weekly laboratory exercises.

Prerequisite(s): None.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1316 - Essential Physics

3 hours (3;3)

Principles and concepts of physics essential to the understanding of modern technological society by the liberal arts major are examined in their cultural context. Topics include Newtonian mechanics, relativity, light, electromagnetic theory, atomic physics, quantum mechanics and nuclear physics. Includes weekly laboratory exercises.

Prerequisite(s): Admission to the Honors College.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1410 - General Physics I

(PHYS 1301)

3 hours (3;0;1)

Principles and applications of mechanics, sound and heat.

Prerequisite(s): Proficiency in algebra and trigonometry.

Corequisite(s): PHYS 1430.

Non-calculus based physics sequence suitable for life sciences majors and preprofessional students.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1420 - General Physics II

(PHYS 1302)

3 hours (3;0;1)

Principles and applications of electricity, magnetism, light and atomic physics.

Prerequisite(s): PHYS 1410 or consent of department.

Corequisite(s): PHYS 1440.

Non-calculus based physics sequence suitable for life sciences majors and preprofessional students.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

### PHYS 1430 - General Physics Laboratory I

(PHYS 1101)

1 hour (0;3)

Laboratory to accompany PHYS 1410.

Prerequisite(s): PHYS 1410 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

## PHYS 1440 - General Physics Laboratory II

(PHYS 1102)

1 hour (0;3)

Laboratory to accompany PHYS 1420.

Prerequisite(s): PHYS 1420 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

## PHYS 1510 - General Physics I with Calculus

3 hours (3;0;1)

Principles and applications of mechanics, sound and heat.

Prerequisite(s): MATH 1710 (may be taken concurrently), and consent of department.

Corequisite(s): PHYS 1530.

Calculus-based physics sequence suitable for future science teachers and for pre-medicine and other health-related preprofessional students

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1520 - General Physics II with Calculus

3 hours (3:0:1)

Principles and applications of electricity, magnetism, light, atomic and nuclear physics.

Prerequisite(s): PHYS 1510 and MATH 1710, each completed with a grade of C or better.

Corequisite(s): PHYS 1540.

Calculus-based physics sequence suitable for future science teachers and for pre-medicine and other health-related preprofessional students.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1530 - General Physics with Calculus Laboratory I

1 hour (0;3)

Laboratory to accompany PHYS 1510.

Prerequisite(s): None.

Corequisite(s): Concurrent enrollment in PHYS 1510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

#### PHYS 1540 - General Physics with Calculus Laboratory II

1 hour (0:3)

Laboratory to accompany PHYS 1520.

Prerequisite(s): None.

Corequisite(s): concurrent enrollment in PHYS 1520.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### PHYS 1710 - Mechanics

(PHYS 2325)

3 hours (3;0;1)

Laws of motion; inertia, acceleration, force, energy, momentum and angular momentum. Rotational and oscillatory motion. Gravitation.

Prerequisite(s): MATH 1710 with a grade of C or better.

Corequisite(s): PHYS 1730.

Calculus-based, suitable for physics, engineering, mathematics, computer science and chemistry majors.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 1730 - Laboratory in Mechanics

(PHYS 2125)

1 hour (0;3)

Laboratory to accompany PHYS 1710.

Prerequisite(s): PHYS 1710 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05; Lab (LF): \$2

## PHYS 2220 - Electricity and Magnetism

(PHYS 2326)

3 hours (3;0;1)

Electric fields, dc and ac circuits, magnetic fields and magnetic induction. Electric and magnetic properties of matter.

Prerequisite(s): MATH 1720 with a grade of C or better. PHYS 1420 or PHYS 1710, either with a grade of C or better.

Corequisite(s): It is recommended that the course be taken concurrently with PHYS 2240.

Calculus-based, suitable for physics, engineering, mathematics, computer science and chemistry majors.

Core Category: Life and Physical Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

# PHYS 2240 - Laboratory in Wave Motion, Electricity, Magnetism and Optics

(PHYS 2126)

1 hour (0;3)

Laboratory to accompany PHYS 2220.

Prerequisite(s): PHYS 2220 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$2

## PHYS 2900 - Special Problems

1-3 hours

Individualized instruction in theoretical or experimental problems.

 $Prerequisite(s) \hbox{: } None.$ 

For elective credit only.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### PHYS 2910 - Special Problems

1-3 hours

Individualized instruction in theoretical or experimental problems.

Prerequisite(s): None.

For elective credit only.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 3010 - Modern Physics

3 hours (3:0:1)

Relativity, quantum physics, atomic structure, properties of matter and nuclear physics.

Prerequisite(s): PHYS 2220 and MATH 1720.

Corequisite(s): It is recommended that the course be taken concurrently with PHYS 3030.

Calculus-based, suitable for physics, engineering, mathematics, computer science and chemistry majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 3030 - Laboratory in Modern Physics

1 hour (0;3)

Laboratory to accompany PHYS 3010.

Prerequisite(s): PHYS 3010 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$2

PHYS 3210 - Mechanics

3 hours (3:0:1)

Vector treatment of the motion of a particle in one, two and three dimensions; motion of a system of particles; conservation laws; the statics of fluids and solids; the motion of rigid bodies.

Prerequisite(s): PHYS 2220.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 3220 - Mechanics

3 hours (3:0:1)

Gravitation; moving coordinate systems; mechanics of continuous media; generalized coordinates and the Lagrangian and Hamiltonian formulations of mechanics; applications of tensors to rotation of rigid bodies; theory of small vibrations.

Prerequisite(s): PHYS 3210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 3310 - Mathematical Methods in the Physical Sciences

3 hours (3;0;1)

Application of advanced mathematical techniques to the solution of problems in physics. Vector spaces, complex analysis, matrices, linear transformations, vector calculus, Fourier series and integrals, the Laplace transformation, and special functions.

Prerequisite(s): PHYS 2220, MATH 1720.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### PHYS 3420 - Electronics

4 hours (1-3:4-6)

Electronics. Analog and digital electronics, applications and diagnostic techniques. Direct and alternating current circuits and measurements; selections from fundamentals of semiconductor devices; uses of diodes, transistors, etc., as switches and circuit elements; applications of Boolean algebra; memory and storage devices; counters and shift registers; computer structures; feedback and operational amplifiers; digital and analog instrumentation and interfacing with computers. Labs on basic circuits, instrumentation and measurements that primarily focus on physical implementation and may include circuit simulation.

Prerequisite(s): MATH 1710. PHYS 1420/PHYS 1440 or PHYS 2220/PHYS 2240.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05; Lab (LF): \$

## PHYS 3510 - Physics, Computation and Software Applications

3 hours

A basic survey of selected topics at the intersection of computer science, engineering and physics. Student will learn computer programming for applications in physics as well as the physics underlying computation and its physical implementation. Topics include: automated control in experimental physics, symbolic computation/analysis, simulation of physical phenomena; physical basis of contemporary computers and computation; physical constraints with respect to size, speed, energy and architecture; classical and quantum computation and implementations.

Prerequisite(s): PHYS 1520 or PHYS 2220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 3910 - Intermediate Computational Modeling of Physical Systems

3 hours

Intermediate-level survey of computer-based modeling of physical systems. Includes the theory and hands-on implementation of computational approaches to solve problems related to classical mechanics, nonlinear dynamics, oscillations, electromagnetic fields, simple random problems, and thermal systems. Describes intermediate-level numerical methods related to function analysis (roots of linear and non-linear equations, derivatives, integrals), linear algebra (linear systems, eigenvalues and eigenvectors), optimization and ordinary differential equations. Covers data analysis, regression, function fitting and an introduction to machine learning approaches on large datasets.

Prerequisite(s): PHYS 3510, PHYS 1520 or PHYS 2220.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### PHYS 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4110 - Statistical and Thermal Physics

3 hours (3;0;1)

Basic probability concepts; statistical description of systems of particles; statistical thermodynamics and thermodynamic laws; macroscopic and microscopic descriptions of systems; phase transformation.

Prerequisite(s): PHYS 3010, PHYS 3030.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4150 - Experimental Physics I

3 hours (1:6)

Laboratory experience via use of research-quality instruments. Modern experiments in solid state, nuclear, atomic and molecular physics. Topics, which may vary, cover recent developments in modern physics suitable for advanced undergraduates and graduate students. Topics, which may vary, include nonlinear dynamics and chaos in circuits and lasers; SQUIDS and high temperature superconductivity; holography; X-ray diffraction; electron scanning microscopy; Rutherford scattering, low energy nuclear reactions; ion-induced innershell ionization at MeV energies; nuclear magnetic resonance to obtain local electronic structure; magnetic transport and magneto-optics; and modern techniques in surface analysis (ion sputtering). In addition, ion beam based experimental techniques for materials growth and modification may be done.

Prerequisite(s): PHYS 3010, PHYS 3030.

May be repeated for credit up to 9 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4210 - Electricity and Magnetism

3 hours (3:0:1)

Vector treatment of static electric and magnetic fields in free space, multipole field distributions, boundary value problems, fields in material media, and electromagnetic waves.

Prerequisite(s): PHYS 2220, MATH 2730.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### PHYS 4220 - Electromagnetic Waves

3 hours (3;0;1)

Maxwell's equations; plane and spherical waves; reflection, refraction, guided waves, radiation and scattering.

Prerequisite(s): PHYS 4210.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4250 - Advanced Photonics for Microscopy and Spectroscopy

3 hours

This comprehensive course on Photonics Application of ultrafast optics for microscopy and spectroscopy introduces students to both the theory and practical use of modern microscopes. The course features lectures on the basic physical principles behind the most common modern microscopy techniques. We cover introduction to linear and nonlinear optics, principles of image formation, light microscopy techniques, principles of fluorescence, digital imaging, confocal microscopy, TIRF, STED, FRET-FLIM, and FRAP techniques, structured illumination, two-photon fluorescence, second harmonic generation, vibrational imaging, scanning probe microscopy (SPM) techniques, atomic force microscopy (AFM), and modern ultrafast electron microscopy (SEM, TEM and ARPES), and ultrasonic microscopy. The lectures are reinforced with the laboratory sessions featuring extensive demonstrations and hands-on exercises on a wide variety of microscopes. This course is designed to provide students and researchers from various fields a comprehensive and practical introduction to modern microscopy techniques and a background in modern optical research tools.

Prerequisite(s): PHYS 1520 or PHYS 2220 with a grade of C or better.

#### PHYS 4310 - Quantum Mechanics

3 hours (3;0;1)

Origins of the modern theory of atomic structure; Schroedinger's formulation of non-relativistic, single-particle quantum mechanics and application to simple systems; the one-electron atom.

Prerequisite(s): PHYS 3010/PHYS 3030 and MATH 3410.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4350 - Advanced Modern Physics I – Atomic and Molecular Physics

3 hours

Introduction to various quantum mechanical models of atomic and molecular structure and spectra. Hydrogen atom and simple spectra; external fields, line splitting; line broadening; addition of angular momentum and spin; effective fields, variational method; Hartree and Hartree-Fock theory; structure and spectra of multielectron atoms; Rydberg atoms; molecular binding; rotational, vibrational and electronic states and spectra of diatomic molecules.

Prerequisite(s): PHYS 4310.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4360 - Advanced Modern Physics II - Nuclear and Particle Physics

3 hours

Comprehensive study of nuclear structure and dynamics; survey of particle physics; properties of the nuclear force; interpretation of experimental data via specific many-body models; interaction of radiation with matter; classification of particles and nuclei; scattering theory; conservation laws and symmetry; and contemporary results.

Prerequisite(s): PHYS 4350.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### PHYS 4420 - Physical Optics

3 hours (3;0;1)

Huygens' principle and application to geometrical optics; interference phenomena; Fraunhofer and Fresnel diffraction; polarization; electromagnetic theory of light and interaction with matter. Part of the instruction will be in a laboratory setting.

Prerequisite(s): PHYS 2220, PHYS 2240.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4500 - Introduction to Solid-State Physics

3 hours

Introduction to the major areas of solid-state physics, including crystal structure and symmetry, lattice vibrations and phonons, thermal properties, energy bands, semiconductors, superconductivity, and magnetic properties.

Prerequisite(s): PHYS 3010/PHYS 3030.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4520 - Physics of Nanoscale Materials

3 hours (3;0;1)

Introduction to the physics of nanoscale materials including a study of their properties, synthesis, characterization and applications. Applications of nanoscale materials also are discussed.

Prerequisite(s): PHYS 3010.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### PHYS 4550 - Modern Classical Dynamics

3 hours

Introduction to nonlinear dynamical systems; onset of chaos, phase space portraits, universality of chaos, strange attractors, experimental verification, fluid dynamics and the KAM theorem.

Prerequisite(s): PHYS 3220.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4600 - Computer Based Physics

3 hours

Symbolic and numerical evaluations of single-variable and multivariable integrals with a single line of programming. Symbolic evaluation of derivatives. Symbolic manipulation of lists including vectors and matrices. Data analysis. Multidimensional plots. Symbolic derivations. Symbolic and numerical solutions to single and multiple, linear and nonlinear, differential and partial differential equations. Probability densities and Monte Carlo methods. Random walk and classical trajectory simulations.

Prerequisite(s): PHYS 3510.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

#### PHYS 4610 - Topics in Astronomy

3 hours (3:0:1)

Selected topics in planetary and stellar astronomy: techniques of astronomical observation and measurement; evolution, composition and properties of our solar system and the universe; history of astronomy. Designed for students seeking secondary physical science/science teacher certification. The recitation hour for PHYS 4610 serves to cover teaching methods in astronomy, including the demonstration of measurement equipment (e.g., spectrometers, digital imaging, telescopes, etc.).

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4630 - Topics in Astronomy Laboratory

1 hour (0;3)

Laboratory sequence for PHYS 4610. Designed for students seeking secondary physical science/science teacher certification. Emphasizes data acquisition (e.g., via astronomical observations), data analysis (e.g., of stellar spectra) for the selected topics covered in PHYS 4610, and includes an overview of how to set up the equipment for the laboratory exercises.

Prerequisite(s): PHYS 4610 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4650 - Introduction to Modern Astrophysics

3 hours (3;0;1)

Celestial mechanics; interaction between light and matter; the energy source of the sun; stellar evolution and black holes; galaxies and cosmology.

Prerequisite(s): PHYS 3010.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$33.05

## PHYS 4700 - Research Methods for Secondary Science Instruction

3 hours (2;4)

Techniques used to solve and address scientific inquiry. Design of experiments. Use of statistics to interpret experimental results and measure sampling errors. Ethical treatment of human subjects. Laboratory safety. Mathematical modeling of scientific phenomena. Oral and written presentation of scientific work.

Prerequisite(s): 16 hours of physics, completion of freshman and sophomore science courses required for certification and consent of department. EDCI 3500 and EDCI 4000 are highly recommended.

Same as CHEM 4700. Same as BIOL 4700.

Students seeking secondary certification in mathematics or computer science who have completed the other science requirement of their majors also may enroll. Does not count as an elective toward a major or minor in physics, except for students seeking certification.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4710 - Foundations of Theoretical Physics

#### 3 hours

Overview of topics in theoretical physics. Symmetry; mechanics: Newton's laws, celestial mechanics, Hamiltonian formalism; electromagnetism: Maxwell's equations, nonlinear optics and classical field theory, quantum optics, lasers, chaotic diffraction; quantum mechanics: measurements and scattering theory; statistical physics: entropy, equilibrium statistical mechanics; and contemporary areas: fractals, chaos and nonlinear dynamics. Topics may vary.

Prerequisite(s): PHYS 4210, PHYS 4310. PHYS 4110 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4900 - Special Problems

1-3 hours

Prerequisite(s): Must have the consent of the faculty member prior to enrollment.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### PHYS 4910 - Special Problems

1-3 hours

Prerequisite(s): Must have the consent of the faculty member prior to enrollment.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4950 - Senior Thesis

3 hours

Individual research on a problem chosen in consultation with a faculty member. Research may be conducted on campus, during an internship off-campus, or as an exchange student in a study abroad program.

Prerequisite(s): Consent of supervising faculty member.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## PHYS 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### PHYS 4955 - Senior Thesis Capstone

3 hours

Individual research project prepared by the student under the supervision of a faculty member. A written thesis and oral presentation are required for successful completion of the thesis.

Prerequisite(s): PHYS 4950 and consent of supervising faculty member.

## **Political Science**

## PSCI 1085 - The American Political and Economic Experience

3 hours

Study of the organization, powers, processes and functions of institutions of national and state governments; civil liberties and civil rights; and public policy. Integrated into each political science topic are topics of macroeconomics, which are discussed in the context of American government. Includes principles of economic organization and growth in modern economies; decision-making that affects economic policy and activities, including official appointments to the Federal Reserve; economic issues, including money and banking and monetary and fiscal policy; and discussion of income and business cycles as they relate to various areas, including education, social welfare, and environmental policy.

Prerequisite(s): Acceptance into the Honors College.

Fulfills 3 hours of the legislative requirement of 6 hours of American government. May be substituted for PSCI 2305/PSCI 2315 and ECON 1110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2305 - US Political Behavior and Policy

(GOVT 2305)

3 hours

Explores the connection between the will of the people and the policies implemented by government by focusing on individual political values and attitudes, the mechanisms that connect individual beliefs to government action (parties, interest groups, the media, and elections), the US Constitution, and the outcomes of government policy. Satisfies one of the political science requirements of the University Core Curriculum.

Prerequisite(s): None.

**Core Category:** Government/Political Science Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2306 - US and Texas Constitutions and Institutions

(GOVT 2306)

3 hours

An introduction to the institutions of government, with particular emphasis on the U.S. and Texas Constitutions. Focus on the structure and powers of the three branches of government (both national and Texas); the division of power between those branches (separation of powers); the division of power between the national and state governments (federalism); and issues related to civil rights and civil liberties. Satisfies the legislative requirement for a course emphasizing the Texas constitution.

Prerequisite(s): None.

PSCI 2306 must be taken to satisfy the requirement of a course emphasizing U.S. and Texas constitutions.

**Core Category:** Government/Political Science Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2315 - Honors US Political Behavior and Policy

3 hours

Explores the connection between the will of the people and the policies implemented by government by focusing on individual political values and attitudes, the mechanisms that connect individual beliefs to government action (parties, interest groups, the media, and elections), and the outcomes of government policy. Satisfies one of the political science requirements of the University Core Curriculum.

Prerequisite(s): PSCI 2306 or PSCI 2316. Acceptance to Honors College.

Core Category: Government/Political Science Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2316 - Honors U.S. and Texas Constitutions and Institutions

3 hours

An introduction to the institutions of government, with particular emphasis on the U.S. and Texas Constitutions. Focus on the structure and powers of the three branches of government (both national and Texas); the division of power between those branches (separation of powers); the division of power between the national and state governments (federalism); and issues related to civil rights and civil liberties. Satisfies the legislative requirement for a course emphasizing the Texas constitution.

Prerequisite(s): Acceptance to Honors College.

Satisfies the requirement of a course emphasizing U.S. and Texas constitutions.

**Core Category:** Government/Political Science Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3010 - American State and Local Government

3 hours

Political processes among state and local governments, and similarities and variations in the politics and policies of states.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **PSCI 3100 - Topics in American Government**

3 hours

Major areas of research and controversy in American politics. Representative topics include political campaigning, minority group politics, and science fiction and politics. May be repeated for credit as topics vary.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **PSCI 3101 - Latino Politics**

3 hours

Overview of the political status and experiences of Latinos in the United States. Deals with group identity and solidarity; historical experiences of different Latino national origin groups; representation in the electoral and policymaking process in local, state and federal governments; and theories of minority group politics.

Prerequisite(s): None

## **PSCI 3102 - U.S. Immigration Policy**

#### 3 hours

Examines immigration issues from an interdisciplinary perspective incorporating readings from economics, sociology, demography, and political science as well as the depiction of immigration in popular culture. Topics will include the historical evolution of American immigration policy, push and pull theories of immigration, the economic costs and benefits of immigration, and the future direction of US immigration policy.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 3103 - U.S. Immigration Politics**

#### 3 hours

Examines how the United States responds to and is transformed by immigration policy. Includes consideration of citizenship politics; governmental institutions, political actors, socio-political processes; migration studies: ethical debates related to immigration control; determinants of immigration policy, the political and cultural inclusion and/or exclusion on immigrants; and immigrant participation in the political process.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 3104 - Race and Ethnic Politics**

#### 3 hours

Overview of the political experiences of major racial and ethnic minority groups in the United States and their paths to political equality. Topics include (pan)ethnic identity, citizenship, suffrage, inequality in political participation and representation, interracial conflict, coalition building, and current political and policy debates affecting racial/ethnic minorities.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# PSCI 3105 - Political Economy of Race, Gender and Immigration

#### 3 hours

Examines theoretical approaches to understanding and integrating gender, race, and immigration in economics and their political impact. Additionally, examines capitalist development in the context of race, gender, and immigration both historically and in the modern political era on the national, state, and local level.

Prerequisite(s):

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 3106 - African-American Politics**

#### 3 hours

Explores the political development of African-Americans in the United States; modes of thought and social movements that emerged in the black community in reaction to systematic racial discrimination; African Americans' transition from protest politics to mainstream electoral involvement; and the influence of African American presence in American politics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3110 - The Legislative Process**

#### 3 hours

Legislative behavior, representation, selection of legislators, organization and procedures; relationships to other branches of government.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3120 - Women and Politics**

## 3 hours

Explores aspects of women's political, legal and economic lives in which gender intersects with government; provides overview of issues and important concepts, events and movements concerning them.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3130 - Interest Groups**

#### 3 hours

The theory, development, types, operations and effectiveness of interest groups in American politics.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3140 - LGBT Politics**

#### 3 hours

Explores the development and the political implications of the LGBTQ rights movement in the United States, with a goal toward understanding the role of this movement in pluralistic, contemporary political life.

Prerequisite(s): PSCI 2306 and PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3160 - Mass Media in American Politics

#### 3 hours

Mass media's impact upon the political process, institutions and the individual.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3165 - Topics in Politics and Pop Culture

#### 3 hours

Explores the influence of popular culture on politics as well as the influence of political realities on popular forms of expression and communication. Topics may include science fiction and politics, the politics of rock and roll, politics in popular film, and more.

Prerequisite(s): None.

May be repeated for credit as topics vary for up to 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3170 - Presidential Elections**

#### 3 hours

Examines theories of voting in presidential elections, candidate strategy, voter mobilization and participation, voter information, the media's role in the election process, and the nomination process.

Prerequisite(s): None.

#### PSCI 3200 - The American Legal System

3 hours

Institutions and processes; courts and judicial behavior.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3210 - The U.S. Supreme Court

3 hours

Explores varying aspects of the U.S. Supreme Court, including how the Supreme Court selects and decides cases, how justices are appointed to the Supreme Court, how the Supreme Court interacts with other branches of government and interest groups, and how decisions are implemented.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 3300 - Political Science Research Methods**

3 hours

Emphasizes the conceptual and analytical tools necessary for conducting and understanding research in political science. Includes an introduction to statistical analysis and computer use.

Prerequisite(s): PSCI 2306/PSCI 2316 or PSCI 2305/PSCI 2315 , or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 3310 - Political Theory: Quest for Justice

3 hours

Examines enduring questions about community, the individual, happiness, and justice through the analysis of such works as Plato's "Republic," Machiavelli's "Prince," and Hannah Arendt's "The Human Condition." Other themes include the ideal political order, the character of human excellence, the relationship between politics and society, the political responsibilities of philosophy, and the relationship between education and justice.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3320 - Political Theory: The State and its Critics

3 hours

Examines the early modern authors who devised the concept of the "state," their later-modern opponents, and a rich variety of pre-modern, non-modern, and post-modern alternatives through such works as Hobbes' Leviathan, Locke's Second Treatise, and Aristotle's Politics. Other themes include concepts of equality, liberty and law, the rise of ideology and nationalism, and the relationships among modern natural science, religion, philosophy, and politics.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 3420 - Bureaucracy and Public Policy

3 hours

Study of the nature of bureaucracy, its role in policy development and the problem of bureaucratic responsibility.

Prerequisite(s): PSCI 2306, PSCI 2305.

Same as PADM 3420.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 3500 - Introduction to Peace Studies**

3 hours

Origins and extent of violence in human relations, foreign and domestic.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PSCI 3600 - Governments and Politics around the World

3 hours

Major concepts and approaches to comparative government and politics.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3611 - Politics of Central America and the Caribbean

3 hours

Analyzes the major political issues in Central American and Caribbean nations including the historical origins of political, economic, and security conditions and variations in the institutional forms of government across the region.

Prerequisite(s): N/A

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3620 - Politics of Western Europe

3 hours

A comparative analysis of political institutions, political culture, and political development in Western European nations, including the institutions and operation of the European Union and the EU's impact on domestic politics in the member states.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3621 - Politics of Russia, Eurasia, and East Europe

3 hour

Examines the politics of post-communist Russia and Eastern Europe, the origins of autocracy in Russia, the rise of communism in Eastern Europe, and contemporary developments in the region such as the reemergence of authoritarianism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3630 - Politics of Africa

3 hours

Overview of contemporary political development in Africa, including the colonial legacy, the politics of ethnic divisions, and the prospects for democratic transitions and decay.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3631 - Peace and Conflict in Africa

3 hours

Overview of theories of civil conflict and conflict resolution with a particular focus on African cases from the end of European colonization to present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 3641 - Politics of Japan

3 hours

Overview of politics in Japan, with an emphasis on electoral competition and political parties in the post-war era.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSCI 3642 - Politics of China

3 hours

Overview of the political development, culture, and institutions of the People's Republic of China. Emphasis is on the post-Mao era.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3650 - Middle East Politics**

3 hours

Overview of Middle Eastern regional politics. Attention is given to such issues as legitimacy, authority, identity, military, democracy and religious fundamentalism.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3700 - Area Politics**

3 hours

Political institutions, processes, problems and policies in distinctive geographic or cultural areas of the world. Frequently offered areas include Africa, Asia, Latin America, the Middle East, the former Soviet Union and Eastern Europe, Western Europe, the Anglo-American democracies, and the Commonwealth of Nations.

Prerequisite(s): 3 hours of political science.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 3701 - Politics of Mexico

3 hours

Survey of contemporary Mexican politics. Emphasis on historical context and recent economic and social changes and their impact on Mexico's political system. Topics include relations with the United States, North American issues, economic and political reforms, and the recent emergence of opposition politics.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 3702 - Latin American Politics**

3 hours

Examines the different types of political rule in Latin America as they relate to awareness and knowledge of distinct cultures or subcultures, including but not limited to ethnicity, gender, class, political systems, religions, languages, and human geography. Different types of political rule have marked the Latin American landscape in the twentieth century. It compares explanations for the emergence of authoritarian rule and for the return of democratization in this region of the world in the current era.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3703 - Security in Latin America

3 hours

Survey course that discusses various topics related to public security in Latin America. Examines the contemporary security landscape of the region focusing on paramilitaries, gender violence, drug trafficking, gangs and urban violence, and policing. Also examines the premises of hemispheric security primarily from the perspective of the Latin American countries particularly addressing Latin American and Caribbean states' capabilities to respond to current insecurities.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 3704 - U.S.-Latin American Relations

3 hours

International relations of Latin America from independence to the end of the Cold War and the current period, with an emphasis on its relations with the United States. Topics will cover colonial rule in Latin America, experience from the early 1800s to World War II; political and economic changes in the 1950s - 1980s; the impact of the Cold War on U.S. foreign policy making; and the end of the Cold War, immigration, NAFTA, and the spread of illicit drugs across borders.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 3810 - International Relations**

3 hours

Analytical survey of current world politics.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSCI 3910 - Practicum

1-3 hours

Field practicum offered as special problems or organized course.

Prerequisite(s): Consent of department and chair; PSCI 3110 for national or state legislative internships.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4020 - Urban Politics

3 hours

The city in social order; political machinery of central city and suburbs; types of conflicts, policies, leadership and groups; metropolitan government.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 4100 - Political Parties**

3 hours

Development, nature, problems, organization, operation and functions.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4120 - Public Opinion and Participation

3 hours

Shaping factors, communication techniques, public opinion, governmental action and democracy.

Prerequisite(s): PSCI 2306, PSCI 2305.

### PSCI 4130 - American Intergovernmental Relations

3 hours

Federal system; constitutional and theoretical bases of federalism; national/state/local government conflict and cooperation; regional arrangements; political centralization; impact upon American traditions; future prospects.

Prerequisite(s): PSCI 2306, PSCI 2305.

Same as PADM 4130.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4140 - The Presidency

3 hours

Development of power, influence and limitations of the chief executive; selection, office, changing role and problems of control.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4150 - Religion and Politics in the United States

3 hours

Examines the role of religious institutions, creeds, and communities in American political life.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4200 - Constitutional Law: Powers of Government

3 hours

Decisions of the United States Supreme Court; scope of legislative, executive and judicial power; presidential power in war and foreign affairs; clash of national and state power; economic liberties and property rights.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4210 - Constitutional Law: Rights and Liberties

3 hours

Decisions of the United States Supreme Court; freedom of religion, speech and press; right to privacy; racial and gender discrimination.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4220 - Jurisprudence

3 hours

Law in the modern state, meaning and objects, sources and growth, and conceptions of rights and justice.

Prerequisite(s): PSCI 2306, PSCI 2305. 3 hours in public law.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4230 - The Constitution and the Rights of Criminal Defendants

3 hours

An in-depth examination of the constitutional rights and liberties enjoyed by defendants in the criminal justice process. Explores the U.S. Supreme Court's interpretation of constitutional guarantees as that interpretation has developed through the evolution of case law in a political and historical context.

Prerequisite(s): PSCI 2306 and PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4300 - Topics in Political Research Methodology

3 hours

Examination of specialized topics in research methodology of political science. Representative topics include intermediate or advanced quantitative data analysis, survey research methods and fieldwork methods.

Prerequisite(s): PSCI 2306, PSCI 2305, PSCI 3300, or consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4320 - American Political Theory

3 hours

American political thought since Colonial beginnings.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4330 - Topics in Political Theory

3 hours

This course addresses either the work of selected theorists, such as Plato, Thucydides, Machiavelli, Locke or Marx, or themes, such as morality and politics, liberalism and authoritarianism.

Prerequisite(s): 3 hours of political science.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **PSCI 4360 - International Ethics**

3 hours

A reading of authors from ancient to the modern world who have examined ethical issues as they relate to international politics. Consideration of ethical positions such as amoral realism, legal positivism, human rights, critiques of human rights, just war theories and Islamic approaches to international ethics. Topics may include the nature of law and morality as well as policy issues such as the use of force against terrorists.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4450 - Public Policy Analysis

3 hours

Policy making, impact of public policy and factors that place specific problems on the public agenda.

Prerequisite(s): PSCI 2306, PSCI 2305.

Same as PADM 4450.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4490 - Topics in Public Policy

3 hours

Analysis of the making, implementation and evaluation of major policy issues in the United States. Representative topics include aging, defense, civil rights, economic growth, education, environment, health care and poverty.

Prerequisite(s): PSCI 2306, PSCI 2305. PSCI 3300 or its equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4520 - International Human Rights

3 hours

Consideration of the concept and role of human rights in international affairs.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSCI 4640 - Revolution and Political Violence

3 hours

Causes and consequences of revolution and other forms of political violence in nations.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4650 - Comparative Public Policy**

3 hours

Public policy and policy making in Westernized democratic nations. Analysis and evaluation of public policies. Introduction to crossnational policy study techniques.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PSCI 4660 - Democracy and Democratization

3 hours

Explores democracy's nature, causes of democratization, the spread of democracy in the world, and problems of consolidation of democracy.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4661 - Politics of Autocracy**

3 hours

Provides a general overview of types of authoritarian and totalitarian regimes and the institutions and internal dynamics of such regimes. Uses case studies to illustrate the evolution and function of such governments.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 4662 - Civil-Military Relations

3 hours

Focuses on the problems that arise between armed forces and society, with focus on issues such as civilian control, military coups, civilian uprisings, and mission creep.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4663 - Comparative Judicial Politics**

3 hours

Structures and functions of the judicial institution in various countries of the developing democratic world.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4670 - Third World Politics**

3 hours

Comparative examination of the process and dynamics of political change and development in Third World nations of Asia, Africa, the Middle East and Latin America.

Prerequisite(s): PSCI 3600.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4671 - Globalization and Development

3 hours

Overview of globalization and development, with an emphasis on domestic economic interests and international factors for explaining political and economic development from Colonization to the present.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4700 - Topics in Comparative Politics**

3 hours

Major areas of research and controversy in the politics of contemporary nations. Representative topics include political socialization, peasant movements, political recruitment and judicial politics.

Prerequisite(s): 3 hours of political science.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **PSCI 4720 - Ethnicity in World Politics**

3 hours

Consideration of the concepts of ethnicity and nationalism as divisive elements in world affairs.

Prerequisite(s): 3 hours of political science.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 4800 - The Politics of International Organization

3 hours

Formation of policy at the international level on questions of military security, the environment, the international economy, economic development through the United Nations and related agencies, and the place of the multinational corporation in world affairs.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSCI 4810 - International Law

3 hours

Theoretical and political foundations of the law among nations; formation, change, application and enforcement of law; modern trends.

Prerequisite(s): PSCI 2306, PSCI 2305. PSCI 3200 or PSCI 3810, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4815 - Advocacy and Activism

3 hours

The roles of advocacy and activism in political life and global citizenship; educates, equips, and networks students to make positive changes in their world.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSCI 4820 - Contemporary International Problems**

3 hours

Major contemporary problems and conflicts confronting the international system.

Prerequisite(s): PSCI 2306, PSCI 2305. Consent of instructor.

May be repeated for credit as topics vary.

#### **PSCI 4821 - International Conflict**

3 hours

Examines the forces that promote conflict and peace within the international system, including change over time. Students survey the scholarly literature on war to learn what leading research can explain about international conflict.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4823 - International Criminal Tribunals and War Crimes

3 hours

Examines international war crimes, such as Rwanda and the former Yugoslavia, including the causes and consequences of such conflicts. Efforts to establish institutions of international justice, including the International Criminal Tribunal for the former Yugoslavia and the International Criminal Tribunal for Rwanda. Students explore international legal issues associated with such courts.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4826 - Women, War and Peace

3 hours

Survey and analysis of the role of gender, gender hierarchies and gender (in)equality on the prevalence of conflict and the prospects for durable peace.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 4827 - Negotiation and Diplomacy**

3 hours

Explores how diplomacy and negotiations are conducted in the international system.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4828 - Geography, History, and International Relations

3 hours

Examination of the ways that geography and history affect international relations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4830 - American Foreign Policy

3 hours

Principles and bases on which American foreign policy rests; machinery and personnel for policy formulation.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4840 - Major Problems of American Foreign Policy

3 hours

Recent policies, decision making, implementation and coordination.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4845 - Foreign Policy Around the World

3 hours

Survey and analysis of foreign policy making and foreign policy behavior in different national contexts with examples from countries around the world.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4850 - Critical Issues in World Politics

3 hours

Examination of major issues in world politics, including potential for war, religious fundamentalism, morality, weapons of mass destruction, and diminishing resources.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4860 - International Political Economy

3 hours

Study of the politics of economic issues in international affairs, including the creation, maintenance and decay of international cooperation in trade; monetary and financial relations among Western countries; the roles of state and non-state participants; conflict and cooperation in East-West and North-South international economic relations; and an examination of the imperialist and world systems approaches to international affairs.

Prerequisite(s): PSCI 2306, PSCI 2305.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSCI 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSCI 4933 - Political Science Internship

3 hours

For students who have obtained an internship with a government entity, law firm, or nonprofit organization; bridges internship with coursework; focuses on reflection and career planning.

Prerequisite(s): 1. At least 60 completed college credit hours, of which at least 12 are at UNT.

2. At least 12 completed credit hours in political science (of which 6 may be 1000-level courses).

3. An overall GPA of at least 3.0 OR a major GPA of 3.0 coupled with an overall GPA of at least 2.8.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSCI 4950 - Writing, Advocacy, and Communication

3 hours

Students hone communication skills by creating written and oral projects related to careers in government affairs. Examples of topics include writing grants, white papers, model legislation, and legal briefs.

Prerequisite(s): PSCI 2305 and PSCI 2306; junior standing or consent of department.

### PSCI 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSCI 4952 - Political Science Capstone Seminar**

3 hours

Integration of concepts and skills developed throughout the political science curriculum, including both experiential and classroom-based components.

Prerequisite(s): Senior standing; completion of: PSCI 2306 and PSCI 2305 or their equivalents; PSCI 3300; and at least four advanced courses from three fields of PSCI.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSCI 4953 - Capstone Internship

3 hours

Practical experience in the political process, learning how various governmental or non-governmental entities on the international, national, state, or local level formulate public policy and how these entities interact with the government, their constituents and each other.

Prerequisite(s): Senior standing; completion of PSCI 2306 and PSCI 2305 or their equivalents; PSCI 3300; at least four advanced courses from three fields of PSCI; completion of departmental application process; and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSCI 4954 - Research Capstone

3 hours

A guided research seminar designed to have students explore the impact of political institutions and/or behavior on the world community.

Prerequisite(s): Senior standing with an overall and major GPA of 3.0 or better; completion of PSCI 2306 and PSCI 2305 or their equivalents, PSCI 3300, and at least four advanced courses from three fields of PSCI.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **Psychology**

## PSYC 1630 - General Psychology I

(PSYC 2301)

3 hours

Nature of psychology with emphases on the study of personality development, decision making, reactions to frustration, mental health, and how the individual interacts with and is influenced by others.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 1650 - Biological Psychology

(PSYC 2330)

3 hours

Nature of psychology with emphases on the physiological basis of behavior and psychological processes, including learning, motivation, perception and emotion.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **PSYC 2317 - Quantitative Methods**

(PSYC 2317)

3 hours

Techniques appropriate for treatment of psychological data; frequency distributions, percentiles, measures of central tendency and variability, normal curve function, simple correlational analyses, and applications of sampling theory. Laboratory offers practice in quantitative methodology and an introduction to the computer statistical program SPSS.

Prerequisite(s): MATH 1680 or MATH 1681

Corequisite(s): PSYC 3317.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 2480 - Psychosocial Adjustment

(PSYC 2315)

3 hours

Processes involved in adjustment of individuals to their personal and social environments; role of conflict, frustration and healthy and pathological strategies of adjustment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 2580 - Health Psychology

3 hours

Examines psychological, physiological, social and behavioral factors as they influence and are influenced by physical health. Health psychology is concerned with the acquisition and maintenance of health through behavior change strategies, the prevention and/or treatment of illnesses, the role of psychosocial and stress factors in the development of physical illness, and the formulation of health care policy.

Prerequisite(s): None.

## PSYC 2600 - Interpersonal Behavior

3 hours (2:2)

Relevant variables underlying interpersonal relationships, and current research methods and findings. Skills in developing effective interpersonal relationships in such contexts as friendships, dating, marriage, family, business and industry. Includes the use of recording devices, role playing and self-observation procedures.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 3000 - Positive Psychology

Nature of psychology with emphases on the development of strengths and virtues, positive emotion, positive cognition, prosocial behavior, positive interventions, and positive environments.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3100 - Social Psychology

(PSYC 2319)

3 hours

Survey of psychological research and theory on social behavior with attention to person perception, interpersonal attraction, group processes, attitudes, helping behavior, aggression and applied social psychology.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3300 - Psychology of Addictive Behaviors

The etiology, theories, cognitive neuroscience, and psychological and behavioral effects of addictive behaviors, including substance use, gambling, and other behaviors being considered as potential addictions, such as binge eating, hypersexuality, and compulsive electronic media use.

Prerequisite(s): PSYC 1630 and PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSYC 3317 - Quantitative Methods Lab

1 hour

Laboratory offers practice in quantitative methodology and an introduction to the computer statistical program SPSS.

Prerequisite(s): MATH 1680 or MATH 1681.

Corequisite(s): PSYC 2317. (Students transferring in an equivalent to PSYC 2317 must complete PSYC 3317 their first semester at UNT.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 3480 - Adult Development and Aging

3 hours

Personality, cognitive, social and sensory-perceptual aspects of development from early adulthood through death. Emphasis on the development of a comprehensive understanding of the adult portion of the life span.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Same as AGER 3480.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSYC 3490 - Psychology of Women

Comparison of personality and cultural factors associated with gender.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Same as WGST 3520.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSYC 3520 - Introduction to Industrial Organizational **Psychology**

3 hours

Personnel and organizational psychology; selection and testing procedures, test validation, and theories of organization, leadership and job performance.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3530 - Psychology of the Offender

Psychological processes related to the legal offender; dynamics involved in such activities as sexual deviancy, drug abuse, personal assault, including murder, and non-assaultive crimes; meaning of classification from courtroom to prisons and in release.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3620 - Developmental Psychology

3 hours

Basic theories and research in life-span developmental psychology, with an emphasis on the first two decades of life; unique and interactive features of socio-emotional, physical and cognitive development.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3630 - Introduction to Psychological Measurement

3 hours

Fundamental approaches, theories of psychological tests and testing; correlation, reliability, validity and methods of test construction.

Prerequisite(s): PSYC 2317 and PSYC 3650.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## PSYC 3640 - Marital Adjustment

3 hours

Physiological, psychological and socioeconomic factors involved in marital adjustment; practical education for marriage and parenthood.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 3650 - Experimental Methods

4 hours (4:3)

Basic experimental procedures and designs, laboratory apparatus, and treatment of experimental data. Experiments and experimental reports required of each student.

Prerequisite(s): PSYC 2317.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSYC 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 4020 - Psychology of Death and Dying

3 hours

Concepts and attitudes concerning death and dying from a psychological perspective; current research on death and dying; development of insights and understanding to prepare the student to interact effectively with people who are terminally ill and their family members.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Same as AGER 4020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4030 - Multicultural Psychology

3 hours

Study of various theories and concepts of multicultural psychology, the impact of cultural factors on human behaviors, and challenges faced by underrepresented groups in society. Emphasis placed on the development of students' multicultural knowledge and experience.

Prerequisite(s): Junior or senior status; PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4040 - Psychology of Race in the U.S.

3 hours

Exploration of highly sensitive issues and concepts related to racial diversity and intersections of race/ethnicity/sex/gender identity/social class/nationality.

Prerequisite(s): Upper-division standing (junior or senior).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4110 - Interviewing for Paraprofessionals in Psychology

3 hours

Introduction to the interviewing process in mental health service settings. Includes purposes, objectives, goals, types and skills of interviewing via lectures, plus taped and live demonstrations.

Prerequisite(s): PSYC 4610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### PSYC 4300 - Psychosocial Issues in HIV/AIDS

3 hours

Examination of the psychosocial factors that are related to health-related behaviors in both healthy people and people living with HIV/AIDS. Prepares students who expect to pursue careers in health service fields (e.g. psychologists, physicians, biologists, dentists, etc.) to be conscious of issues that HIV-positive people face daily. Students interested in HIV/AIDS as a social phenomenon are encouraged to enroll.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 4470 - Sexual Behavior

3 hours

Impact of psychosocial factors on development and expression of human sexuality.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4480 - New Directions in Psychology

3 hours

In-depth study of traditional roles and interests versus current roles and interests of psychologists designed to keep students abreast of the rapidly expanding and changing field of psychology. Topics include changes of duties in schools, legal systems, law enforcement, business and industry, government, biology and medicine, as well as other areas.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4510 - Practicum

1-3 hours

In-depth study of areas of specific interest. Practical experience in supervised settings.

Prerequisite(s): Senior standing and consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4520 - Personality

3 hours

Major approaches to conceptualization of personality; psychodynamic, phenomenological and trait-type learning models.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4600 - History and Systems

3 hours

Principal historical antecedents of modern psychology, relevance to major contemporary systematic positions; philosophy of science, associationism, structuralism, behaviorism, functionalism, Gestalt and psychoanalysis; recent psychological theories.

Prerequisite(s): PSYC 1630 or PSYC 1650.

Core Category: Capstone

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PSYC 4610 - Abnormal Psychology

3 hours

Major psychoses, neuroses and other types of maladaptive behavior patterns that are common problems in society; descriptions of symptomatology, theoretical approaches and epidemiological variables.

Prerequisite(s): Junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4620 - Abnormal Child Psychology

3 hours

Survey of the symptomatology, theoretical perspectives and treatment approaches of psychological disorders seen in infants, children and adolescents.

Prerequisite(s): PSYC 3620 or PSYC 4610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 4640 - Psychophysiology

3 hours

Physiological processes of the body and relationships to behavior. Sensory and motor processes, learning and memory, and physiological problems of motivation and emotion.

Prerequisite(s): Junior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4670 - Behavioral and Biopsychosocial Challenges within LGBT Communities

3 hours

Understanding the health-related behaviors and psychosocial factors associated with sexual minorities (LGBT: lesbian, gay, bisexual and transgendered), primarily in the U.S. Designed for healthcare workers, educators, service providers and individuals who work with or are interested in LGBT communities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4690 - Introduction to Learning and Memory

3 hours

Explores the processes of acquiring and using knowledge. Basic principles in conditioning, concept learning and human behavior are taught as a foundation to the understanding of learning.

Prerequisite(s): PSYC 3650 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4700 - Psychobiology of Stress: The Mind-Body Connection

3 hours

The biology of the stress response is detailed. The effects of this response on a number of topics including but not limited to aging, memory and depression are discussed. The effects of the stress response on immunity and illness are highlighted.

Prerequisite(s): PSYC 4640 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4820 - Sensation and Perception

3 hours

The philosophical history of perception, psychophysics, neurobiological substrates of human sensory systems leading to phenomenological perception, body-brain sensory processing pathways, and the neuropsychology of disrupted sensation and perception.

Prerequisite(s): PSYC 1630 or PSYC 1650

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### PSYC 4830 - Cognitive Psychology

3 hours

Classic and contemporary theories of human thinking processes as related to perception, attention, memory, knowledge representation, reasoning, decision making, language, problem solving and consciousness.

Prerequisite(s): PSYC 1630 or PSYC 1650

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### PSYC 4849 - Topics in Psychology

3 hours

Selected topics of current interest and importance in psychology not covered by existing course offerings.

Prerequisite(s): PSYC 1630 or PSYC 1650.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### PSYC 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## PSYC 4950 - Honors Thesis

3 hours

Research project for outstanding psychology students. The project must involve planning, conducting and defending an actual project.

Prerequisite(s): PSYC 2317, PSYC 3650, PSYC 3630.

For psychology majors with a minimum of 18 hours in psychology and a minimum grade point average of 3.5 in psychology and 3.0 overall

Core Category: Capstone

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **PSYC 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Public Administration**

## PADM 2000 - Discover the City: Placemaking in the World

3 hours

Helps students understand how cities shape life today and into the future. Cities are about the place and shape of human experience that urban policymakers and planners make everyday. Introduces the cities of the world, regional patterns and urban environments that impact the livability, culture, environment, social equity, housing, public health and transportation that pervade our daily lives today and for future generations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 2100 - Cultural Competency in Urban Governance

3 hours

Examines the diverse and sometimes competing demands of people of color, women, the elderly, sexual orientation and the economically disadvantaged on public policy development and execution. Addresses how public managers respond to the demands of diverse interests in American cities. Students develop an understanding of the importance of cultural competency to leadership, responsiveness and efficiency in the management of urban services. These values are discussed in relation to the management of diversity in the public workforce, city budgets and the distribution of public services.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 2120 - Introduction to Urban and Regional Planning

3 hours

Physical and technological, as well as economic, social, and political infrastructure, play an important role in planning for healthy environments. Introduction to planning theory and history as they inform urban development.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 3000 - Public Administration

3 hours

Organizations and management in executive departments, and national, state and municipal governments; bureaucracy; administrative theory; budgeting; personnel and administrative leadership.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 3010 - Foundations of Philanthropy and Nonprofits

3 hours

Foundational course for students interested in a career in nonprofit leadership studies. Examination of the philosophy, values, roles and responsibilities in nonprofit studies in today's society. An examination of historical events leading to the creation of nonprofit organizations and their impact on our communities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3020 - Public Management

3 hours

Introduction to organization and management theories and practices as they concern federal, state and local governments.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 3030 - Topics in Human Services

3 hours

Study of various topics in management leadership and issues of concern for non-profit managers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3200 - Creating Innovative Cities

3 hours

Successful cities rely on creativity and innovation. Explores planning for innovative cities through various theoretical and practical planning approaches.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3210 - Population Demographics and Urban Planning

3 hours

Examination of population trends and changes and the impact of growth on urban form and planning processes.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3220 - Land Use and Transportation Planning

3 hours

Visualization of physical space at the neighborhood and community levels through spatial analysis helps planners to establish and understand vibrant and sustainable communities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3400 - Introduction to Financial Management for Nonprofit Organizations

3 hours

Designed to introduce students to many of the fiscal disciplines of nonprofit organizations. Students learn basic skills in accounting principles, analyzing financial information, reporting requirements, cash management and capital budgeting.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3410 - Financial Aspects of Government

3 hours

Politics and management of taxation, budgeting, grants-in-aid and municipal bonds. Conflicts among politicians, managers and analysts in developing policy and financing programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 3420 - Bureaucracy and Public Policy

3 hours

Study of the nature of bureaucracy, its role in policy development and the problem of bureaucratic responsibility.

Prerequisite(s): None.

Same as PSCI 3420.

#### PADM 3700 - Issues in Public Administration

3 hours

In-depth investigation of a contemporary issue of concern to public managers. Possible topics include managing nonprofit organizations, public-private partnerships and ethics in government.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 4000 - Mediation

3 hours

Defines and examines the process of mediation. Covers the history and development of mediation and introduces theories of conflict management. Reviews diverse settings of mediation, such as domestic, commercial, non-profit, employment and institutional environments. Significant legal, ethical, professional, cultural and gender considerations are explored. Students participate in mediation exercises and simulations.

Prerequisite(s): None.

Required for interdisciplinary minor in alternative dispute resolution.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4010 - Family Mediation

3 hours

Provides mediators with advanced practical skills and clear theoretical understanding of family mediation, with particular emphasis on divorce and child custody issues. Meets statutory requirements of Texas and many other states for mediators of disputes relating to the parent-child relationship.

Prerequisite(s): PADM 4000.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4020 - Dispute Resolution in the Workplace

3 hours

Review of alternative dispute resolution (ADR) to address sources of conflict in the workplace. Examines procedures and benefits of arbitration, mediation, ombudspersons, minitrials, neutral fact-finding and other alternatives to litigation-based conflict resolution. Trends in use and ethical/professional considerations are considered.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4030 - Dispute Resolution in a Global Workplace

3 hours

Explores the relationship of trade-based and work-based conflict with special focus on alternative dispute resolution practices. Examines dispute resolution options available in trade agreements and their implications for workplace and trade. Students learn the benefits and limitations of workplace conflict resolution practices in an environment with multiple layers of world trade.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4040 - Crisis Intervention

3 hours

Provides overview of crisis intervention from the perspectives of a host of intervention organizations and professionals. Reviews the tactics, techniques, behaviors, emotions and motivations of those who intervene or negotiate in crisis situations as well as those of persons who precipitate such actions and their victims. Students are introduced to professionals who negotiate interventions in suicide, workplace and domestic conflict situations. Review of existing research and practices about such interventions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4050 - Negotiation and Dispute Resolution

3 hours

Introduces the fundamentals of non-litigation strategies for a variety of business, professional and personal settings. Learning and skills are developed through lecture, role playing, out-of-class assignments, case studies and negotiation simulations.

Prerequisite(s): None.

Required for interdisciplinary minor in alternative dispute resolution.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4060 - Practicum in Mediation and Dispute Resolution

3 hours

Provides opportunity for students to round out their education in dispute resolution through participation in numerous exercises, simulations and actual mediations and/or other forms of alternative dispute resolution.

Prerequisite(s): PADM 4000.

Required for interdisciplinary minor in alternative dispute resolution.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 4070 - Arbitration Basics

3 hours

Essential characteristics, concepts and practices of arbitration. Examines basic functions and duties of arbitrators, parties in arbitration hearings and party representatives. Covers arbitration ethics and practices in international, commercial, labor/employment, financial services, real estate, and other industries, sectors, and socioeconomic settings.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4130 - American Intergovernmental Relations

3 hours

Federal system; constitutional and theoretical bases of federalism; national/state/local government conflict and cooperation; regional arrangements; political centralization; impact upon American traditions; future prospects.

Prerequisite(s): None.

Same as PSCI 4130.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4170 - Methods in Urban Planning Research and Analysis

3 hours

Introduction to research used in the social sciences. Tools and techniques of data gathering. Approaches include qualitative and quantitative methods. Focus on understanding the basics of research design and developing student abilities to critically evaluate research reports in journals, professional reports and the mass media.

Prerequisite(s): None.

## PADM 4180 - Urban Planning Studio

6 hours

Examines the interdependence of cities in the metropolitan regions and the importance of urban form and functions. Introduces and applies fundamental planning concepts, theories and models to reallife urban challenges. Planning at the city and regional levels directly influences the economy and quality of life of residents.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4200 - Leadership Theory and Practice for Volunteer Managers

3 hours

Overview of organizational leadership theory and practice for volunteer managers and community leaders. Students examine and develop a range of skills in a number of interpersonal areas: group dynamics, decision-making, managing differences, and leadership and influence as they pertain to primarily nonprofit organizations and their ability to lead a volunteer workforce.

Prerequisite(s): None.

May not be repeated if credit has been received for it at the graduate level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4210 - Introduction to Philanthropy and Fundraising

3 hours

Provides an overview of financial planning and fundraising practices in nonprofit organizations from the perspective of the giver. Students learn to assess the financial health of organizations, understand the duty of fiscal responsibility and develop and implement fundraising strategies.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### PADM 4220 - Proposal Writing and Grants Administration

3 hours

Basic steps in researching funding ideas, including how to use the Internet as a fundamental tool and the detailed steps required for preparing funding applications. Focus on the skills and tools needed to monitor funds once grants have been awarded.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4230 - Social Evolution of Contemporary Volunteerism

3 hours

Analysis and review of the social evolution of contemporary volunteerism from revolutionary times to the present. Study of the current issues, definitions, and trends in the field of professional management. Introduction to social systems supporting or limiting volunteerism and volunteerism resources on the Internet.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4240 - Volunteer Management Concepts and Applications

3 hours

Analysis and review of day-to-day applications of management principles to the administrative and operating practices of contemporary volunteer programs in the public, not-for-profit, and for-profit sectors. Focuses on volunteer program management and organization, including targeting, recruiting, training, supervising, motivating, counseling, retaining and recognizing volunteer workforces.

Prerequisite(s): None.

May not be repeated if credit has been received for it at the graduate level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4250 - Community Development and Collaborative Planning

3 hours

Analyzes systems that measure community assets and resources. Explores the means of identifying and approaching potential collaborative community partners, and focuses on the development of joint proposals and/or business plans. Provides an overview of the role of volunteer managers and agency leadership of community organizations that provide resources in the development of a collaborative, capacity building community. An ecological approach is used to analyze the full range of human service agency services: health, social, educational, diagnostic, enrichment, religious, civic and legal. Students have an opportunity to do field work with agency staff on assigned community projects.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4260 - Volunteer Program Planning and Evaluation

3 hours

Seminar designed to provide students with the basic skills necessary to systematically design and plan volunteer programs, and evaluate their effectiveness. Special emphasis is given to measuring program outcomes.

Prerequisite(s): None.

May not be repeated if credit has been received for it at the graduate level

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4300 - Nonprofit Leadership Capstone

3 hours

Designed to crystallize the competencies covered in the nonprofit leadership studies major and minor program and to promote critical thinking and effective writing on those topics. Format includes exchange between students and nonprofit professionals on leadership and management issues to expand individual competencies, build leadership confidence and affirm learning acquired during program. Serves as a final preparation for internship/employment in a nonprofit agency.

Prerequisite(s): Consent of program director.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4310 - Community Service Internship

3 hours

Supervised work in a community agency that is directly related to the student's major in Nonprofit Leadership Studies degree program. Duties, learning objectives, reporting and supervisory functions are agreed on beforehand by the agency and the student.

Prerequisite(s): Meet the employer's requirements and consent of program director.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4450 - Public Policy Analysis

3 hours

Policy making, impact of public policy and factors that place specific problems on the public agenda.

Prerequisite(s): None.

Same as PSCI 4450.

## PADM 4610 - Topics in Community Service

3 hours

Study of various topics in community service. Possible topics include service-learning, volunteer management, and others.

Prerequisite(s): None.

May be repeated for credit up to 9 hours as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4900 - Special Problems

1\_3 hours

Special problems and research in economic development or regional/ sectoral analysis.

Prerequisite(s): None.

Registration permitted only upon approval of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4910 - Special Problems

1-3 hours

Special problems and research in economic development or regional/sectoral analysis.

Prerequisite(s): None.

Registration permitted only upon approval of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PADM 4920 - Cooperative Education in Economic Development or Regional/Sectoral Analysis

1-3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): At least 6 hours of credit in economic development or regional/sectoral analysis courses; student must meet employer's requirements and have consent of the institute director.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **Public Health**

## PUBH 1010 - Introduction to Public Health

3 hours

This course will introduce students to the history of public health, key public health concepts and theories, and the interdisciplinary links between public health and other fields. Students will also learn about both domestic and global public health programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PUBH 2010 - Epidemiological Concepts and Methods for Public Health

3 hours

Objective is to provide students with an understanding of the basic principles of epidemiology as related to public health issues and challenges. Enables students to learn and understand concepts frequently used in epidemiology.

Prerequisite(s): MATH 1680, MATH 1681 or comparable math course with advisor approval.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PUBH 2015 - Research Methods in Public Health

3 hours

Introduces students to research study designs, methods and data collection in public health. Students learn quantitative, qualitative, mixed methods, participatory approaches to research. The role of both clinical and observational trials in public health are examined.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PUBH 3010 - Social Justice and Behavioral Foundations in Public Health

3 hours

Exposes students to social justice challenges associated with race, ethnicity, social class, gender, migration status, and culture; all of which ultimately affect human health and create health disparities. Students are introduced to the concept of health equity and a broad overview of health disparities.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PUBH 3020 - Community Health Education

3 hours

Focuses on the study and improvement of health among population groups by promoting and protecting positive health behaviors and living conditions. Social and behavioral theories and research are covered.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## PUBH 3025 - Environmental Health

3 hours

Introductory course to environmental health for public health practice. Discusses environmental factors that affect the health of all living organisms. Covers topics such as the role of the environment in risk of disease, environmental disease agents, environmental epidemiology, environmental toxicology, environmental justice, etc.

Prerequisite(s): None.

#### PUBH 3030 - Global Public Health

3 hours

Introduces students to global health. Explains forces that make people in some countries healthier compared to people in others. Introduces students to the determinants of global public health and health disparities at global levels. Emphasizes the interplay among social, cultural, economic, political and environmental factors in creating health and disease at global level.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### PUBH 4015 - Ethics in Public Health

3 hours

Introduces students to ethical issues in public health. Students learn and appreciate principles of ethics and theories of social justice and how values, ethical approaches, and evidence should inform policies. They also understand the complex and at times controversial nature of ethics in public health policy and intervention.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### PUBH 4020 - Biostatistics

3 hours

Focuses on some statistical concepts and procedures used in public health. Important biostatistical concepts and reasoning are covered. Students learn descriptive and inferential statistics as well as some epidemiological concepts and designs.

Prerequisite(s): MATH 1680, MATH 1681 or comparable math course with advisor approval.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### PUBH 4050 - Public Health and Health Policy

3 hours

Introduces students to a range of health policy issues as they relate to public health. Students learn social, ideological, economic and political forces that affect health policy-making process. They also learn the health care systems in different settings and the key players in health policy making.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## PUBH 4060 - Public Health Management and Leadership

3 hours

Introduction to management and organizational leadership in public health. Several topics such as U.S. healthcare systems, healthcare costs for individuals and populations, basic principles of health insurance, etc. are covered. Also, leadership-related theories and concepts as well as ethics and professionalism in public health are discussed. Students study a wide variety of public health leadership.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## PUBH 4070 - Public Health Informatics

3 hours

Introduces students to ways in which information technology and communication systems can be used to foster better collaboration among healthcare providers for better patient outcomes. For public health practice, research and learning, the use of informatics helps to increase both personal effectiveness as well as the effectiveness of public health activities. Students learn about principles of informatics and examples of practice in public health, healthcare data and information, healthcare data analytics, electronic health records, health information exchange, key players in health information technology, and much more.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## PUBH 4080 - Public Health Capstone

3 hours

This is the final course that students have to take in order to complete the Bachelor of Science program in public health. It has both a classroom and a service learning component. Students are to identify a public health problem, conduct a literature review of the problem, and devise a solution to solving the problem. Students use the knowledge they have gained from all their courses in public health to critically analyze a public health problem. For the service learning components, students spend 100 hours practicing public health in the real world. This integrative experience helps students achieve cross-cutting competencies in communication, diversity and culture, leadership, professionalism, integration of theory and practice, and public health knowledge and skills.

Prerequisite(s): Public health majors only.

This course is designed to be taken in the final semester of the program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **PUBH 4900 - Special Problems**

1 to 3 hours

This individualized public health course provides students the ability to work in-depth on a public health topic or focus of interest to them. The independent study project will be presented in a standard thesis format. Students will have an oral defense of their research for a successful completion of the course.

Prerequisite(s): PUBH major status; consent of instructor.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## Reading

## EDRE 3350 - Early Language and Literacy Development

3 hours (3;0;0)

Course focuses on theoretical and practical applications of early language and literacy development (birth through grade K). With an emphasis on family and community literacy practices, this course will explore the ways in which children use and play with language as their earliest form of literacy and how teachers can capitalize on family and community literacy practices to create culturally sustaining classrooms. The course critically focuses on historical, political, and local perspectives of language and literacy development, including the Science of Teaching Reading, and how those perspectives instantiate themselves in programs for young children.

Prerequisite(s): N/A

Corequisite(s): EDEE 3330 and EDEE 3340

Must be admitted to teacher education program; Must be taken in Block A.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 3400 - Language and Literacy Practices in Communities

3 hours

Focuses on the study of literacy practices in multilingual and Communities of Color and how these practices can become resources for children and teachers in schools. Activism is emphasized as a pedagogical stance and experienced through community involvement and service-learning experiences. Students in this course will engage in community-based literacy projects.

Prerequisite(s): EDRE 3350

Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

## EDRE 3600 - Engaging Children and Youth with Literature that Represents Diversity

3 hours

Engages students with the content of children's and adolescent literature (in both narrative and expository modes) and the importance and application of children's literature in teaching across content areas. The primary focus will be on the critical examination of contemporary children's literature and the various representations of the diversity that constitutes our society.

Prerequisite(s): Admission to teacher education program; EDRE 3400

Corequisite(s): EDRE 3650 Must be taken in Block A

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 3650 - Critical Literacies, New Literacies, and Teacher Inquiry

3 hours

Focuses on the construct of critical literacy as represented in the historical and contemporary works of local and international scholars, especially scholars of Color. Students will examine the changing nature of literacies and access to literacies of power both in society and schools. Students will also engage with the principles of practice-based research in this course.

Prerequisite(s): Admission to teacher education program; EDRE 3400

Corequisite(s): EDRE 3600

Must be taken in Block A; Course serves as a centering course for Block A and requires attendance in seminars.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDRE 4450 - Reading and Writing, Birth through Grade 6

3 hours (3:1:0)

Examines theoretical and practical aspects of emergent literacy. Focuses on practices that foster motivated, strategic readers and writers. Emphasizes development of early language and pre-literacy skills, common school literacy practices, parental/social influences and affective elements related to early reading. Includes an additional hour of field experience per week.

Prerequisite(s): Admission to teacher education; HDFS 1013.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

1\_3 hours

Organized class for program needs and student interest needs.

Prerequisite(s): Consent of department.

EDRE 4810 - Studies in Education

Limited-offering basis. May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 4820 - Reading and Writing in Grades 4-8

3 hours

Examines reading and writing processes, the development of reading and writing abilities and skills, theories and models of reading, the nature of the balanced reading program, instructional strategies, planning and materials for the 4–8 literacy-learning environment.

Prerequisite(s): Admission to the teacher education program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDRE 4840 - Linguistically Diverse Learners**

3 hours

Designed to enhance the awareness and understanding of pre-service teachers regarding the linguistically diverse learner. Includes study of the language and learning needs of language minority students, affective aspects of the immigrant and refugee experiences and their impact on academic and linguistic development. Students will explore how to make practical application of course content in both the regular and the English-as-a-Second-Language classrooms.

Prerequisite(s): Admission to the teacher education program; EDRE 4450 or EDRE 4820 (for EC-6 and 4-8 English Language Arts; may be taken concurrently); LING 3060 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 4850 - Teaching the Tools and Practices of Reading Across the Curriculum EC-6

3 hours

Prepares preservice teachers in the area of reading as a subject, and reading as a tool for inquiry, and reading as a tool for activism. Covers various models of teaching reading that range from skills oriented, to process oriented, to practice oriented perspectives.

Prerequisite(s): Admission to teacher education program; EDRE 3350

Corequisite(s): EDCI 4010; EDSP 4350; EDEE 4350; EDRE 4860

Must be taken in Block B; Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 4860 - Teaching the Tools and Practices of Writing across the Curriculum EC-6

3 hours

Provides preservice teachers with instruction and practice in the teaching of writing related to purpose, audience, and content. Emphasis is given to process writing and the teaching of writing in all content areas, including the use of technology and multiple modes, in order to introduce or give students practice with the

writing conventions of a discipline and to help them gain familiarity and fluency with specific genres and formats typical of a given discipline.

Prerequisite(s): Admission to teacher education program; EDRE 3350

Corequisite(s): EDCI 4010; EDSP 4350; EDEE 4350; EDRE 4850

Must be taken in Block B; Requires field hours at an offsite location.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDRE 4870 - Cross-Curricular (Content Area) Literacy Materials and Resources

3 hours

Prepares pre-service teachers within both EC-6 and 4-8 certificate programs to plan for and implement literacy instruction across the curriculum. Selecting, evaluating and using developmentally and culturally appropriate materials and resources will be a focus as well as using content literacy strategies which support independent reading and writing in the content areas.

Prerequisite(s): Admission to the teacher education program; EDRE 4450 (for EC-6) or EDRE 4820 (for 4-8 English Language Arts) or EDCI 4060 (for 4-8 Social Studies, Science or Mathematics;7-12 Secondary ELA and the prerequisite course may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDRE 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **EDRE 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **Real Estate**

## **REAL 2100 - Principles of Real Estate**

3 hours

Survey of real estate principles, including real estate market, financial, investment and legal analysis. Home ownership and real estate investment for personal benefit are emphasized.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## REAL 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## REAL 3100 - Real Estate Agency

3 hours

Creation, termination and practice of real estate agency relationship in regards to traditional leasing and marketing of property.

Subagency, buyers agents and dual agency theory and practice are presented as required by all persons seeking a Texas Real Estate License.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## REAL 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## REAL 4000 - Real Estate Finance

3 hours

Examination of the process and methods of financing both residential and commercial properties. Primary focus is on the lender's perspective in mortgage loan analysis.

Prerequisite(s): REAL 2100 and FINA 3770 (FINA 3770 may be taken concurrently.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **REAL 4200 - Property Management**

3 hours

Examination of the process and methods of managing real property assets. Topics include property leasing, marketing, maintenance, personal supervision, value analysis, taxation and cash-flow analysis.

Prerequisite(s): REAL 2100.

### **REAL 4210 - Advanced Property Management**

3 hours

Detailed focus on advanced aspects of managing real property assets. Topics include market analysis and segmentation, advanced asset management and risk management.

Prerequisite(s): REAL 4200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### REAL 4300 - Real Estate Investments

3 hours

Analysis of real estate investments during the origination, operation and termination phases. Primary emphasis is on financial feasibility and cash-flow analysis.

Prerequisite(s): REAL 2100 and FINA 3770 (FINA 3770 may be taken concurrently.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### REAL 4400 - Real Estate Valuation

3 hours

Theory and methods of residential and income property appraisal. Topics include real estate market analysis, highest and best use analysis, and capitalization techniques. Income property valuation techniques are emphasized.

Prerequisite(s): REAL 2100 and FINA 3770, (FINA 3770 may be taken concurrently.)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## REAL 4800 - Internship

3 hours

Supervised work in a job related to student's career objective.

Prerequisite(s): Student must have 2.8 overall GPA, meet employer's requirements and have consent of department chair.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### **REAL 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## **REAL 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## Recreation, Event and Sport Management

## RESM 1950 - Professional Foundations of Recreation, Event and Sport Professions

3 hours

Introduction to the recreation, event and sport professions including philosophical and foundation perspectives, underlying concepts, and the role and advancement for the future. Orientation to the variety of services including settings, and the relationship to public, private, not-for-profit, and government organizations. Trends in services to various populations. An overview of career opportunities in the field.

Prerequisite(s): None.

 $RESM\ 1950-Must$  be taken during the first semester enrolled in the program.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# RESM 2150 - Leadership in Recreation, Event, and Sport Organizations

3 hours (2;1)

Study of the theories and practices related to leadership in the recreation, event and sport professions. Emphasis is placed on self-awareness; leadership style, techniques and effectiveness; group dynamics; problem solving; decision making; volunteer and staff leadership. Students will complete a 15-hour practical leadership lab experience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 2550 - Diversity and the Environment in the RESM Professions

3 hours

Comprehensive overview of the role of recreation, event and sport services in global cultures. Sociological, economic, psychological and environmental implications of recreation, event and sport industries are explored with diverse groups. Societal and lifestyle changes are discussed with a multicultural focus and in relation to their impact on the future of these industries. Personal lifestyles are reviewed and discussed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **RESM 2900 - Special Problems**

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **RESM 2910 - Special Problems**

1-3 hours

Individual study designed in consultation with instructor.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 3050 - Operations and Logistics in Recreation, Event, and Sport Organizations

3 hours

Fundamentals of program planning using techniques of identifying and analyzing program activity areas; content includes program development and application with a variety of population groups and representatives of the recreation, event and sport services markets.

Prerequisite(s): None.

## RESM 3450 - Diversity and Inclusion in Recreation, Event, and Sport Organizations

3 hours

Study of history, theories, philosophies and techniques of providing inclusive RESM services. Barriers to individuals are discussed in relation to strategies to address these barriers, for groups such as people with disabilities, older adults, people of color and gender differences. Field-based experiences provide a perspective of services with diverse populations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **RESM 3500 - Foundations of Therapeutic Recreation**

3 hours

In-depth study of concepts associated with the practice of therapeutic recreation, including history, philosophy, professional development and medical terminology, as well as characteristics of illness, disease and disability. Overview of the process of therapeutic recreation, including assessing, planning, implementing and evaluating.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4050 - Management of Recreation, Event, and Sport Organizations

3 hours

Management topics in recreation, event and sport industries are covered such as: strategic planning, organizational design, budgets, management theory, leadership, problem solving and communication.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### **RESM 4060 - Therapeutic Activity Intervention and Aging**

3 hours

Develops an awareness of the physiological, psychological, economic and sociological processes of aging that affect leisure-time behavior and involvement patterns. Emphasis is on age-related illness, disease, disability and therapeutic activity intervention.

Prerequisite(s): None.

Same as AGER 4060.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4070 - Staffing Perspectives in Recreation, Event and Sport Organization

3 hours

Emphasizes human resource management and the employment process, personnel policies and procedures, legal issues, supervision, performance appraisal, and technological tools in RESM. Also focuses on fostering positive relationships with executive staff, boards and commissions, the public and consumers, special interest groups, and volunteers.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4080 - Legal Aspects of Recreation, Event, and Sport Organizations

3 hours

In-depth study of legal situations which may be encountered by RESM professionals in the delivery of recreation, event and sport services. Examines the five legal areas: legal terminology and dimensions, concepts of liability, situations giving rise to litigation, case studies on program and activity areas, and insurance policies.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4100 - Internship in Recreation, Event or Sport Management

3-12 hours

Field-based experience in an approved recreation, event or sport related organization. Emphasis is placed on application of knowledge and skills to real-world job roles and responsibilities.

Prerequisite(s): RESM 4150.

May be repeated for credit up to a maximum of 12 hours. Must have department consent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4150 - Capstone Experience in Recreation, Event, and Sport Management

3 hours

Capstone course intended to provide a bridge from theory to professional practice. Integrates students' learning experiences from their core classes into their professional goals. Students explore their approaches to lifelong learning and make connections as to how a liberal arts background can facilitate currency and relevancy in professional practice and life. Determining a career direction, assuming professional roles and performing actual job responsibilities in a global and diverse world are emphasized. As students prepare for entry into the leisure, sport or wellness profession they are exposed to and practice steps in making decisions with a focus on promoting sound and ethical judgment to create a common good.

Prerequisite(s): RESM 1950, 2150, 3050, 3450, 4050, 4080, 4160, 4180, 4190, and 4250.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4160 - Assessment and Data Analytics in Recreation, Event, and Sport Organizations

3 hour

Examination and application of models and methodologies for evaluating programs in recreation, event and sport services delivery systems. Includes research methods and design, statistical analyses, and technological skills required to propose, implement and analyze recreation, special events and sport programs and services.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4180 - Planning, Designing, and Maintaining Recreation, Event, and Sport Facilities and Areas

3 hours

Includes basic elements, procedures and processes involved in planning, designing, developing and maintaining recreation, park, leisure and sport facilities and areas. Students assess and evaluate existing facilities and areas in terms of functionality, access standards and maintenance operations.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4190 - Finance and Economics in Recreation, Event, and Sport Organizations

3 hours

Fiscal administration in RESM, generating alternative sources of revenue, marketing strategies, taxes, bonds, pricing schemes, breakeven analysis, cash flow, the budget process, foundations, donations, volunteers, and target and service marketing.

Prerequisite(s): None

### RESM 4200 - Entrepreneurship in RESM Industries

3 hours

Survey of the development and management of commercial goods and services offered in the recreation, event and sport markets, with a focus on entrepreneurship.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$23.25

### RESM 4250 - Marketing in Sport and Recreation Industries

3 hours

This course will introduce students to the theories, concepts, and development of advanced principles of marketing in the sport industry with emphasis on sport companies, intercollegiate athletics, professional sport, and multisport club operations. Particularly, this course is designed to provide students with a broad overview of the important tenets of sport marketing process and will provide students with opportunities to apply this knowledge by creating and developing effective and efficient marketing plans.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4340 - Event Production in the Recreation, Event and Sport Industries

3 hours

The planning, implementation and assessment of recreation, event and sport related services. Examines the various administrative aspects of these event and sport program systems such as planning and evaluation, personnel, financial administration, risk management, and marketing.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4450 - Ticket and Sponsorship Sales in Sport Organizations

3 hours

This course will introduce students to the theories, concepts, and development of fundamental principles of sponsorship and sales in the sport industry with emphasis on all levels of programs and in all types of contexts. Particularly, this course is designed to provide students with a broad overview of the important tenets of sport sponsorship process as well as critical components of sales in various programs. It will also provide students with opportunities to apply this knowledge by creating and developing sponsorship and sales programs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **RESM 4560 - Therapeutic Recreation Program Planning**

3 hours

Study of current practices used in therapeutic recreation service design and delivery. Examines various service delivery systems, models of therapeutic recreation, and standards of practice. Emphasizes a systematic approach to individualized and comprehensive therapeutic recreation planning.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### RESM 4600 - Sport in the Global Marketplace

3 hours

Sport in the Global Marketplace examines the global forces impacting sport and recreation in the USA and around the world. It provides students with a comprehensive view of global sport management and an understanding of cross-cultural influences on sport and recreation. Emphasis will be placed on the application of research and critical thinking as related to key issues in global sport.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4760 - Facilitation Techniques in Therapeutic Recreation

3 hours

In-depth study and application of facilitation techniques for clients in therapeutic recreation programs. A review of various techniques including leisure education, transactional analysis, reality therapy, behavior modification, values clarification, assertiveness training, relaxation therapy, reality orientation, remotivation, activities therapies and therapeutic relationships.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **RESM 4800 - Seminar in RESM**

1-6 hours

Organized classes for specific program needs and student interests.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## RESM 4900 - Special Problems in Recreation, Event and Sport Management

1-6 hours

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## **RESM 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Rehabilitation

## RHAB 2000 - Recovery Seminar

1 hour

Intensive evaluation of all the issues involved in both addiction and recovery. Students who are enrolled in the Collegiate Recovery Program (CRP) are required to take this class during their first semester at UNT. Facilitates the students' knowledge of recovery principles and fosters their ability to develop leadership skills in the campus recovery community.

Prerequisite(s): Admission to Collegiate Recovery Program.

May be repeated up to a maximum of 3 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 2575 - Introduction to Drugs and Addictions

3 hours

Examines the meaning of substance use and addiction in modern society, taking an interdisciplinary view of its causes and the effects of commonly used drugs and the impact of substance use/addiction on the individual and society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 3000 - Microcounseling

3 hours

Microcounseling skills and case presentation. Students learn and practice specific interpersonal communication and microcounseling skills related to human service delivery.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 3100 - Disability and Society

3 hours

Explores the historical and current treatment of persons with disabilities. Examines the impact of social institutions, public policy, and attitude on service provision, with emphasis on the impact current legislation and research have had on the marginalization and segregation of persons with disabilities.

Prerequisite(s): None.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 3900 - Case Management in Rehabilitation

3 hours

Application of the rehabilitation model as an approach to individualized service delivery. Focuses on interviewing, assessment, individualized service planning and coordination of rehabilitation services.

Prerequisite(s): RHAB 3000, RHAB 3100.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### RHAB 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### RHAB 4100 - Rehabilitation Service Delivery Systems

3 hours

Reviews rehabilitation services within their organizational contexts. Examines service delivery models and dynamics, as well as their application through public and private resources. Includes review of program evaluation strategies, field visits and review of practicum application process.

Prerequisite(s): RHAB 3000, RHAB 3100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 4200 - Physical and Psychosocial Aspects of Disability

3 hours

Stages of adjustment to disability, impact of age at onset, impact on family. Introduction to consumer-based health perspectives. Overview of etiology, progression and treatment of major disabling conditions related to cognition, emotion and addiction and other disorders related to the nervous system. Includes the interplay of physical, psycho-social and vocational implications of these disorders.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 4300 - Introduction to Psychiatric Rehabilitation

3 hours

Overview of the field of psychiatric rehabilitation for students who are interested in providing services to individuals with severe mental illnesses (psychiatric disabilities). Review of the principles and values of psychiatric rehabilitation, emphasizing consumer empowerment and recovery. Covers a brief history of the field, current practice models and identifying important issues facing the psychiatric rehabilitation practitioner today.

Prerequisite(s): RHAB 3000, RHAB 3100, RHAB 3900, rehabilitation major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 4475 - Assessment of Alcoholism and Chemical Dependency

3 hours

Explores the tools and dynamics of assessing chemical dependency, the placement and referral of these clients and treatment planning. Students learn to systematically gather data from clients and other sources; to use psycho-social instruments that are sensitive to age, gender and culture; and to apply accepted criteria in diagnosing substance abuse disorders and making treatment recommendations.

Prerequisite(s): ADDS 4175 or equivalent.

#### RHAB 4500 - Assessment in Rehabilitation

3 hours

Principles, techniques and procedures used in the assessment process in rehabilitation, including assessments related to identification of issues of addiction, vocational assessments and situational assessments.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## **RHAB 4700 - Employment Services**

3 hours

Covers basic job development and job placement skills and activities. Includes job analysis, supported employment, transition services and labor market analysis.

Prerequisite(s): RHAB 3100 or consent of department.

Same as SOWK 4600.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 4800 - Studies in Rehabilitation

1-3 hours

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### RHAB 4810 - Studies in Rehabilitation

1-3 hours

Prerequisite(s): Consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

### RHAB 4880 - Rehabilitation Practicum

3 hours

Practical experience in a supervised setting aimed at the integration of theory and practice and refinement of skills. Requires a minimum of 200 hours within the practicum setting plus attendance at weekly integrative seminars.

Prerequisite(s): A minimum of 18 hours of rehabilitation course work, including RHAB 3000, RHAB 3100, RHAB 4200 and RHAB 3900.

May be repeated for credit. Application for approval of the practicum site occurs in the term/semester prior to enrollment in this course and is facilitated by the practicum instructor and/or student advisor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## RHAB 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## **RHAB 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## RHAB 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

#### Retail

#### **RETL 2550 - Retailing Principles**

3 hours

Detailed study of operations within and pertaining to a retail organization. Emphasis on the physical store, multi-channel management, and policy development.

Prerequisite(s): None.

### **RETL 3880 - Profit-Centered Retailing**

3 hours

Introduction to the financials that drive high-level retail decisions.

Prerequisite(s): C or higher in DRTL 2090 , HFMD 2400 , MDSE 2490 or RETL 2550 .Requires Excel proficiency. Students must submit verified Excel course completion from a third-party provider two weeks prior to enrollment. See MDR website for more information.

#### **RETL 3950 - Visual Merchandising and Promotion**

3 hours

Study of the promotional strategies in retail merchandising and fashion product development industries. Emphasis is on various promotional tools, including visual presentations, store layout, print and broadcast advertising, interactive media, sales promotion, public relations, special events and fashion shows. Experience in planning, execution, installation and evaluation of promotional strategies. Practice with equipment, materials and techniques used in presentation of merchandise.

Prerequisite(s): MDSE 3750 may be taken concurrently.

#### RETL 4080 - Retail Start-Up

3 hours

Principles and procedures used in starting and operating a retail business that include: consumer research, financial planning, logistical analysis, management and strategic planning. Examines various product and service offerings in traditional and nontraditional retail formats.

Prerequisite(s): Prerequisite(s): DRTL 2090, HFMD 2400 MDSE 2490, or RETL 2550; MDSE 3510 and MDSE 3750 with a grade of C or better.

#### RETL 4330 - Consumer Analytics and Data Visualization

3 hours

Examination of various consumer research methodologies including descriptive and predictive analysis. Application of analytical techniques in developing effective business strategies using analytics tools and data visualization programs.

Prerequisite(s): C or higher in MDSE 3750.

### **RETL 4850 - Brand Development**

3 hours

Students plan, develop and present private label apparel or home furnishings products using a multi-functional team approach. Includes application of computer software.

Prerequisite(s): C or higher in DRTL 2090, HFMD 2400, MDSE 2490, or RETL 2550.

### RETL 4880 - Omnichannel Retail Strategy

3 hours

This course will provide a framework for Omnichannel retailing, covering the wide spectrum of retail channels with an emphasis on creating seamless customer experience while developing a competitive edge for the retailer.

Prerequisite(s): C or higher in MDSE 2490, DRTL 2090, HFMD 2400, or RETL 2550; MDSE 3750, DRTL 3090.

## **Risk Management and Insurance**

#### RMIN 2500 - Personal Risk Management

3 hours

Surveys the risk management and insurance disciplines from the individual's perspective. The course incorporates an award-winning project where students create their own grade insurance product and market it to other students. Recommended for all students, regardless of major field of interest. This course also serves as a basis for more advanced RMIN courses.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## RMIN 3100 - Introduction to Risk Management and Insurance

3 hours

Examination of risk and insurance with an emphasis on the fundamental principles of risk management and the insurance mechanism, various insurance products, and an overview of insurer operations and the insurance industry. Recommended for all students, regardless of major field of interest. This course also serves as a basis for more advanced RMIN courses.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### RMIN 4200 - Life Insurance

3 hours

Economic basis, fundamental principles, types of life insurance and annuity products, pertinent legal concepts, contract provisions, taxation of life insurance and annuity products, nature and operations of companies, and financial statements of life insurers; personal and business uses of life insurance and annuity products.

Prerequisite(s): None.

# RMIN 4300 - Property/Liability Risk Management and Insurance

3 hours

The course provides a survey of commercial exposures to property and liability insurance contracts. Students will develop the ability to understand, and navigate, the content of various property and liability insurance contracts in resolving claim coverage scenarios.

Prerequisite(s): RMIN 2500 or RMIN 3100 with a grade of C or better.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 4310 - Insurance Company Operations

3 hours

This course provides an overview of both the broader operations of the insurance industry as well as the internal operations of a typical property-liability insurance company. Students will be exposed to many of the specific job functions within a typical property-liability insurance company. Students will also learn to navigate and interpret insurance company financial statements.

Prerequisite(s): RMIN 2500 or RMIN3100 with a grade of C or above.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 4400 - Employee Benefit Programs

3 hours

Reasons for employee benefit programs; group life, medical expense and disability income insurance programs; health maintenance organizations; pension programs and profit-sharing plans; tax considerations and government regulations.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 4500 - Estate Planning

3 hours

Planning process and selected techniques for efficient disposition and administration of property interests; various tools, including wills, trusts, life insurance settlement options and powers of appointment; pertinent income, estate and gift tax provisions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

### RMIN 4600 - Corporate Risk Management

3 hours

Study of financial effects of risk on businesses institutions; identification and evaluation of risk; selection of risk treatment/financing tools; implementation and review of tools used; probability analyses of data and financial evaluation of alternative tools.

Prerequisite(s): RMIN 2500 or RMIN 3100 with a grade of C or better

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 4800 - Internship

3 hours

Supervised work in a job related to student's career objective.

Prerequisite(s): RMIN 2500 or RMIN 3100 with a grade of C or above. Student must meet the employer's requirements and have consent of the department chair.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

#### RMIN 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$15.47

## RMIN 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

#### Russian

### **RUSS 1010 - Elementary Russian**

(RUSS 1411)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **RUSS 1020 - Elementary Russian**

(RUSS 1412)

3 hours (3;2)

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): RUSS 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **RUSS 2040 - Intermediate Russian**

(RUSS 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): RUSS 1020 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **RUSS 2050 - Intermediate Russian**

(RUSS 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): RUSS 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### **RUSS 2900 - Special Problems**

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **RUSS 2910 - Special Problems**

1-4 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### **RUSS 3070 - Russian Composition and Conversation**

3 hours

Focuses on writing, grammar and conversation skills through a review of Russian syntax and the use of authentic Russian readings to build vocabulary, develop writing skills, and increase conversational fluency.

Prerequisite(s): RUSS 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### RUSS 3080 - Russian Through Music and Film

3 hours

Focuses on listening and conversation skills, using authentic Russian films, music and television programs to build vocabulary, enhance listening comprehension and develop discussion skills.

Prerequisite(s): RUSS 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### RUSS 4080 - Business Russian

3 hours

Linguistic and cultural aspects of business transactions and negotiations in Russian as well as the role of social customs in professional contexts.

Prerequisite(s): 3 hours of advanced Russian or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **RUSS 4900 - Special Problems**

1-3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **RUSS 4910 - Special Problems**

1–3 hours

NONE

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## Science Project Design and Analysis

# SPDA 2010 - Applied Industry Seminar: Introduction to Decision Making

1 hour

Intro in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students work with professionals to prepare electronic portfolios, resumes and cover letters appropriate for their career mission and vision. They meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures, on-site visits, and expert panels, students learn how practicing professionals encourage and implement innovation in the public and private sectors. Restricted to students admitted to the cohort.

Prerequisite(s): None.

May be repeated for credit for a maximum of 2 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 2011 - Internship Project Management

1-6 hours

This internship is focused on Project Management. Your internship should be used to gain valuable work experience and increase your knowledge in the field of your major. It is a good idea to seek a position in a firm or industry where you have an interest in possible permanent employment, and where you will gain desired competencies.

Prerequisite(s): None.

May be repeated for credit as topics vary for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 2020 - Connections I: Collaborative Thinking

3 hours

First in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories of collaborative thinking and idea generation. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is to teach students how to develop and execute effective collaborative project management to address complex systems. Learning is supported by readings, lectures, discussion and simulation of key theories that drive said collaboration. Restricted to students admitted to the cohort.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

# SPDA 2021 - Connections I: Introduction to Collaborative Thinking Lab

1 hour

Lab associated with SPDA 2020. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. Focus is on building students' ability to develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demo session to a broader audience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

## SPDA 3010 - Applied Industry Seminar: Operational Decision Making

1 hour

Intermediate level in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures, on-site visits, expert panels, and individual interviews, students learn how practicing professionals encourage and implement innovation in the public and private sectors. Restricted to students admitted to the cohort.

Prerequisite(s): None.

May be repeated for credit for a maximum of 2 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3011 - Internship Project and Design

1-6 hours

This internship is focused on project and design. The internship should be used to gain valuable work experience and increase your knowledge in the field of your major. It is a good idea to seek a position in a firm or industry where you have an interest in possible permanent employment, and where you gain desired competencies.

Prerequisite(s): None.

May be repeated for credit for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3020 - Connections II: Professional Communication

3 hours

Second in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories of professional communication—both face-to-face and digital—in a collaborative setting. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is teaching students how to develop and execute effective collaborative communication while working in teams to address complex systems and project implementation. Learning is supported by readings, lectures, discussion and simulation of key theories that drive said communication. Restricted to students admitted to the cohort.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3021 - Connections II Professional Communications Lab

1 hour

Lab associated with SPDA 3020. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. Focus is on building students' ability to develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demonstration session to a broader audience.

Prerequisite(s): None.

#### SPDA 3120 - Connections III: Problem Analysis

3 hours

Third in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories of problem and process analysis in a collaborative setting. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is teaching students how to study and analyze processes used to achieve particular outcomes, determine points of failure, and collaborate to increase the effectiveness and efficiency of those processes. Students consider how theories of teamwork can positively impact the ability to find and implement creative solutions to problems within complex systems. Learning is supported by readings, lectures, discussion, and simulation of key theories that drive said communication. Restricted to students admitted to the cohort.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3121 - Connections III: Problem Analysis Lab

1 hour

Lab associated with SPDA 3120. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. The focus is on building students' ability to develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demonstration session to a broader audience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3220 - Connections IV: Team Creativity

3 hours

Fourth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories of creativity and team sciences in a collaborative setting. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is teaching students how to understand and implement creative thought processes, with particular emphasis on creativity arising from team collaboration. Students consider how theories of creativity can positively impact the ability to find and implement solutions to problems within complex systems. Diversity of teams, as exemplified by differences in economic background, cultural background, gender, race, religion, physical or intellectual abilities, etc., is studied as it relates to team creativity. Learning is supported by readings, lectures, discussion and simulation of key theories that drive said communication. Restricted to students admitted to the cohort.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3221 - Connections IV: Team Creativity Lab

1 hour

Lab associated with SPDA 3220. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. Focus is on building students' ability to develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demonstration session to a broader audience.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3300 - Project Design Thinking

3 hours

Students will be thinking about thinking, thinking about design, thinking about users and research, and thinking about how to turn less than ideal situations into preferred ones. Wrap up all that thinking with a dose of curiosity and skepticism and you have the essence of design thinking.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 3350 - Creative Design

3 hours

Students will put into practice the concepts and skills they learned in the previous Design Thinking course (SPDA 3300). The course will be a blend of lecture, discussion, and four stand alone projects. Each of the four projects will challenge the students to think about and practice problem identification, framing and solving.

Prerequisite(s): SPDA 3300.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

## SPDA 4010 - Applied Industry Seminar: Strategic Decision Making

1 hour

Upper level in a series of seminar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students meet and interact with professionals who describe how the topics the students are currently studying are applied in their organizations or businesses. Through guest lectures, on-site visits, expert panels and individual interviews, students learn how practicing professionals encourage and implement innovation in the public and private sectors. Restricted to students admitted to the cohort.

Prerequisite(s): SPDA 3010.

May be repeated for credit for a maximum of 2 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

## SPDA 4011 - Internship Strategic Analysis

1-6 hours

SPDA Internship in Strategic Analysis. Your internship should be used to gain valuable work experience and increase your knowledge in the field of your major. It is a good idea to seek a position in a firm or industry where you have an interest in possible permanent employment, and where you gain desired competencies.

Prerequisite(s): None.

May be repeated for credit for a maximum of 6 hours.

#### SPDA 4020 - Connections V: Global Design

3 hours

Fifth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories globalization and design in a collaborative setting. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is teaching students how to understand and implement design thinking processes within a global context. Students consider how globalization is affecting the ways that projects are implemented and managed and how design thinking can be used in a variety of cultural contexts. Diversity of project teams, as exemplified by differences in economic background, cultural background, gender, race, religion, physical or intellectual abilities, etc., is studied as it relates to solutions to complex problems within a global framework. Learning is supported by readings, lectures, discussion and simulation of key theories that drive said communication. Restricted to students admitted to the cohort.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

SPDA 4021 - Connections V: Global Design Lab

1 hour

Lab associated with SPDA 4020. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. Focus is on building students' ability to develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demonstration session to a broader audience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 4120 - Connections VI: Thinking in Leadership

3 hours

Sixth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Students integrate university core knowledge and skills with theories leadership and change management in a collaborative setting. Project-based learning forms the center of this educational experience, focused around a theme chosen by, and in collaboration with, a business or community partner. The goal is teaching students how to understand and implement leadership theories to affect thinking processes in a collaborative work environment. Students consider how leadership and ways of thinking about change affect the ways that projects are implemented and managed. Leadership approaches are studied as they relate to solving complex problems in a dynamic environment. Learning is supported by readings, lectures, discussion and simulation of key theories that drive said communication. Restricted to students admitted to the

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

### SPDA 4121 - Connections VI: Thinking in Leadership Lab

1 hour

Lab associated with SPDA 4120. Project-based learning lab focuses on real solutions to a problem. Once a problem is identified, student teams develop and demonstrate their understanding of the problem by proposing one or more solutions, often designing, constructing, and delivering a prototype. Focus is on building students' ability to

develop creative, realistic, tangible solutions to sometimes difficult problems through teamwork. Once a solution is agreed upon, the team must decide how to realize that solution with a product or service. Attention then turns to designing and developing a prototype of the product or detailed definition of the service. When completed, teams may present their solution to the class or in a demonstration session to a broader audience.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$6.67

#### SPDA 4300 - Design Thinking within Organizations

3 hours 3

Students become familiar with the ways in which Design Thinking can be used as a means to create competitive advantage in the marketplace and catalyze organizational improvement. The course is divided into three distinct but interrelated sections of learning, assimilation and doing.

Prerequisite(s): None.

## **Secondary Education**

# EDSE 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDSE 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDSE 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDSE 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **Social Work**

#### SOWK 1450 - Introduction to Social Work

(SOCW 2361)

3 hours

History and philosophy of social work in the United States; social welfare agencies in the community and social services offered; requirements for professional social work practice.

Prerequisite(s): None.

Core Category: Social and Behavioral Sciences

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## SOWK 2430 - Policies, Issues and Programs in Social Welfare

3 hours

Current social policies and issues affecting the development of social welfare services; relationships between basic societal values and social welfare services.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

#### SOWK 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

# SOWK 3000 - Foundations of Interviewing and Interpersonal Skills

3 hours

Prerequisite for admission into the social work program and serves as a foundation for direct practice courses. Explores the components of the engagement process to help students understand the importance of self-awareness and interpersonal skills. Students develop skills essential to building the professional relationship, interviewing techniques, and effective communication. Emphasizes the demonstration of skills through simulation activities in the classroom.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$18.31

## SOWK 3150 - Addictions

3 hours

Examines the relationship of substance abuse and addiction to individual functioning and health, social welfare, criminality and family life. Reviews the history of drug use, control and treatment as well as modern methods of treatment.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

### SOWK 3500 - Human Behavior and the Social Environment I

3 hours

Part of a two-course sequence focusing on Human Behavior in the Social Environment (HBSE). Examines a multidimensional, person and environment framework addressing the interactions between the varied biological, psychological, social, cultural, and spiritual factors that influence behavior in a multicultural society. Students will analyze theories of human development, functioning and well-being in the first half of the life span from conception to young adulthood.

Prerequisite(s): None.

#### SOWK 3525 - Violence in Families

3 hours

This course emphasizes increasing students' sensitivity towards violence in "families," broadly defined to include any intimate relationship. The extent, risk factors, and traumatic effects of this issue are explored by applying theoretical perspectives to facilitate understanding and to differentiate between various forms of violence. Recognition of the importance of violence as shaped by the social location of vulnerable and oppressed groups is also examined. A trauma-informed approach is used to address the consequences of survivors' experience with multiple forms of trauma often leading to health and mental health concerns. Societal responses such as prevention and treatment models for recovery are assessed. Students will critically examine their own responsibility for addressing this grave issue and strategies for change.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 3610 - Social Work Practice I

3 hours

Focuses on generalist social work practice with individuals. Presents conceptual frameworks, intervention methods and skills for practice with diverse client populations across the lifespan. Uses the strengths perspective for fostering client growth and empowerment. Emphasizes the individual in his or her social environment.

Prerequisite(s): Formal admission to the major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 3870 - Social Work Research and Practice

3 hours

Information about social scientific methods for social work practice and its evaluation, including research quantitative and qualitative methodologies and designs, data sources, analysis.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4000 - Ethics and Professionalism in Practice

3 hours

Examines the knowledge base of ethics, values and professional social work practice. Students explore the impact of these processes from multiple practice settings, dynamics with client systems, and differing social contexts. Self-reflection also is explored to help students assess their personal strengths, biases and values as they relate to professional practice. This assessment helps students become socialized and identify as emerging professionals. Students also learn to apply critical techniques using an ethical decisionmaking model to make decisions consistent with professional values and ethics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4325 - The Intersection of Trauma and Substance Use

3 hours

In this course students will explore the intersectionality of trauma and substance use disorders across the life span. This includes the examination of the characteristics of various life traumas and the social, psychological, and biological impact that may be associated with substance use. Students are expected to recognize these signs and symptoms with emphasis on the integration of learned knowledge and skills. Included in the course is examination of processes such as basic screening tools, assessment, and use of interdisciplinary interventions. The principles of empirically supported treatment modalities will be examined, as well as new and emerging research and its implications. Pertinent policy issues and the needs of diverse populations are also addressed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4400 - Social Work Practice II

3 hours

Focus on generalist social work practice with families and groups. Presents conceptual frameworks, intervention methods, and skills for practice with diverse client populations. Uses the strengths perspective for fostering client growth and empowerment. Emphasizes the interaction of the family/group and the surrounding social systems.

Prerequisite(s): SOWK 3610.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4430 - Applied Social Welfare Policy

3 hours

Exploration of the philosophies that underlie social welfare policy; in-depth analysis of social policies and exploration of ways to impact social policy development and change. Students carry out an analysis of a selected social welfare policy area.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4500 - Human Behavior and the Social Environment II

3 hours

This is part of a two-course sequence focusing on Human Behavior in the Social Environment (HBSE). Examines a multidimensional, person and environment framework addressing the interactions between the varied biological, psychological, social, cultural, and spiritual factors that influence behavior in a multicultural society. Students will analyze theories of human development, functioning and well-being in the second half of the life span from middle adulthood to older adulthood and the end of life.

Prerequisite(s): SOWK 3500

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4540 - Human Diversity for the Helping Professions

3 hours

Promotes competence in the role of helping professionals with diverse and vulnerable populations. Focuses on sociopolitical, intrapersonal and socio-cultural factors affecting the complexities of the human experience. Enhances self-awareness and explores systematic processes of oppression. Conditions for culturally relevant change strategies and advocacy in a global society are examined.

Prerequisite(s): None.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4600 - Employment Services

3 hours

Covers basic job development and job placement skills and activities. Includes job-analysis, supported employment, transition services and labor market analysis.

Prerequisite(s): RHAB 3100 or consent of department.

Same as RHAB 4700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4610 - Social Work Practice III

3 hours

Macro practice for generalist social workers. Includes work in communities, organizations and other social systems. The impact of social policy is a particular focus. Presents conceptual frameworks, intervention methods and skills for practice in diverse settings. Uses the strengths perspective for fostering community empowerment.

Prerequisite(s): SOWK 4400.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4700 - Child Welfare Practice and Services

3 hours

This course presents the history of child welfare practices, social institutions, policy development, and the social service delivery system. Utilizing a trauma-informed lens, the dynamics of child abuse and neglect, family structures, support systems and methods of intervention will be examined. Students will recognize that the impact of trauma is experienced not only by children and families in the child welfare system, but also by foster families, kinship caregivers, and social service providers. Students will examine their own beliefs and values to address issues, as well as the ethics inherent in this system. The development of assessment skills on both a macro and micro level will be expected, taking into account adverse childhood experiences and historical trauma.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4725 - Theory and Practice in Mental Health

3 hours

This course will familiarize students with essential knowledge on the vulnerabilities of individuals with mental impairments to better understand their lived experiences and potential adverse effects. This is explored through appraisal of the risk of unaddressed traumatic experiences and its implications for mental health across the life span. Students will understand symptom severity and screening processes, classification systems, bio-psycho-social aspects of assessment, and skills needed to serve individuals, families, groups and communities impacted by this illness. Culturally competent, sensitive, and evidence-based interventions will be explored that include addressing paths to recovery using trauma-informed approaches. Students will understand the challenges of stigma, lack of access, and the integration of policies to avoid trauma-inducing service approaches.

Prerequisite(s): None

May be repeated for credit for a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4870 - Social Work Integrative Seminar

3 hours

Provides a forum in which students share experiences encountered in the field, discuss issues related to practice and service delivery systems, demonstrate application of research to practice, and integrate field and classroom learning.

Prerequisite(s): Acceptance into practicum and satisfactory completion of all other social work courses, and concurrent enrollment in SOWK 4875.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4875 - Social Work Field Practicum

9 hours

Field practicum in a social agency. Includes direct and indirect service activities in a community agency or program related to previous course work. Refinement of applied skills and evaluation of social work practice in an applied setting.

Prerequisite(s): Acceptance into practicum and the satisfactory completion of all other social work courses. Taken concurrently with SOWK 4870

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4880 - Quantitative Methods of Social Research

2 hour

Role of quantitative methods in social research; application of quantitative techniques and procedures to social data, statistical inference; data processing.

Prerequisite(s): None.

Same as AGER 4880.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4890 - Topics in Social Welfare

3 hours

Selected topics in social welfare.

Prerequisite(s): SOWK 1450 or consent of chair.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

## SOWK 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### SOWK 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$18.31

#### **SOWK 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## Sociology

### **SOCI 1510 - Introduction to Sociology**

(SOCI 1301)

3 hours

Social and cultural basis for human behavior; impact of societal groups and organizations on personal identity, feelings and actions; influence on the self in relation to the family, peer groups, social classes, religion and social institutions.

Prerequisite(s): None.

Satisfies liberal arts and social sciences core social science requirements. Required of all sociology majors.

**Core Category:** Social and Behavioral Sciences Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **SOCI 1520 - Contemporary Social Problems**

(SOCI 1306)

3 hours

Conditions disruptive to society today, both those seen as problematic as a whole and those that violate the norms of special groups in society; includes population, poverty, minorities, crime, drugs, sexual deviance, mental illness, changing family patterns and violence.

Prerequisite(s): None.

Satisfies liberal arts and social sciences core social science requirements. Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 2010 - Race, Class, Gender and Ethnicity

(SOCI 2319)

3 hours

Social, cultural and economic perspectives on Native, African-, Asian- and Mexican-Americans; emphasizes work and family patterns for both women and men, racism and sexism, and contemporary movements for equality.

Prerequisite(s): None.

Same as WGST 2420.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 2050 - Sociology of Sport

3 hours

Study of social behavior in sport, with particular emphasis on its relationship to the cultural perspectives of socialization, minorities, economics, politics and current issues.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SOCI 2070 - Introduction to Race and Ethnic Relations

3 hours

Introduction to the basic theories within current and historical race and ethnicity relations. Includes examination of evidence of continuing prejudice, institutional discrimination and modern forms of racism. Other topics include assimilation, pluralism, the contact hypothesis, anti-racism, immigration, segregation and racial identity.

Prerequisite(s): None.

Required for all ethnic studies minors.

**Core Category:** Component Area Option Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3000 - Sociology of Marriage and Family

3 hours

Interpersonal dynamics of marriage and family life; role and influence of the family as both a powerful primary group and as a social institution in society; current status of families in the United States plus cross-cultural and historical patterns.

Prerequisite(s): None.

Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 3110 - Sociology of Mental Health, Mental Illness and Mental Health Care

3 hours

Effects of social stresses and social integration on the mental health of various age, sex, ethnic and other groups within society; the mental health care system and problems of access to that system among different subgroups in the population.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SOCI 3120 - Sociology of Health and Illness

3 hours

Effects of social factors, such as age, sex, race and social class, on health and illness; differential access to health care services among subgroups of the U.S. population, including Blacks, Hispanics, Indians and the elderly; strains in the organization of the health care delivery system.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3200 - Sociological Theory

3 hours

Survey of development of sociological theory; emphasizes nature and types of contemporary theory.

Prerequisite(s): SOCI 1510 or equivalent.

Required of all sociology majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3220 - Quantitative Data Collection

3 hours

Principles and procedures, sources of data, techniques of collection and analysis of quantitative data. Focus on survey research, secondary data analysis and other quantitative methods.

Prerequisite(s): SOCI 1510 and advanced (junior or senior) standing.

Required of all BS with a major in sociology majors. A grade of C or better in this course is required for graduation.

#### SOCI 3240 - Qualitative Data Collection

3 hours

Principles and procedures, sources of data, techniques of collection and analysis of qualitative data. Focus on how sociologists use face-to-face interviewing, participant observation, focus groups and other qualitative methods.

Prerequisite(s): SOCI 1510 and advanced (junior or senior) standing.

Required of all BS with a major in sociology majors. A grade of C or better in this course is required for graduation.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 3260 - Quantitative and Qualitative Research Methods

3 hours

Principles and procedures of research methods, sources of data, techniques of collection and analysis of quantitative and qualitative data. Focus on survey research, face-to-face interviews, secondary data sources, participant observation, focus groups, and other sources of data.

Prerequisite(s): SOCI 1510 and advanced (junior or senior) standing.

Required of all BA in sociology majors. A grade of C or better in this course is required for graduation.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3280 - Quantitative Data Analysis

3 hours

Role of quantitative methods in social research; application of quantitative techniques and procedures to social data, statistical inference; data processing.

Prerequisite(s): For BS majors: SOCI 3220 or equivalent; for BA majors: SOCI 3260 or equivalent.

Required of all sociology majors. Restricted to sociology majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3300 - Urban Sociology

3 hours

Rise of the city; ecological distribution and processes; suburb and metropolitan areas; trends in urbanization.

Prerequisite(s): None.

Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SOCI 3330 - Social Stratification

3 hours

Bases of social differentiation; status, power and mobility in social systems; influence of stratification on behavior; class structure in the United States.

Prerequisite(s): None.

Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3550 - Collective Behavior

3 hours

Human behavior in sporadic and unstructured situations; theories and case studies of rumors, crowds, panics, riots, disasters, fads and crazes; links among collective behavior episodes, social movements and social change.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3560 - Sociology of Disasters

3 hours

Introduction to the study of human response to disaster events, including political and economic factors influencing vulnerability. Case studies of major disasters are used to explore topics such as the impact of gender, class, ethnicity and age on vulnerability, response, and impacts; the effects of larger political and economic systems on disaster response; and the relationship of disasters to social change.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3600 - The Multiracial Family

3 hours

Academic study of the dynamics found in multiracial families. Important concepts in race/ethnicity studies such as assimilation, racial identity and pluralism. Other topics include passing, one-drop rule, interracial dating/marriage, bi- or multiracial identity and transracial adoption.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3630 - Drugs, Crime and Society

3 hours

Examines the relationship between drugs, crime and human behavior. Explores the relationship between drug abuse and crime and the policy proposals developed to control drug trafficking, drug abuse, and drug-related crime, as well as the multi-faceted aspects and effects of chemical abuse and dependency.

Prerequisite(s): None.

Same as CJUS 3630.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3700 - Sociology of Religion

3 hours

Review of the common sociological dimensions of all religions such as moral definitions, group membership and dynamics, prescribed ritual practices and definitions of the sacred. An examination of sociologists contributing to the field such as Durkheim and Weber. Includes a sociological analysis of selected major world religions, including Christianity, Judaism, Islam, Buddhism and Hinduism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 3800 - Sociology of Work

3 hours

Social behavior and performance in the workplace beginning at the emergence of the industrial revolution through current workplace arrangements (e.g., work teams). Special topics covered include discrimination in the workplace (e.g., race, age, gender), the relationship between work and family, work alienation, welfare and work, women and work, and unions. Implications for counselors, managers, union organizers, city planners and policy makers.

Prerequisite(s): None.

#### SOCI 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4160 - Developing Societies

3 hours

Changing culture and institutions — family, population, religion, work and politics — in developing nations in South and Central America, Asia, and Africa; impact of industrial nations on societies experiencing rapid urban, bureaucratic, technological and industrial growth; implications for war and peace in the world.

Prerequisite(s): None.

Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4170 - Environmental Sociology

3 hours

Examines how a community's physical environment, economic development, and social conditions (e.g., health and equity) affect one another by examining the history and development of the environmental movement in the U.S and internationally, including public policies that have hindered or assisted sustainable community development.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4210 - Intersectionality

3 hours

Explores the interrelation and co-construction of systems of inequality to engage with intersectionality as an analytical framework for examining power and class stratification. Topics include systems of race, gender, and class stratification.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4240 - Sociology of Sexuality

3 hours

Sexuality and how it is perceived, defined and experienced in the context of society. Course explores sexuality as a social and historical construction and focuses on how sexuality influences our lives as reflected in social norms, attitudes and beliefs, and through public and private policies and practices.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4250 - Gender and Society

3 hours

Analyzes gender as a major social institution which intersects with all other institutions, especially the family, work, religion, politics and education. Stresses programs to change the unequal treatment of women and men in these areas. Surveys contemporary changes and cultural variability in gender role definitions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4260 - Topics in Sociology

3 hours

Investigation, analysis and discussion of a significant, contemporary topic.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4340 - Social Psychology and Behavior in the Social Environment

3 hours

Social and cultural bases of diverse human behavior; social matrix of personality, organization and disorganization.

Prerequisite(s): None.

Advised for students planning sociology graduate work.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4350 - Community Organization

3 hours

Principles of community organization and disorganization; agencies and programs dealing with contemporary problems facing the community.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4450 - The Family in Later Life

3 hours

Later stages in the family life cycle are surveyed with emphasis on changing family composition, role transitions and support systems.

Prerequisite(s): None.

Same as AGER 4450.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4500 - Sociology of Childhood and Adolescence

3 hours

Practical focus on socialization, parenting and educational strategies in childhood and adolescence, and upon the social factors, agencies and institutions (particularly education) affecting children and adolescents in modern society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4540 - Race and Ethnic Minorities

3 hours

Conditions and distribution of race and ethnic minorities; sociopsychological and cultural factors in race and ethnic relations; pattern of relations in the United States with emphasis on the Southwest and on social services.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4550 - Sociology of Aging

3 hours

Twenty-somethings, generation Xers, baby boomers—all will be senior citizens sooner or later. Their sex, race/ethnicity, and social class will affect their experience of aging. Course explores issues related to successful aging, including what young adults should be doing now to ensure that they have happy, healthy, wealthy, and creative golden years.

Prerequisite(s): None.

Same as AGER 4550.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4580 - Immigration and Race in Contemporary U.S.

#### 3 hours

Immigration, the movement of people from their native lands to foreign lands, has become more significant today than ever. It impacts both homelands and non-native lands. In the United States, the immigrant population is growing and its impact has become more noticeable. About 13 percent of the U.S. population is foreign-born. Most of these foreign-born are from non-European countries unlike their previous counterparts who were mostly of European origin. Today, more than 80 percent of immigrants come from Asia, Latin America and the Caribbean. Examines the contemporary immigrant groups, how these immigrants incorporate into American society and ways the U.S. is transformed by their presence. In fact, the United States is no longer a black-white society, but has become a society with multiple racial and ethnic groups.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4600 - Internet and Society

#### 3 hours

Social consequences of the internet and information technology; impacts on everyday life, family life, identity, social networks, social inequalities, and politics.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4620 - Sociology of Culture

### 3 hours

What is culture? How do cultures shape individuals, nations and economies? What kinds of social processes influence cultural production and consumption (art, music, literature, movies, television)? Looks at questions of culture through a sociological lens, and at society through a cultural lens. Most readings are from cultural sociology and the sociology of culture, but anthropology, literary criticism, philosophy and cultural history are also discussed.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4630 - Deviance and Control

#### 3 hours

Introduction to the basic sociological theories regarding deviance and control. Includes how meanings around deviance are socially constructed and often experience change over time. Topics include social control, constructionism, moral panies, and moral entrepreneurs.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4750 - World Population Trends and Problems

#### 3 hours

Patterns of population growth; trends of fertility and mortality; migration; social and economic consequences of population change.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SOCI 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4951 - Honors College Capstone Thesis

#### 3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SOCI 4990 - Sociology Capstone

3 hours

Senior sociology majors use their skills and knowledge to develop data-driven senior theses that integrate core sociological concepts, theories and methods. Students are required to find an applied sociology application to their projects.

Prerequisite(s): BS majors: SOCI 3200, SOCI 3220, SOCI 3240, and SOCI 3280 (all with a grade of C or better).

BA majors: SOCI 3200, SOCI 3260, and SOCI 3280 (all with a grade of C or better).

Required of all sociology majors. Senior level sociology majors only.

## **Spanish**

### SPAN 1010 - Elementary Spanish

(SPAN 1411)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 1020 - Elementary Spanish

(SPAN 1412)

3 hours

Grammar and phonetics; reading, composition and oral-aural practice.

Prerequisite(s): SPAN 1010 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 1030 - Review of Elementary Spanish

3 hours

One-semester review of elementary Spanish. Emphasis on the enhancement of listening, reading, writing and speaking skills in Spanish.

Prerequisite(s): Two years of high school Spanish or equivalent.

May not be taken if credit has been received for SPAN 1010 or SPAN 1020.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 2040 - Intermediate Spanish

(SPAN 2311)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): Spanish 1020, Spanish 1030 or equivalent

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SPAN 2050 - Intermediate Spanish

(SPAN 2312)

3 hours

Grammar, composition, oral-aural practice and readings.

Prerequisite(s): SPAN 2040 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3001 - Advanced Conversation for Non-Native Speakers

3 hours

A variety of focused oral activities for non-native speakers of Spanish.

Prerequisite(s): Spanish 2050 or its equivalent

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3002 - Advanced Conversation for Native/Heritage Speakers

3 hours

A variety of focused oral activities for native speakers of Spanish.

Prerequisite(s): Spanish 2050 or equivalent

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3003 - Advanced Grammar

3 hours

Advanced study of Spanish grammar with emphasis on especially challenging aspects for Spanish language learners.

Prerequisite(s): Spanish 2050 or equivalent

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3004 - Advanced Composition

3 hours

Both native and non-native learners of Spanish will improve their writing abilities in the language by writing diverse types of compositions.

Prerequisite(s): Spanish 2050 or equivalent

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3010 - Writing in Spanish: Style and Technique

3 hours

Focus on writing skills and strategies through various forms of composition.

Prerequisite(s): SPAN 3001, SPAN 3002, SPAN 3003, or SPAN 2004

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SPAN 3020 - Spanish Translation

3 hours

Basic techniques of translating written texts from Spanish to English and from English to Spanish with emphasis on literary texts. Taught in Spanish and English, where appropriate.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3030 - Readings in Spanish-American Short Story

3 hours

Selected readings in Spanish-American short stories with emphasis on techniques for gaining reading fluency in Spanish.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### SPAN 3050 - Readings in Hispanic Literature

3 hours

Selected readings in modern Spanish and Spanish-American literature with emphasis on conversational and written practice.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# SPAN 3080 - Development of Spanish Language Proficiency

3 hours

Development of Spanish proficiency through reading, writing, listening, and speaking. Emphasis is given to the use of academic Spanish and literary concepts in bilingual school settings. Taught in Spanish.

Prerequisite(s): Open to students seeking certification in bilingual education.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3110 - Introduction to Hispanic Literature

3 hours

Literary terminology, analysis of text, and differences among the genres. Readings include writings from a wide variety of Hispanic authors (both traditional and contemporary, from Spain and Latin America).

Prerequisite(s): 6 hours from: SPAN 3001, SPAN 3002, SPAN 3003 and/or SPAN 3004.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3120 - Aspects of Contemporary Spanish Culture

3 hours

Study of specific aspects in Spanish culture, including historical, literary, artistic, political and economic arenas.

Prerequisite(s): 3 hours of advanced (3000- or 4000-level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 3130 - Topics in Latin American Culture

3 hours

Study topics in Latin American culture, including historical, literary, artistic, political and economic arenas.

Prerequisite(s): SPAN 2050 or equivalent.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 3140 - Mexican Civilization

3 hours

Study of the politics, social structures and traditions of the Mexican world from the pre-Columbian period until today, with a special focus on their contemporary life in order to build a foundation for a more in-depth study of the life, literature and culture of Mexico. Taught entirely in Spanish.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 3150 - Spanish Culture and Civilization

3 hours

Study of the politics, social structures and traditions of the Spanish world from the Paleolithic period until today, with a special focus on their contemporary life in order to build a foundation for a more in-depth study of their life, literature and culture. Taught entirely in Spanish.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3160 - Latin American Culture and Civilization

3 hours

Study of the politics, social structures and traditions of Latin America from the indigenous period until today, with a special focus on their contemporary life in order to build a foundation for a more in-depth study of Latin American culture. Taught entirely in Spanish.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3180 - Latin American Culture Through Film

3 hours

An introduction to Latin American culture through film which includes linguistic varieties, socio-economic and historical context and gender roles.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3510 - Spanish for Law Enforcement

3 hours

Emphasizes the Spanish language capabilities needed in the law enforcement field to communicate with the Spanish speaking population. Specialized vocabulary, scenarios, sample dialogues and information on Hispanic culture as they relate to law enforcement.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3520 - Spanish for Social Services

3 hours

Emphasis on Spanish language skills needed in the area of social services to communicate with Hispanic clients and staff. Includes specialized vocabulary, workplace scenarios, dialogues and information on Hispanic culture related to this profession.

Prerequisite(s): SPAN 2050.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3530 - Spanish for Hotel and Restaurant Management

3 hours

Emphasizes the Spanish language capabilities needed in the hotel and restaurant management fields to communicate with Hispanic customers and staff. Includes specialized vocabulary, hotel and restaurant scenarios, sample dialogues and information on Hispanic culture related to these two industries.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3540 - Spanish for Travel and Tourism

3 hours

Emphasis on Spanish language skills needed in the travel and tourism industry to communicate with Hispanic clients and staff. Includes specialized vocabulary, travel scenarios, dialogues and information on Hispanic culture related to those industries.

Prerequisite(s): SPAN 2050.

#### SPAN 3550 - Spanish for the Medical Professions I

3 hours

Emphasizes the Spanish language capabilities needed in the medical field to communicate with Hispanic patients. Includes specialized medical vocabulary, medical scenarios, sample dialogues and information on Hispanic culture related to health care.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3560 - Spanish for the Medical Professions II

3 hours

Extension of Spanish for the Medical Professions I, further building the Spanish language skills needed in the medical field to communicate with Hispanic patients and/or employees. Focuses on specialized medical vocabulary, medical scenarios, sample medical dialogues and information on Hispanic culture as it relates to health

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3570 - Spanish in the Bilingual Classroom

3 hours

Emphasizes the Spanish language skills needed in the teaching field to communicate with Spanish speaking students and their parents/guardians. Includes specialized vocabulary, scenarios, sample dialogues and information related to a variety of school-related settings.

Prerequisite(s): SPAN 2050 or equivalent.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4010 - Aspects of Contemporary Mexican Culture

3 hours

Study of specific aspects in Mexican culture, including historical, literary, artistic, political and economic arenas.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 4020 - Language, Culture and Community Service

3 hours

Study of Spanish-language variants and cultural customs of Hispanic communities. Includes a community learning experience. May be repeated once as topics vary.

Prerequisite(s): One advanced Spanish course or bilingual students, and approval of the department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# SPAN 4040 - Spanish Writing for the Mass Media Professions

3 hours

Emphasizes the writing skills needed in the mass media profession to communicate with a wider Hispanic community. Cultural differences and writing styles are addressed through authentic oral and written ads.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4061 - Spanish for Social Services II

3 hours

Spanish language skills needed in the area of social services to communicate with Hispanic clients and staff. Includes specialized vocabulary, workplace scenarios, dialogues and information on Hispanic culture(s).

Prerequisite(s): Must have completed one advanced SPAN class at the 3000/4000 level.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4080 - Business Spanish

3 hours

Oral, written and reading skills in Spanish for business purposes, as well as a cultural understanding of how business transactions are conducted in the Hispanic world.

Prerequisite(s): 3 hours of advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4095 - Spanish Idiomatic Expressions in Context

3 hours

Study of idiomatic expressions in context as an integral part of communication in Spanish.

Prerequisite(s): SPAN 3001, SPAN 3002, SPAN 3003, or SPAN 3004.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SPAN 4120 - Advanced Spanish Grammar II

3 hours

Pronunciation principles, orthography and punctuation; syntactical, lexical and stylistic aspects.

Prerequisite(s): SPAN 3001, SPAN 3002, SPAN 3003, or SPAN 3004

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4150 - Foreign Language Teaching Methods

3 hours

Study of foreign language curriculum, instruction and assessment for future and current teachers of Spanish. Designed for students in a teacher preparation program.

Prerequisite(s): 6 hours of advanced Spanish (3000 or 4000 level), or consent of department.

Same as FREN 4150 and GERM 4150.

#### SPAN 4210 - Spanish Phonetics and Pronunciation

3 hours

Study of the Spanish sound system and how it corresponds to Spanish orthography and pronunciation.

Prerequisite(s): 3 hours from advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SPAN 4242 - Latin American Fantastic Literature and Science Fiction

3 hours

Chronological study of fantastic literature and science fiction genres in Latin America from the nineteenth and twentieth centuries.

Prerequisite(s): 6 hours of upper level Spanish.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# SPAN 4250 - Acquisition of Spanish as a Second Language

3 hours

Overview of prominent linguistic principles in the acquisition of Spanish as a second language. Application of theory to language acquisition, pragmatics, and teaching/learning Spanish grammar such as verbal morphology system, indicative/subjunctive mood system and pronominal system in Spanish.

Prerequisite(s): 3 hours from advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4260 - Linguistic Structures of Spanish

3 hours

Introduction to core areas of linguistic study of Spanish (phonetics, phonology, morphology, syntax, semantics) and consideration of subfields (language variation and change).

Prerequisite(s): 3 hours from advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 4310 - Survey of Spanish Literature

3 hours

Spanish literature to 1700. Readings, lectures, discussions and term projects.

Prerequisite(s): SPAN 3110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4320 - Survey of Spanish Literature

3 hours

Spanish literature since 1700. Readings, lectures, discussions and term projects.

Prerequisite(s): SPAN 3110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4330 - Post-Franco Spanish Culture

3 hours

Study of the culture and lifestyle of the Spanish people since the death of Franco and the country's return to democracy. Readings, discussions and audiovisual materials.

Prerequisite(s): Any SPAN 3000- or 4000- level course or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4360 - Survey of Spanish-American Literature

3 hours

Spanish-American literature from the colonial period to 1888. Readings, lectures, discussions and term projects.

Prerequisite(s): SPAN 3110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4370 - Survey of Spanish-American Literature

3 hours

Spanish-American literature since 1888. Readings, lectures, discussions and term projects.

Prerequisite(s): SPAN 3110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4385 - Hispanic Culture in the United States

3 hours

The Hispanic historical and cultural presence in the United States through a multidisciplinary approach (film, short fiction, theater, music) including notions of identity and presence within literary and cultural canons focusing on the North/South relations of the American continent. Primary readings, class discussions, exams and student projects are in Spanish.

Prerequisite(s): 3 hours from advanced (3000- or 4000- level) Spanish or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4430 - Sexualities in Contemporary Spanish Cinema

3 hours

Study of sexualities in contemporary Spanish cinema in the light of the socio-political and historical context of Spain, carried out in relation to topics such as gender, identity, class, politics, feminism.

Prerequisite(s): Any SPAN 3000- or 4000- level course or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# SPAN 4450 - Contemporary Spanish Culture Through Cinema

3 hours

Study of different cultural topics relevant in contemporary Spain. Topics include women in contemporary Spanish cinema, religion and Spain in contemporary Spanish cinema, globalization, Spain and Spanish cinema.

Prerequisite(s): Any SPAN 3000- or 3000-level course or consent of department.

May be repeated for credit as topics vary for a maximum of 9 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 4451 - Women in Contemporary Spanish Cinema

3 hours

Overview of Spanish women in contemporary Spain, their roles in Spanish society and culture, their contributions, their challenges, their cultural productions as depicted in Contemporary Spanish Cinema.

Prerequisite(s): Any SPAN 3000 or 4000 level course or consent of department.

#### SPAN 4452 - Almodovar and 21st Century Spain

3 hours

A panorama of Almodóvar's cinema of the 21st century and how it relates to 21st Century Spanish culture and relevance to socio-cultural issues from this century in Spain.

Prerequisite(s): Any SPAN 3000 or 4000 level course or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4453 - The Movida Cinema

3 hours

Overview of the socio-cultural period of the Movida in 1980's Spain and how this period of Spanish culture was crucial to transitioning from a dictatorship to a democracy.

Prerequisite(s): Any SPAN 3000 or 4000 level course or consent of department

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# SPAN 4510 - Representations of the Hero in Spanish Literature and Culture

3 hours

A study of the concept of hero and a chronological study of its most significant representations in Spanish Literature from medieval times to contemporary literature studying its evolution and constant adaptation to the historic and cultural frameworks that produced them

Prerequisite(s): Any SPAN 3000 or SPAN 4000 level course or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4775 - Latin American Philosophy

3 hours

A chronological study of Latin American philosophical thought from the sixteenth to the twentieth century focusing on themes related to national identity, history and culture. May not be counted towards the BA or Minor in Spanish. Same as PHIL 4775

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## SPAN 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4910 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### SPAN 4920 - Cooperative Education in Spanish

1–12 hours

Supervised work in a job directly related to the student's major, professional field of study, or career objective.

Prerequisite(s): 12 advanced credit hours in Spanish and declared major; student must meet the employer's requirements and have consent of the department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### SPAN 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **Spanish Studies**

#### SPST 1000 - Spanish for Getting Along

3 hours

Taught in English for students with no experience speaking Spanish. Focuses on conversation and attaining basic fluency. Cannot be used as credit for Spanish majors and minors.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## Special Education

#### EDSP 2010 - Dis/Ability, Community and Culture

3 hours

Critically examines the understanding of dis/ability in society through an intersectional lens between disability and culture, race, class, gender, and sexuality. Also provides knowledge about the diverse communities within dis/ability culture.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDSP 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDSP 3210 - Educational Aspects of Exceptional Learners

3 hours

Overview of the unique physical, cognitive and behavioral needs of exceptional learners. The teacher's role in identification and referral procedures and implementation of effective educational practices as required by federal and state law are examined.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

## EDSP 3240 - Family Collaboration for Exceptional Learners

3 hours (2;1)

Study of collaboration models and strategies used to work with families of students with exceptionalities. Focus on changing definition of family, community resources, advocacy, public policies and other factors that may impact students and their families. Attention also given to working effectively with paraprofessionals. Presented in blended format including face-to-face, online and 15 hours of field work. For students seeking core subjects EC–6 with special education EC–12 certification as Interdisciplinary Studies majors in the College of Education.

Prerequisite(s): None.

15 hours per term/semester of field-work is arranged.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDSP 3300 - Special Education Practicum I

3 hours (1;6)

Practical experience in field sites (90 hours: 70 hours field experience and 20 hours classroom). Cognitive, affective and psychomotor objectives for observing behaviors, assisting in planning for instruction and participating in diagnostic processes. Professional development is emphasized.

Prerequisite(s): 60 hours of undergraduate credit, overall GPA 2.75, all sections of THEA must be passed.

# EDSP 3410 - Developmental Disabilities and Autism: Identification and Intervention

#### 3 hours

Provides students with a background in the characteristics, causes, prevalence and identification of individuals with developmental disabilities and autism. Maximum consideration is given to classification categories as defined by the federal regulations, integration of assessment and educational planning, and specific interventions for facilitating the education and training for this target population.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# EDSP 3420 - Behavioral Disorders: Characteristics, Identification and Intervention

#### 3 hours

An examination is made of the typical characteristics associated with severe behavior problems and procedures for identification. Emphasis is on the development of appropriate intervention programs.

Prerequisite(s): EDSP 3210 and EDSP 3300 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDSP 4110 - Student Teaching in Special Education

#### 3 hours

Teaching under supervision. See "Student Teaching Program" under College of Education section in the Undergraduate Catalog for details.

Prerequisite(s): Admission to teacher education; all program course work with the exception of (a) student teaching and (b) EDEE 4890. Required for those seeking core subjects EC–6 with special education EC–12 certification. See Student Teaching Program for details. Pass/no pass only.

Pass/no pass only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# EDSP 4320 - Educational Assessment and Evaluation of Exceptional Learners

#### 3 hours

Examines a variety of assessment and evaluation strategies that are appropriate for special and general education settings. Knowledge of basic testing procedures and terminology as related to the exceptional learner. Interpretation and utilization of test data in developing individual education plans. Introduction to curriculum-based assessment. Field experiences include administration of academic and teacher-made assessments.

Prerequisite(s): EDSP 3210 or equivalent, EDSP 3240 and admission to teacher education.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### EDSP 4330 - Advanced Educational Strategies for Exceptional Learners

#### 3 hours

Advanced educational strategies and interventions that promote academic performance of exceptional learners across a variety of settings and situations. Includes an emphasis on instructional use of computers and technology in the classroom.

Prerequisite(s): EDSP 3210 or equivalent, EDSP 3240 and admission to teacher education.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# **EDSP 4340 - Classroom and Behavioral Management Strategies for Exceptional Learners**

#### 3 hours

Approaches to behavioral management of exceptional learners across a variety of educational settings. Implementation of individualized techniques including applied behavioral analysis, as well as larger-group strategies, to foster positive behavioral, social and emotional growth. Special attention to the development of behavioral intervention plans and positive behavioral supports for students with challenging behaviors.

Prerequisite(s): EDSP 3210 or equivalent and EDSP 3240 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

# EDSP 4350 - Strategies to Support Diverse Learners in General Education

#### 3 hours

Examination of the roles of various professionals in the successful inclusion of students with disabilities in the general education classroom. Focus on consultation models, practices and principles with an emphasis on collaboration, cooperative learning and inclusion. Provides an overview of assessment techniques applicable for all learners in the general education classroom.

Prerequisite(s): Admission to teacher education; all program course work with the exception of (a) student teaching and (b) EDEE 4890. Required for those seeking core subjects EC-6 certification, only. See Student Teaching Program for details.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDSP 4360 - Transition Education and Services for Exceptional Learners

#### 3 hours

Transition education and services for individuals with disabilities across the life span with emphasis on the post-secondary years. Examines the theory and practice of transition planning from school to community living, post-secondary education and employment. Legislative history and practical applications of skills such as transition assessment, job development and job placement are emphasized. Presented in blended format including face-to-face and online instruction.

Prerequisite(s): EDSP 3210 or equivalent, EDSP 3240, EDSP 4340 and admission to teacher education.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### EDSP 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

#### **EDSP 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

#### **EDSP 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$23.25

### Studio Art

#### **ASTU 2045 - Digital Fabrication for Non Majors**

3 hours (0;6)

Digital fabrication (the use of computer-controlled machines to create physical objects) is now easily accessible to individuals and is a rapidly growing field with tremendous entrepreneurial opportunities. Designed for non-art majors, primarily to instruct students in the processes of digital fabrication. Students are instructed on the basics of 2D and 3D object making and participate in group analysis of completed objects. Utilizes the traditional methods of the project-based studio course and adapts them to the online learning environment. By thoroughly documenting each project and uploading those images, students receive constructive criticism, both from the instructor as well as from their peer group.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 2101 - Beginning Ceramics: Handbuilding**

(ARTS 2346)

3 hours (0;6)

Introduction to hand building techniques to fabricate functional ceramics forms and ceramic sculpture.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 2102 - Beginning Ceramics: Throwing**

(ARTS 2347)

3 hours (0;6)

Introduction to functional and non-functional wheel-throwing and glazing techniques and practices.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 2201 - Beginning Drawing and Painting: Painting I

(ARTS 2316)

3 hours

Introduction to painting practices and issues, including the study of methods and materials (oil, acrylic, tools, building of supports and surfaces), composition, value, color, and pictorial space centered on observation. Focuses on the capacities of painting and introduces students to technical and historical issues central to painting.

Prerequisite(s): ART 1600; ART 1700 or ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 2202 - Beginning Drawing and Painting: Painting II

(ARTS 2317)

3 hours (0;6)

Development and expression of a working knowledge of various painting techniques and styles (representation, abstraction, conceptual), through the exploration of compositional dynamics and methods, materials and theories. Study of modern and contemporary issues in painting.

Prerequisite(s): ASTU 2201.

#### **ASTU 2300 - Introduction to Printmaking Techniques**

3 hours (0:6)

Survey of traditional and non-traditional printmaking techniques, introducing students to a variety of basic printmaking processes including the fundamentals of paper, inks, presses, printing and editing.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900.

For art education majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 2401 - Beginning Metalsmithing**

3 hours (0;6)

Design, construction and forming using basic techniques with an emphasis on sculptural forms and containers.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 2402 - Beginning Jewelry**

(ARTS 2341)

3 hours (0;6)

Design, construction and forming using basic techniques with an emphasis on personal adornment.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 2501 - Beginning Photography: Photo I

(ARTS 2356)

3 hours (0;6)

Beginning photographic materials, techniques, software and digital cameras. Assignments, lectures, demonstrations and critiques expose students to the necessary tools for creative image making and expression using photography. Students will gain technical competencies with DSLR cameras, Adobe Lightroom, and Inkjet printing.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 2502 - Beginning Photography: Photo II

ARTS 2357

3 hours (0;6)

Continued development with photographic materials, techniques, software and digital cameras. Assignments, lectures, demonstrations and critiques advance student understanding of the necessary tools for creative image making and expression using photography. Students will advance technical competencies with DSLR cameras, Adobe Lightroom, and Inkjet printing.

Prerequisite(s): ASTU 2501.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 2601 - Beginning Printmaking: Relief

(ARTS 2333)

3 hours (0;6)

Introduction to concepts and techniques of relief printmaking, including carving and printing wood, linoleum, and/or plastic relief matrixes. Black and white and multiple-color printing will be explored along with limited edition and monoprinting.

Prerequisite(s): ART 1600 and one of the following: ART 1700 or ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 2602 - Beginning Printmaking: Screen Printing

3 hours (0:6)

Introduction to concepts and techniques of screen printmaking including manual and photomechanical stencil-making. Black and white and multiple-color printing will be explored along with limited edition and mono-printing.

Prerequisite(s): ART 1600 and one of the following: ART 1700 or ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 2701 - Beginning New Media: Time and Movement

3 hours (0;6)

Introduction to the fundamentals of ordering information in time through new media platforms and outputs. Sequences of still images, interactivity, modes of filming and editing sound and moving images.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 2702 - Beginning New Media: Analog and Avant-Garde

3 hours

Introduction to analog, avant-garde and experimental form, style, and content in new media.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 2801 - Beginning Sculpture: Traditional Methods

(ARTS 2326)

3 hours (0:6)

An introduction to the concepts and processes involved in the production of sculptural objects, with an emphasis on the tools, materials and techniques used in basic woodworking, metal fabrication, mold-making and casting techniques

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 2802 - Beginning Sculpture: Digital Methods

3 hours (0;6)

An introduction to the concepts and processes involved in the production of sculptural objects, with an emphasis on basic digital fabrication tools and techniques such as 3D modeling, scanning and printing, CNC routing and CNC plasma cutting.

Prerequisite(s): 2 of the following: ART 1600, ART 1700, ART 1800.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 3000 - Interdisciplinary: Rotating Topics**

3 hours (0;6)

Topics vary each semester. Interdisciplinary and inter-media approaches to art making. Courses offer integrated, multidimensional approach to art-making. Students will be introduced to historic and contemporary references in arts, criticism and curation.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and five (5) of the following courses: ASTU 2101, ASTU 2102, ASTU 2201, ASTU 2202, ASTU 2401, ASTU 2402, ASTU 2701, ASTU 2601, ASTU 2602, ASTU 2501, ASTU 2502, ASTU 2801, ASTU 2802.

### **ASTU 3010 - Exploring Metalsmithing and Jewelry**

3 hours (0:6)

Designed for non-art majors; primarily intended to instruct students in the fundamental processes and materials used in the practices of contemporary jewelry and metalsmithing. Students are instructed on the basic working properties of commonly used non-ferrous metals. They learn to utilize techniques such as piercing, soldering, texturing, small-scale casting and forming to create wearable objects or hollowware as well as participate in group analysis of completed objects.

Prerequisite(s): Non CVAD majors only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 3030 - Computer Applications in the Visual Arts**

3 hours (2.4)

Visual, conceptual and practical use of computers in art and design. Problem solving using computer graphics systems to generate images.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900, or consent of instructor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 3101 - Intermediate Ceramics: Rotating Topics

3 hours (0:6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of ceramics.

Prerequisite(s): ASTU 2101 and ASTU 2102.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3102 - Intermediate Ceramics: Surface and Ornamentation

3 hours (0;6)

Study and practice of ceramic surfaces though the implementation of decorative surface techniques, glaze application, and firing methods. Clay and glaze mixing, firing theory and practice, and conceptual ideas will be an employed in this class.

Prerequisite(s): ASTU 2101 and ASTU 2102.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3103 - Intermediate Ceramics: Form, Function and the Body

3 hours (0;6)

Technical and conceptual understanding of functional object design, utilitarian pottery, and their relation to the body. Clay and glaze mixing, firing theory and practice, and conceptual ideas will be an employed in this class.

Prerequisite(s): ASTU 2101 and ASTU 2102.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 3104 - Intermediate Ceramics: Molds and Multiples**

3 hours (0;6)

Study and practice of the creation of molds for slip casting and press molding and the practical and conceptual approach to the ceramic multiple. Clay and glaze mixing, firing theory and practice, and conceptual ideas will be an employed in this class.

Prerequisite(s): ASTU 2101 and ASTU 2102.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 3105 - Intermediate Ceramics: Material Studies**

3 hours (0:6)

Study and practice of ceramics materials, clay body and glaze formulation/mixing, kiln building practices, and firing techniques.

Prerequisite(s): ASTU 2101 and ASTU 2102.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3150 - Intermediate Metalsmithing and Jewelry: Color and Surface

3 hours (2:4)

Design in metal using intermediate processes with an emphasis on color and surface effects.

Prerequisite(s): ASTU 2150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3155 - Intermediate Metalsmithing and Jewelry: Plasticity

3 hours (2;4)

Design in metal using intermediate processes with an emphasis on the plastic deformation of metal.

Prerequisite(s): ASTU 2150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ASTU 3160 - Intermediate Metalsmithing and Jewelry: Adornment

3 hours (0;6)

Design in metal using intermediate processes with emphasis on jewelry.

Prerequisite(s): ASTU 2150 or consent of instructor. Mid-point review administered during the term/semester.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3165 - Intermediate Metalsmithing and Jewelry: Technology

3 hours (2;4)

Design in metal using intermediate processes with an emphasis on industrial technologies.

Prerequisite(s): ASTU 2150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ASTU 3170 - Intermediate Metalsmithing and Jewelry: Mechanisms and Multiples

3 hours (2;4)

Design in metal using intermediate processes with an emphasis on cold connections and production multiples.

Prerequisite(s): ASTU 2150.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 3200 - Intermediate Figure Drawing

3 hours (2;4)

Human figure in compositions using drawing media including drawing from the nude figure.

Prerequisite(s): ASTU 2200.

#### ASTU 3201 - Intermediate Drawing and Painting: Rotating Topics

3 hours (0;6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the disciplines of drawing and/or painting.

Prerequisite(s): ASTU 2202.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3202 - Intermediate Drawing and Painting: Figure Drawing I

3 hours (0;6)

Visual observation of the nude figure and interpretation through various graphic techniques.

Prerequisite(s): ART 1600 and either ART 1700 or ART 1800.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3203 - Intermediate Drawing and Painting: Figure Drawing II

3 hours (0;6)

Investigations in both historical and contemporary use of the figure from academic negotiations of the figure (anatomy and nude models), conceptual and narrative territories and the use of expanded drawing media.

Prerequisite(s): ASTU 3202.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3204 - Intermediate Drawing and Painting: Figure **Painting**

3 hours (0:6)

Painting the nude human figure and exploration of the figure as subject and narrative device. Introduction of formal issues and conceptual strategies related to painting the figure.

Prerequisite(s): ASTU 2202 and ASTU 3202 and ASTU 3203.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 3205 - Intermediate Drawing and Painting: Experimental Approaches**

3 hours (0;6)

Experimental approaches to drawing and painting through stretching, subverting and challenging traditional boundaries. The course is designed to ask questions about what drawing and painting is, explore the conventions of the disciplines and experiment with unfamiliar/unexpected materials, methods, theories and presentations. The focus is on critical exploration of alternative and contemporary means of creating images and enlarge understandings of the disciplines.

Prerequisite(s): ASTU 2201 and ASTU 2202.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3206 - Intermediate Drawing and Painting: Themes, Variations and Series

Exploration of the strategy of the series in drawing and painting to deconstruct, transform, distill, unpack, or otherwise evolve an idea.

Prerequisite(s): ASTU 2201 and ASTU 2202.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3401 - Intermediate Metalsmithing and Jewelry: **Rotating Topics**

3 hours (0;6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of metalsmithing and jewelry.

Prerequisite(s): ASTU 2401 and ASTU 2402.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3402 - Intermediate Metalsmithing and Jewelry: **Color and Surface**

Design in metals using intermediate processes with an emphasis on color and surface effects.

Prerequisite(s): ASTU 2401 and ASTU 2402.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3403 - Intermediate Metalsmithing and Jewelry: **Plasticity**

3 hours (0;6)

Design in metal using intermediate processes with an emphasis on the plastic deformation of metal.

Prerequisite(s): ASTU 2401 and ASTU 2402.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3404 - Intermediate Metalsmithing and Jewelry: Adornment

3 hours (0:6)

Design in metal using intermediate processes with an emphasis on jewelry.

Prerequisite(s): ASTU 2401 and ASTU 2402.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

#### ASTU 3405 - Intermediate Metalsmithing and Jewelry: Technology

3 hours (0;6)

Design in metal using intermediate processes with an emphasis on industrial technologies.

Prerequisite(s): ASTU 2401 and ASTU 2402.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$43.76

## ASTU 3501 - Intermediate Photography: Rotating Topics

3 hours (0:6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of photography.

Prerequisite(s): ASTU 2502 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 3502 - Intermediate Photography: Darkroom **Photography**

3 hours (0;6)

Film-based photography, exposure, and darkroom printing. Through assignments, lectures, demonstrations and critiques students gain competency in analog photography, archival darkroom printing and film-based photography in relationship to contemporary art and photographic practices.

Prerequisite(s): ASTU 2502.

#### ASTU 3503 - Intermediate Photography: Digital Imaging

3 hours (0:6)

Digital techniques and software in photography. Through assignments, lectures, demonstrations and critiques students gain competencies in digital photography and image manipulation.

Prerequisite(s): ASTU 2502.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ASTU 3504 - Intermediate Photography: Photography, Sound and the Moving Image

3 hours (0:6)

Examination and practice with the intersection between still and moving images and explores the possibilities beyond conventional modes of photographic practice. Through assignments, lectures, demonstrations and critiques students gain competencies in video capture using a DSLR camera, audio capture, and video and audio editing software. Assignments and instruction will cover a wide range of approaches to video including narrative, non-narrative and installation.

Prerequisite(s): ASTU 2502.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3505 - Intermediate Photography: Alternative Processes

3 hours (0;6)

Alternate processes in photography with emphasis on hand applied, non-silver photographic emulsions. Through assignments, lectures, demonstrations and critiques students gain competencies in digital negative creation, creating hand coated photographic papers and printing full tonal range photography images using historic printing processes.

Prerequisite(s): ASTU 2502.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ASTU 3506 - Intermediate Photography: Lighting Techniques

3 hours (0;6)

Photographic lighting procedures and studio techniques. Through assignments, lectures, demonstrations and critiques students gain competencies in professional photographic studio lighting, studio portraiture, product photography and tethered image capture. Completion of a portfolio of images is required.

Prerequisite(s): ASTU 2502.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 3507 - Intermediate Photography: Field Photography

3 hours (0;6)

Students use photography to examine and build an understanding of place. Students use photography to interpret, analyze, and criticize specific locations. Students consider the efficacy of art making in projecting solutions, taking activist stances and creating a new understanding of their surroundings.

Prerequisite(s): ASTU 2501 and ASTU 2502 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3601 - Intermediate Printmaking: Rotating Topics

3 hours (0:6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of printmaking.

Prerequisite(s): ASTU 2601 and ASTU 2602.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3602 - Intermediate Printmaking: Intaglio

3 hours (0:6)

Concepts and techniques of Intaglio printmaking. Coursework may include making and printing from drypoint plates, acrylic ground etching plates, and/or photopolymer plates. Black and white and multiple-color printing will be explored along with limited edition and monoprinting.

Prerequisite(s): ASTU 2601 and ASTU 2602.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3603 - Intermediate Printmaking: Lithography

3 hours (0;6)

Concepts and techniques of lithographic printmaking. Coursework may include making and printing from stones, polymer plates, ball grained plates, and/or photopositive plates and/or polyester plates. Black and white and multiple-color printing will be explored along with limited edition and mono-printing

Prerequisite(s): ASTU 2601 and ASTU 2602.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3604 - Intermediate Printmaking: Monotype

3 hours (0:6)

Concepts and techniques of monotype printmaking. Coursework will include making unique print artworks from instable matrixes using additive, subtractive, ghost, trace, and stencil methods for imaging along with multiple impression registration printing.

Prerequisite(s): ASTU 2601 and ASTU 2602.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3701 - Intermediate New Media: Rotating Topics

3 hours (0;6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of new media.

Prerequisite(s): ASTU 2701 and ASTU 2702.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3702 - Intermediate New Media: Net Art

3 hours (2;4)

Seminar/studio course focusing on the art and criticism of the internet as an artistic tool. Key concepts include: transmission, narration/narrative, presence, interactivity, identity, instrument, gaming, digital vs. analog, medium and mediation.

Prerequisite(s): ASTU 2701 and ASTU 2702.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3703 - Intermediate New Media: Creative Coding

3 hours (0;3)

Introduction to the fundamentals of coding and computer science as a creative medium.

Prerequisite(s): ASTU 2701 and ASTU 2702.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

# ASTU 3704 - Intermediate New Media: Performance and Electronic Media

3 hours (0;6)

Theory and practice of integrating electronic and interactive media in live performance

Prerequisite(s): ASTU 2701 and ASTU 2702.

# ASTU 3705 - Intermediate New Media: Augmented and Virtual Reality Art

3 hours (0;6)

Exploration of the artistic and critical potential of augmented and virtual reality content through art research and practice.

Prerequisite(s): ASTU 2701 and ASTU 2702.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 3801 - Intermediate Sculpture: Rotating Topics**

ARTS 2326

3 hours (0;6)

Topics vary each semester. This course provides students with opportunities to engage in a range of methods, materials, sources, concepts and dialogue related to the discipline of sculpture.

Prerequisite(s): ASTU 2801 and ASTU 2802.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

## ASTU 3802 - Intermediate Sculpture: Multiples and Monuments

3 hours (0;6)

This course builds upon the fundamental principles of mold-making and casting learned in Beginning Sculpture: Traditional Methods, while exploring more complex concepts, materials, and techniques. (both hot and cold casting)

Prerequisite(s): ASTU 2801 and ASTU 2802.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3803 - Intermediate Sculpture: Installation Art

3 hours (0:6)

An investigation of form and space and the ability for art to transform environmental and architectural sites.

Prerequisite(s): ASTU 2801 and ASTU 2802.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 3804 - Intermediate Sculpture: Art in Public

3 hours (0:6)

An exploration of the many ways that art can exist in public spaces, from temporary interventions to formal proposal-based projects.

Prerequisite(s): ASTU 2801 and ASTU 2802.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 4000 - Topics in Studio Practice**

3 hours (0;6)

Variable topics course designed to explore concepts and processes in art making that go beyond the curricular parameters of traditional studio disciplines.

Prerequisite(s): Junior standing or consent of instructor.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 4010 - Professional Practices for the Studio Artist**

3 hours

Study of theoretical and practical aspects of succeeding as a practicing artist outside the academy. Survey of the protocols and common practices expected of the artist as a productive member of the business community wherein fine art is the commodity.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and 5 out of the following: ASTU 2101, ASTU 2102, ASTU 2201, ASTU 2202, ASTU 2401, ASTU 2402, ASTU 2501, ASTU 2502, ASTU

2601, ASTU 2602, ASTU 2701, ASTU 2702, ASTU 2801, ASTU 2802.

This class should be taken after admission into a concentration.

For all students seeking a major in the College of Visual Arts and Design, a grade of C or above must be earned in every art-based course required in the College of Visual Arts and Design (completed in residence or transferred to UNT) to be considered for credit toward a CVAD degree. A grade of D or below will not satisfy any art-based course requirements, electives or prerequisites.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 4100 - Senior Ceramics Studio**

3 hours (0;6)

Advanced studies in ceramics with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in ceramics and other arts, criticism, and expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900 and three of the following courses: ASTU 3101, ASTU 3102, ASTU 3103, ASTU 3104, ASTU 3105. Must have passed ceramics entry review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### ASTU 4200 - Senior Drawing and Painting Studio

3 hours (0;6)

Advanced studies in drawing and painting with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in drawing and painting and other arts, criticism, expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3201, ASTU 3202, ASTU 3203, ASTU 3204, ASTU 3205, ASTU 3206. Must have passed drawing and painting review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 4400 - Senior Metalsmithing and Jewelry Studio

3 hours (0;6)

Advanced studies in metalsmithing and jewelry with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in metalsmithing and jewelry and other arts, criticism and expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3401, ASTU 3402, ASTU 3403, ASTU 3404, ASTU 3405. Must have passed metals and jewelry entry review

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

#### **ASTU 4500 - Senior Photography Studio**

3 hours (0;6)

Advanced studies in photography with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in photography and other arts, criticism, expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3501, ASTU 3502, ASTU 3503, ASTU 3504, ASTU 3505, ASTU 3506. Must have passed photography entry review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

#### **ASTU 4600 - Senior Printmaking Studio**

3 hours (0:6

Advanced studies in printmaking with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in printmaking and other arts, criticism, expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3601, ASTU 3602, ASTU 3603, ASTU 3604. Must have passed printmaking entry review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### ASTU 4700 - Senior New Media Studio

3 hours (0;6)

Advanced studies in new media with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3701, ASTU 3702, ASTU 3703, ASTU 3704, ASTU 3705. Must have passed new media entry review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **ASTU 4800 - Senior Sculpture Studio**

3 hours (0;6)

Advanced studies in sculpture with an emphasis on in-depth individually generated projects. Students will focus on professional development and portfolio preparation. Students will work on developing technical skills, materials and processes appropriate to their concepts as well as aesthetic sensibilities including the use of historic and contemporary references in sculpture and other arts, criticism, expression of personal concepts in works.

Prerequisite(s): ART 1600, ART 1700, ART 1800, ART 1900. Three of the following courses: ASTU 3801, ASTU 3802, ASTU 3803, ASTU 3804. Must have passed sculpture entry review.

May be repeated for credit for a maximum of 12 hours. The required 6 credits (2 courses) must be taken over two semesters.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$43.76

### **Teach North Texas**

# TNTX 1100 - Secondary Teacher Preparation I: Inquiry Approaches to Teaching

1 hour (1;0;1)

Introduction to mathematics, computer sciences and science teaching as a career. Discussions include standards-based lesson design and various teaching and behavior management strategies. Fieldwork consists of planning and teaching three inquiry-based lessons to students in grades 3–5 in local elementary schools.

Prerequisite(s): Admission to the Teach North Texas Program; see the Teach North Texas advisor for details.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# TNTX 1200 - Secondary Teacher Education Preparation II: Inquiry-Based Lesson Design

2 hours (2:0:1)

Topics may include routes to teacher certification in mathematics, computer sciences and science teaching; various teaching methods designed to meet instructional goals; learner outcomes. Students develop and teach three inquiry-based lessons in the field in a middle school and participate in peer coaching.

Prerequisite(s): TNTX 1100 or consent of Teach North Texas advisor.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# TNTX 1300 - Secondary Teacher Education Preparation I and II: Inquiry-Based Lessons

3 hours (3;0;1)

One-semester introduction (equivalent to TNTX 1100 and TNTX 1200) to mathematics, computer science and science teaching as a career. Discussions include standards-based lesson design and various teaching and behavior management strategies. Topics may include various teaching methods designed to meet instructional goals and learner outcomes. Students develop and teach three inquiry-based lessons in their field in a middle school and participate in peer coaching.

Prerequisite(s): Junior or senior standing and consent of the Teach North Texas advisor. Students may not enroll in TNTX 1300 if they have completed TNTX 1100 and/or TNTX 1200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

## TNTX 3100 - Conceptual Algebra

3 hours

Patterns, relationships, proportional reasoning, linear modeling, polynomials, exponential modeling, quadratic modeling, systems of equations, and the Pythagorean Theorem. Emphasizes handson learning and technology and provides content knowledge in mathematics.

Prerequisite(s): TNTX 1200 or TNTX 1300; EDCI 3500 (may be taken concurrently); MATH 1650 (or equivalent); or consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### TNTX 3200 - Science Laboratory Instruction and Design

3 hours

Laboratory and field safety, lab management, lab design, and use of modern technology in middle and high school laboratories.

Prerequisite(s): TNTX 1200 or TNTX 1300, and EDCI 3500 (may be taken concurrently).

#### TNTX 4150 - Conceptual Geometry

#### 3 hours

Using inquiry-based learning, hands-on learning, and technology, the structures, functions and relationships of geometric concepts are explored and uncovered to provide deep, connected content knowledge of Euclidean geometry. Comparisons to spherical geometry, elliptical geometry and hyperbolic geometry, all known as non-Euclidean geometry, is included in the development of the critical, foundational understanding of Euclidean geometry's structures, functions, and the relationships within geometric concepts.

Prerequisite(s): TNTX 1200 or TNTX 1300, and successfull completion of EDCI 3500 (may be taken concurrently) and MATH 2000 (or equivalent), or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### TNTX 4200 - Conceptual Science

#### 3 hours

Topics in conceptual science, such as laboratory and field safety, lab management, lab design, differences between a content-specific dynamic conceptual model and static model of content, as well as using modern technology in science.

Prerequisite(s): Admission to the Teach North Texas program, a university grade point average of at least 2.50, and completed TNTX 1200 or TNTX 1300, and EDCI 3500, or with department consent. Minimum of 6 credit-hours of major content courses.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### **TNTX 4900 - Special Problems**

#### 1-3 hours

Prerequisite(s): TNTX 1100 and TNTX 1200 (or TNTX 1300), and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

#### TNTX 4910 - Special Problems

#### 1-3 hours

Prerequisite(s): TNTX 1100 and TNTX 1200 (or TNTX 1300), and consent of department.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

# TNTX 4930 - Selected Topics in Mathematics and Science Teaching

#### 3 hours

Topics of current interest, which vary from year to year.

Prerequisite(s): TNTX 1100 and TNTX 1200 (or TNTX 1300), and consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$33.05

### **Technical Communication**

### **TECM 1200 - Developmental Writing**

#### 3 hours

Fulfills TSI requirements for students who have not passed the writing portion of the Texas Higher Education Assessment with a score of 7 prior to enrolling in the university or who are not otherwise exempt. Covers sentence formation and skills needed for argumentation and exposition. Emphasizes audience, purpose and occasion.

Prerequisite(s): None.

Students must complete the requirements of the course with a grade of C or better in order to meet the prerequisite for ENGL 1310. Does not apply to degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### TECM 1500 - New Media Experience

#### 3 hours

Provides an overview of the user experience design and development process: How people in the technology industry work together to ideate, validate, develop, and sell digital media products; what job roles are involved in the process; and what avenues students can choose to pursue those roles.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## TECM 1700 - Introduction to Professional, Science, and Technical Writing

#### 3 hours

A process-oriented introduction to writing, especially for science, pre-engineering and business students. Focuses on understanding the writing situation and provides students the opportunity to practice writing in response to professional, science and technical situations.

Prerequisite(s): None.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **TECM 2700 - Technical Writing**

(ENGL 2311)

3 hours

Expository writing, especially for science, pre-engineering and business students.

Prerequisite(s): ENGL 1310 or TECM 1700.

May be substituted for ENGL 1320 in some programs; students should consult advisors in their majors.

**Core Category:** Communication (English Composition and Rhetoric)

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### TECM 3010 - The Profession of Technical Communication

#### 3 hours

Provides a foundation for understanding technical communication as a profession. Focuses on the competencies required for information product creation; the tools used by technical communication professionals; collaboration techniques for effective team-based projects; and professional development through interaction with industry professionals.

Prerequisite(s): TECM 2700 (may be taken concurrently).

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **TECM 3100 - Visual Technical Communication**

3 hours (3;1)

Learning and applying theoretically-driven strategies for producing commercial publications for high-tech industries. Designing visual information using industry-standard software.

Prerequisite(s): TECM 2700; TECM 3010; Professional and Technical Communication major status, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **TECM 3200 - Information Design for Electronic Media**

3 hours (3;1)

Focuses on the fundamentals of web design and explores the practical and theoretical issues that professional and technical communicators face as they manage and distribute the content they create

Prerequisite(s): TECM 2700; TECM 3010; Professional and Technical Communication major status, or consent of the department.

One program affected by this change is the Interdisciplinary Art and Design Studies, BA. However, we have no record that CVAD ever consulted with TECM to include TECM 3200 as a possible part of that degree.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **TECM 3500 - Digital Media for Professional Communication**

3 hours

Combines theory and hands-on experience to focus on how a variety of emerging technologies, including mobile and social media, are used in professional settings.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

# **TECM 3550 - Content Strategy in Technical Communication**

3 hours

Introduction to the theories and methodologies associated with content strategy for online media in professional communication settings. Covers how technical communicators can use social media in their work and how professional communicators can plan, organize and develop online content.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **TECM 4100 - Proposal Writing**

3 hours

Provides a foundation in proposal writing. Focuses on each component of the proposal writing process: identifying appropriate revenue streams, developing fundable themes, writing specific work plans and budgets, and understanding the review process.

Prerequisite(s): TECM 2700; TECM 3010.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## **TECM 4180 - Advanced Technical Communication**

3 hours

Practical application of technical communication style, conventions, genre, and technologies in industry, business and the sciences.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **TECM 4190 - Technical Editing**

3 hours

Focuses on the techniques for editing technical documents, including proofreading; copyediting; and comprehensive editing for audience, content, organization, style, and design.

Prerequisite(s): TECM 2700; TECM 3010.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### TECM 4200 - Research Methods for the Practitioner

3 hours

Explores the research tasks that professional and technical communicators face in real-world situations and, in some cases, work with a real-world client to investigate a research question. Explores the relationship between theory and research and learning how to design and carry out empirical studies using both quantitative and qualitative methods.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### TECM 4250 - Writing Technical Procedures and Manuals

3 hours

Application of the principles of technical style to the writing of technical procedures and manuals. Intensive practice in writing technical procedures and manuals.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## TECM 4300 - Usability and User Experience in Technical Communication

3 hours

Introduction to the theories and methodologies associated with assessing and measuring the usability and user experience of documents, software, web sites, mobile applications and other technical or professional interfaces. Methods may include card sorting, think aloud protocol, interviews, observations, cognitive walkthroughs, task analysis, heuristic evaluations and eye tracking, among others.

Prerequisite(s): TECM 2700; TECM 3010; Professional and Technical Communication major, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## TECM 4400 - Advanced Information Design in Technical Communication

3 hours

Introduction to web application development as it pertains to technical communication. Develop interactive procedural content using a variety of markup and programming languages. Introduction to theory and practice of information design to create visual and multimedia versions of their web content.

Prerequisite(s): TECM 3200.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

## TECM 4500 - Content Analysis in Technical Communication

3 hours

Covers the systematic, objective, and quantitative analysis of message characteristics with a professional communication focus. Explores various approaches to analyzing content, including computer-aided, human-coded, and sentiment analysis.

Prerequisite(s): TECM 2700; TECM 3010; Professional and Technical Communication major status or consent of department.

#### TECM 4700 - Writing in the Sciences

3 hours

Intensive investigation of the genres of writing in the sciences. Applying appropriate structures for reporting general information and specific data for a variety of scientific contexts.

Prerequisite(s): TECM 2700.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **TECM 4800 - Topics in Technical and Professional Communication**

3 hours

Explores a variety of specialized topics such as technical presentations, usability, and the history of technical communication.

Prerequisite(s): TECM 2700.

May be repeated for credit when topics vary for up to 6 hours.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **TECM 4900 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### **TECM 4910 - Special Problems**

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **TECM 4920 - Cooperative Education in Technical Communication**

3 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): TECM 2700; consent of department.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## **TECM 4950 - Senior Capstone Course**

3 hours

Culmination of the BA in professional and technical communication. Create a capstone portfolio and then present it to the professional and technical communication faculty and industry professionals.

Prerequisite(s): Professional and Technical Communication major status with 90 or more semester credit hours only.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

### **TECM 4951 - Honors College Capstone Thesis**

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### **Theatre**

### THEA 1030 - Lighting and Sound I

3 hours (3;2)

Introduction to basic terminology, equipment, personnel and procedures for lighting and sound production in performing arts. Topics include introductions to lighting equipment, basic electricity, optics, color in light, sound equipment, acoustics, sound recording and playback, music and sound effects and safety considerations. Lecture and discussion. Application of concepts through practical exercises and lab hours.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 1043 - Costume I

(DRAM 1342)

3 hours (3:2)

Principles and practices governing the preparation of costumes for theatrical productions. Costume construction, basic materials, pattern making, work with special fabrics; introduction to design techniques. Practical application in laboratory and on crew assignments for theatrical productions.

Prerequisite(s): None.

Required for theatre majors.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 1046 - Stagecraft I

(DRAM 1330)

3 hours (3;2)

Introduction to basic scenery construction, properties, general theatre safety and operations. Includes a practical laboratory working in the scene shop on department productions. Time and dates in the practical laboratory determined through consultation with instructor.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 1050 - Acting: Fundamentals

(DRAM 1351)

3 hours (3;2)

Explores and applies basic principles of acting. Topics include terminology, scene and character analysis, the inner process, exercises and improvisation.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 1130 - Introduction to Creative Drama in the Elementary School

1 hour

Introduction to current philosophies, principles and techniques of creative drama in the elementary school. Emphasis on development of the individual child through use of dramatic play, improvisation and theatre games. Includes lecture, discussion, group facilitation, peer teaching and practical performance work.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 1280 - Stage Management I

3 hours (3;2)

Introduction to stage management pre-production, rehearsal and performance responsibilities and techniques. Lecture and discussion. Practical application of concepts through class exercises and lab hours.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

# THEA 1340 - Aesthetics of the Theatre Throughout the World

(DRAM 1310)

3 hours

Theory and practice of theatre art throughout the world. Appreciation of drama in both western and nonwestern cultures. Principles of dramatic criticism. Cultural and social significance of the theatre and its drama.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

### THEA 1440 - Play Analysis

3 hours

Principles and techniques governing the preparation of plays and other theatrical events for performance, design, direction and production. Contemporary systems of script analysis. Emphasis on theory and criticism of theatre arts.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 1700 - Theatrical Design I

3 hours

Introduction to principles and elements of design such as line, form, color composition, balance and symmetry, with specific focus related to costume, makeup, lighting and sound, properties, and scenery.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

## THEA 1701 - Theatrical Design II

3 hours (3;2)

Advanced techniques for rendering, drawing and painting for scenic, costume and lighting designers. Pencil, ink and watercolor techniques for rendering architecture, scenery, costumes and lighting. Required for majors whose concentration is design/tech.

Prerequisite(s): THEA 1700 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

### THEA 2051 - Theatre Voice I

(DRAM 2336)

3 hours (3;2)

Principles and practices governing the use of the voice and speech for theatrical and filmic performances. Contemporary systems of vocal and speech preparation.

Prerequisite(s): None.

Required for theatre majors whose concentration is performance.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 2095 - Stage Production I

(DRAM 1120)

1 hour (1:3)

Introduction to principles and practices governing presentation of stage production. Students participate in support of department laboratory productions. Students complete lab hours assigned to costume shop, scene shop, lighting/sound, paints, properties and ushering, to gain an understanding of how each area supports an overall production.

Prerequisite(s): None.

Same as DANC 2095.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 2340 - Theatre Appreciation

3 hours (3;2)

Study of the elements and production of the theatrical art form. Survey of theatre productions in and around the Dallas–Fort Worth region. Field trips.

Prerequisite(s): None.

May not be counted toward a major or minor in theatre. May be repeated for credit when the productions vary.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 2351 - Theatre Movement I

(DRAM 1322)

3 hours (3;2)

Principles and practices governing the use of the actor's body for theatrical and filmic performances. Emphasis on the dynamics and the therapeutic aspects of movement as a means of exploring and expressing thoughts or feelings, and on periods and styles of movement. Study of the theories and techniques of Rudolf von Laban. Coordinated performance with voice, body and musical accompaniment. Development of mime, pantomime and stage combat techniques.

Prerequisite(s): None.

Required for theatre majors whose concentration is performance.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 2380 - Theatrical Makeup

(DRAM 1341)

3 hours (3;2)

Principles and practices governing the use of theatrical makeup in the performance of a play or in a film or television production. Practical application in laboratory and on crew assignments for theatrical productions.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

## THEA 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

# THEA 2996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by a freshman or sophomore honors student under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; freshman or sophomore class status; consent of Honors College dean.

May only be taken once for Honors College credit.

#### THEA 3030 - World Theatre to 1700

3 hours

Intense investigation of major developments in theatre performance and dramatic literature from their beginnings to the mid-17th century, from Western and non-Western worlds. Emphasis on plays, playwrights, actors and other theatre artists in relation to society. Lecture, student presentations and a research project with a crosscultural emphasis.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3040 - World Theatre After 1700

3 hours

Intense investigation of major developments in theatre performance and dramatic literature from the mid-17th century to the 21st century, from Western and non-Western worlds. Emphasis on plays, playwrights, actors and other theatre artists in relation to society. Lecture, student presentations and a research project with a crosscultural emphasis.

Prerequisite(s): None.

Core Category: Creative Arts

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3050 - Acting: Realism

3 hours (3:2)

Practical exploration of theories and methods of building a character. Utilization of numerous approaches including improvisation, emotional and sense memory, actions and objectives, character analysis, and the application of these techniques to text. Advanced script analysis and demonstration of acting proficiency required.

Prerequisite(s): THEA 1050, THEA 2051 and THEA 2351.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3070 - History of Theatrical Costume and Décor

3 hours

Historical survey of clothing, architecture, furniture, and decorative styles as they pertain to theatrical production.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

### THEA 3095 - Stage Production II

1 hour (1;3)

Intermediate study of the principles and practices governing presentation of stage production. Students participate in support of department laboratory productions. Students complete lab hours assigned to costume shop, scene shop, lighting/sound, paints, properties and ushering, to gain an understanding of how each area supports an overall production.

Prerequisite(s): THEA 2095.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

## THEA 3100 - Directing I

3 hours (3;2)

Directing theatrical productions. Analysis of play and film scripts, composition and movement, business and pantomime, coaching the actor, production staff development and management, rehearsal techniques. Written examination on a selected bibliography about theatrical directing.

Prerequisite(s): THEA 1050, THEA 1440, THEA 2051, THEA 2351, THEA 3030, THEA 3050 and junior or senior standing.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 3130 - Lighting II

3 hours (3;2)

Intermediate techniques for theatrical lighting, stage instrumentation and circuitry. Intensive practical experience in laboratory and production assignments.

Prerequisite(s): THEA 1030 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 3140 - Acting: Styles and Periods

3 hours (3:2)

Application of characterization techniques to period styles, including physical farce, comedy of manners, absurdism and dark comedy. Demonstration of acting proficiency. Written examination on a selected bibliography about acting.

Prerequisite(s): THEA 1050, THEA 1440, THEA 2051, THEA 2351, THEA 3030, and THEA 3050.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3143 - Costume II

3 hours (3:2

Intermediate construction techniques for theatrical costuming. Intensive practical experience in advanced laboratory and production assignments.

Prerequisite(s): THEA 1043 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

## THEA 3146 - Stagecraft II

3 hours (3;2)

Intermediate study of scenery and properties construction and drafting.

Prerequisite(s): THEA 1046 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3280 - Stage Management II

3 hours (3;2)

Advanced training for the organization and management of theatrical productions and companies. Practical application in laboratory and production management assignments.

Prerequisite(s): THEA 1280 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

### THEA 3351 - Theatre Movement II

3 hours (3;2)

Advanced study of movement techniques for the classical and nonrealistic theatre. Emphasis on movement vocabulary and intense physical training in relaxation, alignment, conditioning and stage presence. Application to characterization and performance.

Prerequisite(s): THEA 2351.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 3400 - Theatre for Young Audiences

3 hours (3;1)

Recognition and examination of the history and philosophy, production and performance of theatre for young audiences. Through focused inquiry, work on the practical problems that arise in the selection and performance of dramatic texts, original collective creations and adaptation of selected literature. Emphasis on connecting artistic practices and trends in educational theatre to theories of child/adolescent development. Course designed for those who advocate theatre as a stimulus for learning, whether they are specializing in classroom teaching or seeking careers in professional theatre. Class activities may take place on site in a school or at a theater.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 3701 - Scenic Design

3 hours (3;2)

Exploration of theatrical scenic design techniques, genres, styles, venues and historical contexts. 2D, 3D and CAD visual communication techniques will be used in a variety of hands-on portfolio building projects.

Prerequisite(s): THEA 1046, THEA 1700, THEA 1701, THEA 3146 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 3910 - Directors' Ensemble

1 hour (1;4)

Principles and practices of character development governing stage performance. Students audition, participate in directing exercises, classical and contemporary scenes and theatre creation exercises.

Prerequisite(s): None.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# THEA 3996 - Honors College Mentored Research Experience

3 hours

Research experience conducted by an honors student with at least junior standing under the supervision of a faculty member.

Prerequisite(s): Admission to the Honors College; at least junior class status; consent of Honors College dean.

May only be taken once for Honors College credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## **THEA 4000 - Musical Theatre Acting**

3 hours (3;1)

History and evolution of musical theatre in the 20th century. Practical experience in auditioning, rehearsing and performing. Demonstration of acting proficiency required.

Prerequisite(s): THEA 1050, THEA 2051, THEA 2351, THEA 3050.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4095 - Stage Production III

1 hour (1;3)

Advanced study of the principles and practices governing the presentation of stage production. Students participate in support of department laboratory productions. Students complete lab hours assigned to costume shop, scene shop, lighting/sound, paints, properties and ushering, to gain an understanding of how each area supports an overall production.

Prerequisite(s): THEA 2095 and THEA 3095, or consent of department.

Same as DANC 4095.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 4100 - Directing II

3 hours (3;2)

Theories and production techniques for selected styles, periods or genres of dramatic literature. Written examination on a selected bibliography about styles of directing for selected styles, periods or genres of dramatic literature.

Prerequisite(s): THEA 1440, THEA 3030, THEA 3040, THEA 3100.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4110 - Scene Painting for the Theatre

3 hours (3:2)

Principles and practices of scene painting. Use of the tools, materials and techniques of the modern scenic artist.

Prerequisite(s): THEA 1701 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

### THEA 4112 - Advanced Scenic Painting for the Theatre

3 hours (3;2)

Advanced techniques in scenic painting, various 3D finishing techniques including lectures and sculpture as well as charge shine painter responsibilities of leadership, estimation and budgeting.

Prerequisite(s): THEA 1701, THEA 4110.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4130 - Lighting III: Design

3 hours (3;3)

Advanced lighting design principles, light plots and design skills as they apply to the performing arts. Conceptualization and communication of design ideas through script analysis, light studies, storyboards and related projects. Introduction to computer-aided design. Laboratory and practicum activities.

Prerequisite(s): THEA 1030, THEA 1700, THEA 1701, THEA 3130 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

## THEA 4140 - Acting: Shakespeare

3 hours (3;2)

Principles and practices of physical and vocal characterization, mental agility, rhetorical dexterity and empathetic imagination required by the creation of characters in Shakespeare's plays. Study of Elizabethan theatre and its verbal conceits. Special attention paid to making classical language and situations relate to contemporary cultures. Demonstration of acting proficiency required.

Prerequisite(s): THEA 1440, THEA 3030, THEA 3050.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4143 - Costume Design

3 hours (3;2)

Theories and styles of costume design for stage presentation. Techniques of analysis, interpretation, drawing, rendering and organizing.

Prerequisite(s): THEA 1043, THEA 1700, THEA 1701, THEA 3070, or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 4146 - Stagecraft III: Design

3 hours (3:2)

Design principles applied to theatrical scenery and properties; drafting of ground plans and sections, rendering and model building, theoretical application on many different types of theatrical productions including drama, musicals, dance and opera.

Prerequisite(s): THEA 1046, THEA 1700, THEA 1701, THEA 3070, THEA 3146 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4190 - Sound Production and Design for the Theatre

3 hours (3;2)

Techniques for designing and production of sound support and effects for theatrical applications. Covering live, recorded, engineered and multiple effects. Emphasis on creativity and appropriateness of sound design for special theatrical situations.

Prerequisite(s): THEA 1030 or consent of department.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72; Lab (LF): \$9.54

#### THEA 4240 - Theatre in the Classroom

3 hours (3;1)

Theories and practical application of theatre in the classroom with children and adolescents. Integrates the content area of theatre with educational pedagogy, with an emphasis on theatre games, improvisational play-making, story dramatization, and thematic work in educational and recreational settings. Includes lecture/discussions, group facilitation, peer teaching and off-campus classroom observation. Course of value to classroom teachers, performers, directors, writers and community service workers who view working with youth as part of career plan.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### THEA 4260 - History of the Broadway Musical

3 hours

Critical investigation of the origin and development of American musical theatre. A survey of the Broadway musical from Irving Berlin to Stephen Schwartz. Beginning with a consideration of its historical roots, this course examines the contributions made by performers, composers, lyricists, playwrights, directors, choreographers and producers to the evolution of America's singular contribution to world theatre.

Prerequisite(s): THEA 1440 or consent of department.

Attendance at selected performances is required.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4310 - Acting for the Camera

3 hours (3;1)

Study of acting techniques required for commercial, soap, film and television productions. Methods and styles of acting in relation to the script, the environment and technical personnel.

Prerequisite(s): THEA 3050.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4346 - Design/Tech and The Profession

3 hours (3;2)

Culminating Capstone covering historic and current trends in the entertainment industry, entrepreneurial best practices, portfolio development and digital networking.

Prerequisite(s): THEA 1700, THEA 1701, and one of the following: THEA 3070, THEA 3130, THEA 3143, THEA 3146, THEA 3701.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4350 - Senior Seminar

3 hours (3;1)

Capstone course involving intensive study of aesthetic principles, values, philosophy, creative process, criticism, activism and advocacy within the profession. Through self-discovery, discussion, readings, arts experiences, professional interactions and exchange of ideas, this course focuses on transitions and the parameters of preparation and responsibility as students investigate career options, professional and personal goals, continuing education and individual life choices. Essential to this process is that each student analyze and synthesize knowledge and skills in preparation for planning for a future. The course meets regularly as a seminar and at laboratory events within the profession. This course meets the criteria for the Honors Capstone Course.

Prerequisite(s): 90 hours of college-level courses, and must be within final two semesters of completion of theatre major.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4351 - Physical Theatre

3 hours (3;2)

Study and practice of physical theatre. The application of the physical and vocal methodologies of movement-based theatre to creative exercises. Intensive practice in collective creation for directors and actors. Demonstration of skill required.

Prerequisite(s): THEA 3050.

May be repeated for credit.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4370 - Contemporary Chicana/Chicano Theatre

3 hours

Reading and critical examination of Chicana/Chicano dramatic literature from the late 1960s to the present day, including discussion of leading Chicana/Chicano playwrights, historical experiences, and the theatre groups that contributed to a professionally-oriented Chicana/Chicano theatre in the U.S. Designed for those interested in both production and criticism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4380 - Gay/Lesbian Plays and Performance After 1960s

3 hours

Survey of gay and lesbian plays and performance after 1960s to the present day, focusing on themes and issues of identity and representation. Course geared toward those interested in both production and criticism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4390 - Theatre and Social Change

3 hours (3;2)

Exploration and examination of the potential relationship between theatre and contemporary issues from social, political and personal perspectives. Through readings, live performances, films/videos, personal experiences and historical and cultural concerns, students form and discuss personal points of view regarding contemporary issues and theatrical performances.

Prerequisite(s): Upper-level standing.

#### THEA 4395 - Theatre and the Holocaust

3 hours

The exploration and examination of performance and the arts as reflections of the experiences of people during the Holocaust.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

# THEA 4400 - Theatre Symposium (INACTIVE) (deleted 06/03/2020)

1 hour

Study of and practical involvement with the process of creating and producing theatre as experienced by visiting professionals such as actors, directors, designers, dancers, artistic directors, arts managers, union officials, producers, agents and casting directors.

Prerequisite(s): None.

May be repeated for credit up to a maximum of 3 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### THEA 4460 - Play and Film Scriptwriting

3 hours

Dramatic theory, structure, characterization, dialogue and technical media as used by the playwright or the film scriptwriter in both dramatic and comedic works. Study of the scriptwriting process from proposal to production. Marketing of scripts. Practice in playwriting and film scriptwriting.

Prerequisite(s): None.

May be repeated twice for credit, but no more than 3 hours may be counted toward a major in theatre.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### THEA 4500 - Theatre Topics

3 hours

Representative topics include theatrical unions, theatre criticism, music for non-musical productions, dialects for stage and film performances, stage movement, directing and playwriting.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4600 - Rehearsal and Performance for the Stage

1-3 hours

Focuses on the process of preparation for performance in a produced play. Includes attention to the audition process, script and character analysis, daily rehearsals, technical theatrical preparations including technical and dress rehearsals for public performances.

Prerequisite(s): Enrollment based on audition process.

May be repeated for credit as topics vary for a maximum of 3 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

### THEA 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Problems must be approved by the department chair.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$60.72

#### THEA 4910 - Special Problems

1\_3 hours

Prerequisite(s): None.

Problems must be approved by the department chair.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

#### THEA 4920 - Theatre Practicum

3 hours

Supervised work in a position related to student's major, professional field of study or career objective.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 6 hours.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$60.72

## THEA 4951 - Honors College Capstone Thesis

3 hours

Major research project prepared by the student under the supervision of a faculty member and presented in standard thesis format. An oral defense is required of each student for successful completion of the thesis.

Prerequisite(s): Completion of at least 6 hours in honors courses; completion of at least 12 hours in the major department in which the thesis is prepared; approval of the department chair and the dean of the school or college in which the thesis is prepared; approval of the dean of the Honors College.

May be substituted for HNRS 4000. Course may be taken only once for Honors College credit.

## **University Courses**

### **UCRS 1100 - Application of Learning Foundations**

1 hour

Study of critical theories of learning and their effective utilization for increasing academic performance and persistence.

Prerequisite(s): Consent of department.

# UCRS 1300 - Exploring Majors and Careers through Self Discovery

3 hours

Assists undecided majors and others who wish to clarify their career goals in exploring their interests, abilities and values, and in relating these to academic, personal and career choices.

Prerequisite(s): None.

#### UCRS 1850 - First Year Seminar

3 hours

Introduces students to new and exciting ways of becoming active and engaged citizens of the university community and larger society through the exploration of problems in the current world. Students develop skills of critical thinking, communication, values clarification, and self-awareness. Varying topics require a creative and interdisciplinary view of the world. Past topics include leadership information literacy, career and major exploration, community engagement and service.

Prerequisite(s): None.

May be repeated for credit as topics vary.

# UCRS 2020 - Connections: Introduction to Collaborative Thinking

3 hours (0;6)

The first in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Integration of university core knowledge and skills with theories of collaborative thinking and idea generation. Project-based learning will be focused on a theme chosen by, and in collaboration with, a business or community partner.

Prerequisite(s): None.

## **UCRS 2100 - Career Development**

1 hour

Course assists undecided majors and others who wish to clarify their career goals in exploring their interests, abilities and values, and in relating these to academic, personal and career choices.

Prerequisite(s): None.

Pass/no pass only.

#### **UCRS 2900 - Special Problems**

1-3 hours

Prerequisite(s): None.

### UCRS 3000 - Legal Studies Survey

3 hours

Close reading and analytical skills aimed at LSAT preparation, exploration of careers in the law, and strategies for succeeding in law school.

Prerequisite(s): Junior standing and consent of Pre-Law Advisor.

## UCRS 3020 - Connections: Professional Communication

3 hours (0;6)

The second in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Integration of university core knowledge and skills with theories of professional communication—both face-to-face and digital—in a collaborative setting. Project-based learning will be focused around a theme chosen by, and in collaboration with, a business or community partner.

#### UCRS 3120 - Connections III: Problem Analysis

3 hours (0;6)

The third in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Integration of university core knowledge and skills with theories of problem and process analysis in a collaborative setting. Project-based learning will be focused around a theme chosen by, and in collaboration with, a business or community partner.

Prerequisite(s): UCRS 3020.

## UCRS 3150 - Introduction to Research and Other Scholarly Activities

2 hours

Basics of research and scholarship, to include critical thinking, elements of research, design, ethics, technical writing, computer technology, publication, application and professional presentation.

Prerequisite(s): None

May be repeated for credit. Offered summer term only.

## UCRS 3220 - Connections IV: Team Creativity

3 hours (0:6)

The fourth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Integration of university core knowledge and skills with theories of creativity and team sciences in a collaborative setting. Project-based learning will be focused around a theme chosen by, and in collaboration with, a business or community partner.

Prerequisite(s): UCRS 3120.

#### UCRS 3600 - Leadership for a Global Society

3 hours

Integrates guest speakers, foundational leadership theories and skills along with understanding of leadership in both theory and practice. Prepares students to become effective leaders on campus, in the community and in their professional careers.

Prerequisite(s): Sophomore or junior standing and consent of department.

### UCRS 4020 - Connections V: Global Design

3 hours (0;6)

The fifth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the  $21^{\rm st}$  century world. Integration of university core knowledge and skills with theories of globalization and design in a collaborative setting. Project-based learning will be focused around a theme chosen by, and in collaboration with, a business or community partner

Prerequisite(s): UCRS 3220.

### UCRS 4120 - Connections VI: Thinking in Leadership

3 hours (0:6)

The sixth in a series of pillar courses for the Integrative Studies cohort degree focused on the intersection between application and theory in the 21st century world. Integration of university core knowledge and skills with theories of leadership and change management in a collaborative setting. Project-based learning will be focused around a theme chosen by, and in collaboration with, a business or community partner

Prerequisite(s): UCRS 4020.

### UCRS 4500 - Global Leadership through Service

1-6 hours

Introduction to leadership through the social change model of leadership development, which focuses on the importance of collaborative leadership for a broader purpose. Service-learning projects serve as the vehicle for leadership development for students as they develop cultural competency, learn about community needs and to identify and address social problems abroad.

Prerequisite(s): Consent of department.

May be repeated for credit up to a maximum of 12 hours.

#### UCRS 4700 - Social Studies Teaching Methods

3 hours

Designed to help prepare students to teach social studies courses for students in grades 7–12. Students are exposed to content and pedagogy to teach Texas history, U.S. history, world history, world geography, government and economics.

Prerequisite(s): Major must be History with Teacher Certification or Social Science with Teacher Certification.

Senior status or consent of department.

Same as HIST 4750.

# UCRS 4800 - College of Liberal Arts and Social Sciences Internship

1-6 hours

Supervised work in a job directly related to the student's major, professional field of study or career objective.

Prerequisite(s): Junior or senior standing; students must meet employer's requirements and have consent of department.

May be repeated for credit for a maximum of 6 hours.

#### **UCRS 4900 - Special Problems**

1-21 hours

Prerequisite(s): None.

### Women's and Gender Studies

#### WGST 2100 - Introduction to Women's and Gender Studies

3 hour

Introduction to the multidisciplinary field of women's studies. Examination of diverse experiences of women and the significance of gender in society and culture, with a focus on factors such as race, class, age and sexual orientation.

Prerequisite(s): None.

Core Category: Component Area Option

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 2420 - Race, Class, Gender and Ethnicity

3 hours

Social, cultural and economic perspectives on Native, African, Asian and Mexican Americans. Emphasizes work and family patterns for both women and men, racism and sexism and contemporary movements for equality.

Prerequisite(s): None.

Same as SOCI 2010

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 2900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 3100 - LGBTQ Studies

3 hours

Introduction to LGBTQ Studies, an interdisciplinary field that raises questions about the meanings of sex, gender and sexuality in society.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 3500 - Feminist Foundations

3 hours

Explores the women's movement in the United States from the 1960s to the present. Issues of gender equity, reproductive rights, economic disparity, work and the family, and political participation are discussed within the contexts of second and third wave feminism.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 3520 - Psychological Dynamics of Women

3 hours

Comparison of personality and cultural factors associated with gender.

Prerequisite(s): None.

Same as PSYC 3490.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## WGST 3720 - Women's Literature

3 hours

Studies in literature written by or about women.

Prerequisite(s): None.

Same as ENGL 3924.

May be repeated for credit as topics vary up to a maximum of 6 hours.

#### WGST 4100 - Feminist and Womanist Theories

3 hours

Historical overview, key concepts, and vocabulary of feminist/ womanist theories in social and political contexts. Current and emerging bodies of feminist/womanist theories are used to define critical contemporary issues and debates, and to initiate discussion on wide-ranging social, political and global issues from a variety of feminist and gender perspectives.

Prerequisite(s): WGST 2100 or consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 4150 - Queer Theory

3 hours

Survey of key historical and contemporary theoretical debates that have shaped the interdisciplinary field of queer studies with an emphasis on LGBTQ+ issues, identities, and activisms.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 4260 - Topics in Women's and Gender Studies

3 hours

Studies in psychology, sociology, history, literature and other subjects with a focus on either women's issues or the interaction of women and men in society.

Prerequisite(s): None.

May be repeated for credit as topics vary.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 4460 - History of Black Women in America

3 hours

Historical exploration into the characteristics, cultures and reflective thoughts of black women in America.

Prerequisite(s): None.

Same as HIST 4455.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WGST 4800 - Professional Internship

3 hours

Practical experience through employment under the supervision of the Women's and Gender Studies director and the coordinating professional in a company, organization or agency focusing on women. Partnering entities allow students to learn and execute meaningful gender-centered activities. Internships are 20 hours per week and must be arranged in advance of enrollment. Internships are unpaid.

Prerequisite(s): Junior or senior status.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## WGST 4900 - Special Problems

1-3 hours

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# World Languages, Literatures and Cultures

#### WLLC 3000 - Linguistic Landscapes Around the World

3 hours

Exploration and analysis of cultural, historical, political and social dimensions of language use, language contact, and multilingualism in a range of linguistic landscapes around the globe.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### WLLC 3010 - Global Diversity

3 hours

Examines cultural differences in various parts of the world, particularly in countries whose languages are taught in the Department of World Languages, Literatures and Cultures. Creates cultural awareness to prepare global citizens.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3100 - Arab Cultures in Film and Music

2 hours

Exploration of modern Arabic histories and cultures through movies and music. This course is taught in English and does not fulfill a foreign language requirement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3200 - Chinese Culture and Society

3 hours

Introduction to the contemporary cultures and societies of the Chinese-speaking world through readings and films. This course is taught in English and does not fulfill a foreign language requirement.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### WLLC 3300 - French Influences in North America

3 hours

Exploration of the influences of French language, people, and culture in parts of North America. With specific focus on eastern Canada, Louisiana and Texas.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3310 - The Best of French Pop Culture

3 hours

Through exposure to, and analysis of different aspects of French culture (such as fashion, film, food, comics, music, advertisements, media, sports, language, and other cultural artifacts), students will learn to think about how popular culture is constructed and consumed in France.

This course is taught in English and does not fulfill a foreign language requirement.

Prerequisite(s): None

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3400 - The Holocaust and Film

3 hours

Examines how the Holocaust has been portrayed in feature films and documentaries

Prerequisite(s): None

This course is taught in English.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3510 - Contemporary Italian Cinema

3 hours

A multidisciplinary approach to contemporary Italian cinema.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3530 - Cosa Nostra: The Mafia in History and Fiction

3 hours

Exploration of the growth of the Mafia from its origins to the present day. Taught in English.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

### WLLC 3600 - Japanese Popular Culture

3 hours

Exploration and analysis of contemporary Japanese popular culture in a variety of contexts. This course is taught in English and does not fulfill a foreign language requirement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

#### WLLC 3700 - Classical Mythology

3 hours

Overview of the principal myths of classical antiquity, from Homeric Greece to the Roman Empire, and their significance for today's culture. This course is taught in English and does not fulfill a foreign language requirement.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## WLLC 3800 - Russian Folklore and Magic

3 hours

Exploration and analysis of core genres of Russian folklore, magic and system of popular beliefs.

Prerequisite(s): None.

This course is taught in English and does not require any knowledge of Russian.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## WLLC 3810 - Russian Popular Culture

3 hours

Exploration and analysis of contemporary Russian popular culture in a variety of contexts.

Prerequisite(s): None.

Core Category: Language, Philosophy and Culture Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

# WLLC 3840 - Mapping Russia: Saint Petersburg in Russian Culture and Literature

3 hours

Addresses the notion of place and space as the basis for a cultural understanding of Russia's artistic, literary, and historical developments and explores the significance of geographical places such as St. Petersburg, Moscow, and the landscapes of the Ural Mountains and Siberia in Russian society and culture through the ages.

Prerequisite(s): None.

Course specific fees (in addition to tuition and mandatory): Academic (AF) per hour: \$11.01

#### WLLC 4900 - Special Problems

1-3 hours

None.

Prerequisite(s): Consent of department.

Course specific fees (in addition to tuition and mandatory):

Academic (AF) per hour: \$11.01

## Administration, faculty and librarians

UNT system and university officers

**Board of Regents** 

Laura Wright, Chair (2021), Dallas Melisa Denis (2025), Southlake Mary Denny (2023), Aubrey Daniel Feehan (2025), Fort Worth Milton B. Lee (2023), San Antonio **A.K. Mago** (2021), Dallas Carlos Munguia (2023), University Park G. Brint Ryan (2021), Dallas John Scott Jr. (2025) Keller

**Student Regent** Appointed annually

## **UNT system administration**

Lesa B. Roe, MS, Chancellor of the University of North Texas

Michael R. Williams, DO, MD, MBA, President of the UNT Health Science Center at Fort Worth

Robert Mong BA, President of UNT Dallas

Rosemary R. Haggett, PhD, Vice Chancellor for Academic Affairs and Student Success, Board Secretary

Jack Morton, JD, Vice Chancellor for Governmental Relations Alan Stucky, JD, Vice Chancellor and General Counsel

Dan Tenney, MBA, Vice Chancellor for Finance

Steve Maruszewski, BAE, Vice Chancellor for Facilities Tracy Grunig, MPA, CPA, CFE, CISSP, Chief Audit Executive

Paul Corliss, Chief Communications Officer Chris McCoy, Chief Information Officer

### **UNT administration**

Neal J. Smatresk, PhD, President

Jennifer Cowley, PhD, Provost and Vice President for Academic

Clayton Gibson, CPA, Vice President for Finance and Administration and CFO

Wren Baker, MS, Vice President and Director of Athletics Jim Berscheidt, MS, Vice President for University Brand Strategy and Communications

Adam D. Fein, PhD, Vice President for Digital Strategy and

Shannon Goodman, MEd, Vice President for Enrollment Mark McLellan, PhD, Vice President for Research and Innovation Debbie Rohwer, PhD, Vice President for Planning and Chief of Staff

Clay Simmons, MBA, JD, Chief Compliance Officer Elizabeth With, EdD, Vice President for Student Affairs

David Wolf, PhD, Vice President for Advancement

Joanne Woodard, MA, Vice President for Institutional Equity and Diversity

Chris McCoy, MBA, Chief Information Officer

### **Academic deans**

**Honors College** 

Glênisson de Oliveira, PhD, Interim Dean

**New College** 

Wesley Randall, PhD, Dean

College of Business

Marilyn Wiley, PhD, Dean

College of Education

Randy Bomer, PhD, Dean

College of Engineering

Hanchen Huang, PhD, Dean

#### College of Health and Public Service

Nicole Dash, PhD, Dean

College of Information

Kinshuk, PhD, Dean

Frank W. and Sue Mayborn School of Journalism

Andrea Miller, PhD, Dean

College of Liberal Arts and Social Sciences

Tamara Brown, PhD, Executive Dean

College of Merchandising, Hospitality and Tourism

Jana Hawley, PhD, Dean

College of Music

John W. Richmond, PhD, Dean

College of Science

Su Gao, PhD, Dean

College of Visual Arts and Design

Greg Watts, MFA, Dean

**Toulouse Graduate School** 

Victor Prybutok, PhD, Dean

**University Libraries** 

Diane Bruxvoort, MLIS, Dean

Texas Academy of Mathematics and Science

Glênisson de Oliveira, PhD, Dean

## **Faculty and librarians**

Information regarding individual faculty members and librarians is available from the Faculty Profile System (https://faculty.unt.edu/ index.php). Select "Faculty Profiles" from the Browse menu. To access faculty information from a specific department or from the Libraries, use the drop-down menu at the head of the faculty list.

Graduate faculty of the Graduate School of Bio-medical Sciences and the School of Public Health at the University of North Texas Health Science Center at Fort Worth (UNTHSC) also are members of the graduate faculty of the University of North Texas and thus can serve as mentors or committee members of UNT graduate students appropriate to their graduate appointment. See the UNTHSC Graduate Catalog for UNTHSC graduate faculty listings.

## **Emeritus faculty**

Abel, Mickey, Visual Arts and Design (2003-2019).

Adkison, Judith, Education (1983-2011).

Albarran, Alan, Liberal Arts and Social Sciences (2000-2018).

Albertson, Roxanne, Education (1979-2000).

Allen, John Ed, Arts and Sciences (1963-2011).

Allison, Jay, Liberal Arts and Social Science (1989-2020).

Altekruse, Michael, Education (1995-2005).

Anderson, Miles, Arts and Sciences (1950-1992).

Aronson, Harriet, Arts and Sciences (1971-1999).

Austin, Jerry, Visual Arts and Design (1982-2017).

Bahnsen, Kenneth, Education (1955-2003).

Bailey, Don C., Education (1962-1999).

Baird, James, Arts and Sciences (1966-2011).

Bane, Robert, Education (1970-2007).

Beitinger, Thomas L., Arts and Sciences (1976-2011).

Benet, Diana, Arts and Sciences (2001-2012).

Berg, Robert, Education (1968-2006).

Blow, David, Visual Arts (1980-2011).

Boedenhamer-Davis, Eugenia, Public Affairs and Community Service (1974-2010).

Boley, Richard, Business Administration (1990-2005).

Booth, John, Arts and Sciences (1984-2011).

Borden, Weston T., Science (2004-2017).

Bower, Beverly, Education (2008-2019).

Bowman, Brian, Music (1999-2018).

Brady, William T., Arts and Sciences (1962-1999).

Brand, Neal, Science (1988-2017).

Brantton, Sue, Education (1992-2017). Fisher, Vernon, Visual Arts (1978-2006). Fitzpatrick, Lloyd, Arts and Sciences (1970-2014). Braswell, Michael, Business (1990-2015). Braterman, Paul S., Arts and Sciences (1988-2006). Forde, Steven, Arts and Sciences (1987-2017). Brookshire, William, Education (1970-2003). Foster, Phillip, Engineering (1982-2017). Brostow, Witold, Engineering (1989-2019). Fox, Norris, Education (1972-2017). Brothers, Lester, Music (1974-2005). Froehlich, Hildegard, Music (1976-2001). Frost, Carol Ann, Business (2007-2018). Brown, Newel Kay, Music (1970-1991). Broyles, Sheri J., Journalism (1996-2020). Garcia, Oscar, Engineering (2003-2019). Garner, Cody, Music (1989-2006). Buckalew, Mary, Arts and Sciences (1965-1998). Getschow, George, Journalism (2002-2017). Buhler, June, Education (1973-2000). Bullock, Lyndal M., Education (1978-2017). Gibbons, Henry, Music (1980-2012). Busby, Roy, Journalism (1961-2015). Gillespie, James E., Music (1978-2011). Bush, Barbara, Education (2002-2020). Gleeson, Larry, Visual Arts and Design (1972-2007). Bush, Deanna D., Music (1980-2011). Glick, Edwin, Arts and Sciences (1970-1995). Butt, Harlan, Visual Arts and Design (1976-2017). Golden, David, Arts and Sciences (1985-2004). Caldwell, Patsy, Education (1959-2000). Goodwin, Vicki, Business (1991-2014). Callicott, J. Baird, Arts and Sciences (1995-2015). Gough, Georgia Leach, Arts and Sciences (1952-1975). Campbell, Lloyd P., Education (1970-2006). Graves, Finley, Business (2002-2018). Campbell, Randolph (Mike), Liberal Arts and Social Sciences Greenlaw, M. Jean, Education (1978-2005). Groom, Joan, Music (1973-2011). Campbell, Vicki L., Liberal Arts and Social Sciences (1982-2020). Grubbs, Bill, Engineering (1993-2011). Candelaria, Leonard, Music (1974-2003). Gunter, Pete, Arts and Sciences (1969-2005). Chandrasekaran, Perinkolam, Business (1981-2020). Haerle, John M. (Dan), Jr., Music (1977-2007). Cheal, Susan, Visual Arts and Design (2000-2017). Hagler, Harland, Liberal Arts and Social Sciences (1966-2017). Chipman, Donald, Arts and Sciences (1964-2002). Hamilton, Fred, Music (1989-2017). Chisholm, Rose Marie, Music (1995-2012). Hargrove, Eugene, Liberal Arts and Social Sciences (1990-2015). Chng, Chwee-Lye, Education (1981-2013). Harrell, Pamela, Education (2000-2020). Clark, Thomas, Music (1976-2004). Harris, Mary, Education (2000-2014). Clay, Joan Marie, Merchandising, Hospitality and Tourism Harrison, Thomas, Arts and Sciences (1972-2004). (1990-2011). Hasty, Ron, Business Administration (1992-2011). Clay, Raymond J., Business (1983-2011). Hayes, Robert (Bob), Engineering (1990-2018). Coe, Barbara, Business Administration (1980-2005). Havnes, Jack R., Arts and Sciences (1963-1999). Hays, Henry, Business Administration (1964-2004); Dean. Coe, Teddy L., Business Administration (1980-2007). Conover, James, Business (1989-2018). Hayslip, Bert, Arts and Sciences (1978-2013). Conover, Teresa, Business (1989-2017). Henderson, Sam, Arts and Sciences (1953-1985). Contreras, Gloria, Education (1987-2011). Henoch, Miriam, Arts and Sciences (1996-2005). Cooper, J. Arthur, Education (1966-1998). Holcomb, Terry, Education (1973-2005). Copeland, Ben, Business Administration (1963-2000). Holden, Jan, Education (1988-2019). Cornelius, Bill, Education (1966-2004). Hollaway, Linda, Health and Public Service (1998-2019). Crader, Jeannine, Music (1970-1997). Holman, John, Public Affairs and Community Service (1984-2006). Crocker, Betty, Education (1988-2010). Homer, Paula, Music (1992-2017). Crowder, Robert, Arts and Sciences (1979-1997). Hudnall, Margaret, Music (1968-2004) Hudson, Johnetta, Education (1999-2012). Cushman, Shelley, Liberal Arts and Social Sciences (1977-2019). Damico, Anthony, Arts and Sciences (1966-2001). Huffman, Janie, Education (1996-2016). Davis, Addie Nell, Human Resource Management (1951-1981). Impson, Michael, Business (1987-2020). Ingman, Stanley, Health and Public Service (1990-2018). Davis, D. Jack, Visual Arts and Design (1971-2011). Davis, Richard, Visual Arts and Design (1968-2018). Jacobson, Arminta, Education (1981-2015). Day, Kaaren, Education (1989–2008). James, George, Liberal Arts and Social Sciences (1983-2020). Deering, William, Arts and Sciences (1965–2008). Jessup, Robert, Visual Arts and Design (1991-2018). DeLaney, Gloria, Education (1960-1999). Johnson, Charles, Education (1957-1994). Desiderato, Robert, Arts and Sciences (1966-2004). Johnson, Douglas A., Arts and Sciences (1971-2004). Dickenson, Jerry, Hospitality and Tourism Management (1996-Johnson, James, Jr., Visual Arts (1968-1995). Johnson, Karrell, Music (1997-2013). Dickson, Kenneth L., Arts and Sciences (1978–2010). Jordan, Ann, Public Affairs and Community Service (1990-2014). Kallman, Robert R., Jr., Science (1979-2019). DiFiori, Linda, Music (1996-2014). Ditzenberger, Roger, Education (1980–2007). Karafiath, Imre, Business (1984-2019). Dixon, Paul, Education (1992-2006), Dean. Kemerer, Frank R., Education (1978–2003). Dixon-Krauss, Lisbeth, Education (2009-2019). Kennelly, Kevin, Arts and Sciences (1967-2000). Dobson, Gerard R., Arts and Sciences (1969-1999). Kern, R. Fred, Music (1980-2011). Donahue, Manus, Arts and Sciences (1982-2002). King, Barry, Business Administration (1970-1995). Dworak, Paul, Music (1979-2017). Klammer, Thomas, Business (1970-2007). Earp, Norman Wesley, Education (1963-1995). Kowalski, Jacek, Arts and Sciences (1989-2014). Eaton, Henry, Arts and Sciences (1966–2011). Kung, Joseph, Science (1984-2018). Eddy, John Paul, Education (1979-2000). Kuss, Malena, Music (1976-1999). Emmanuel, Donna, Music (2002-2020). LaPoint, Thomas, Arts and Sciences (1999-2014). Engels, Dennis, Education (1976-2011). Landreth, Garry, Education (1966-2001).

Esterchild, Elizabeth, Public Affairs and Community Service (1969-Laney, James, Education (1985-2019). Larson, George, Arts and Sciences (1970-2000). Evans, Mary, Human Resource Management (1958-1981). Lawrence, Annette, Visual Arts and Design (1996-2020). Evenson, Thomas, Health and Public Service (1980-2017). Lee, James Ward, Arts and Sciences (1958-1999). Falsetta, Vincent, Visual Arts and Design (1977-2017). Leung, Paul, Public Affairs and Community Service (1999-2015). Feigert, Frank, Arts and Sciences (1977-2003). Levin, Ben, Liberal Arts and Social Sciences (1990-2018). Lewis, Paul, Arts and Sciences (1970-2005). Ferring, C. Reid, Liberal Arts and Social Sciences (1978-2019). Fink, Ron, Music (1964-2000). Lillie, Nancy Boyd, Business (1991-2018). Finn, Don, Business (2009-2020). Linebarger, James Morris, Arts and Sciences (1963-1996). Fisher, Dennis, Music (1982-2019). Lowe, Gale B., Business Administration (1965-1995).

Lowe, Richard, Liberal Arts and Social Sciences (1968-2018). Scott, John, Music (1981-2018). Sears, Ray, Arts and Sciences (1967-2001). Lundsteen, Sara, Education (1977-1999). Luttrell, H. Dale, Education (1970-2007). Seward, Rudy, Public Affairs and Community Service (1973-2011). MacDonald, Don, Business (1989-2020). Shrader, David, Music (1992-2006). Mackey, James, Arts and Sciences (1969-1999). Shuemaker, Ira, Visual Arts (1974-2001). Marcello, Ronald E., Arts and Sciences (1967-2009). Simms, Richard L., Education (1970-2006). Marshall, James L., Science (1987-2017). Sinclair, Richard, Arts and Sciences (1992-2014). Martin, Barbara, Library and Information Science (1984-2010). Sirvent, Michel, Arts and Sciences (1994-2016). Slater, K. Neil, Music (1981-2008). Martin, Charles B., Arts and Sciences (1964-1999). Martin, Cora, Community Service (1967-1992). Smith, Don W., Arts and Sciences (1967-2011). Masaracchia, Ruthann, Arts and Sciences (1990-2002). Smith, John, Arts and Sciences (1964-1993). Smith, Richard, Health and Public Service (1994-2019). Mason, Diana, Arts and Sciences (2001-2012). Soph, Edward, Music (1988-2017). Matteson, Samuel, Arts and Sciences (1987-2014). Mauldin, Richard D., Arts and Sciences (1977-2011). Sparks, Richard, Music (2009-2019). McCarter, R. William, Visual Arts (1968-2005). Spence, J. Wayne, Business (1980-2010). Spencer, Sandra, Liberal Arts and Social Sciences (1996-2017). McClung, Alan, Music (2002-2017). McCoy, Jerry, Music (2000-2015). Sprague, D. Jack, Visual Arts and Design (1990-2010). McCroskey, Lenora, Music (1982-2009). Staff, Marcia, Business (1979-2019). McDaniel, Floyd, Science (1974-2018). Staples, Donald, Arts and Sciences (1979-2004). McDonald, James, Business (1976-2013). Steinel, Michael (Mike), Music (1987-2019). McKee, Bill, Arts and Sciences (1978-2011). Stephens, Elvis Clay, Business Administration (1963-1999). McNeill, Perry, Engineering (1994-2006). Stern, Laura, Arts and Sciences (1994-2014). McTee, Cindy, Music (1984-2010). Stevens, L. Robert, Arts and Sciences (1963-1998). Merino, Barbara, Business (1983-2011). Stidham, Janie, Visual Arts and Design (1996-2020). Michaelsen, Robert, Business Administration (1987-2005). Summers, Patricia, Arts and Sciences (1967-2002). Miller, William, Education (1964-1996). Tanner, Fred, Education (1968-1987). Milnes, Robert, Visual Arts and Design (2006-2014). Tanner, James T.F., Arts and Sciences (1965-2012). Mohr, Cynthia, Visual Arts and Design (2003-2018). Tas, Richard, Hospitality and Tourism Management (1985-2016). Montler, Timothy, Liberal Arts and Social Sciences (1984-2020). van Tassel, Frances, Education (1993-2010). Morrison, George, Education (1995-2015). Taylor, Lew, Business (1992-2019). Morrisson, Clovis C., Jr., Arts and Sciences (1962-1997). Teeter, C. Russ, Education (1967-2006). Morrow, James, Education (1993-2017). Terrell, Sandra, Arts and Sciences (1979-2011). Moseley-Grady, Patricia, Education (1974-2002). Thomas, Jerry, Education (2008-2016). Nacke, Bruce, Visual Arts and Design (1987-2020). Thomas, Ruthanne, Arts and Sciences (1981-2016). Thornton, John H., Business (1971–2006). Nahrgang, Lee, Arts and Sciences (1965-2007). Nash, Jerry, Arts and Sciences (1997–2007). Tipps, Steve, Education (1992-2002). Neeley, Paden, Business Administration (1960-2003). Tobolowsky, Peggy, Health and Public Service (1989-2019). Nelson, Nancy, Education (2009-2019). Totten, Herman, Information (1977-2015). Neuberger, John, Arts and Sciences (1977–2010). Tunks, Jeanne, Education (2000-2019). Newsom, Ron, Education (1977-2011). Turner, Elizabeth, Arts and Sciences (2002-2016). Newton, Connie, Visual Arts and Design (1989-2007). Turner, Philip, Library and Information Sciences (1969-2011). Vanecek, Michael T., Business Administration (1978-2006). Nordstrom, Lyle, Music (2000-2010). Norton, Scott, Arts and Sciences (1963-2005). Vann, J. Don, Arts and Sciences (1964-1999). Olsen, Solveig, Arts and Sciences (1968-2005). Veazey, Charles O., Music (1973-2011). deOnis, Carlos, Arts and Sciences (1968-1995). Venables, Barney, Science (2003-2018). O'Rourke-Kaplan, Marian, Visual Arts and Design (1992-2018). Vidrine, Donald, Arts and Sciences (1968-1998). Papich, George, Music (1967-2000). Walker, Myra, Visual Arts and Design (1987-2015). Patton, Robert, Education (1973-2013). Waller, William, Arts and Sciences (1989-2009). Paz, Denis, Arts and Sciences (1995-2013). Warner, Roger, Music (1976-2006). Pekara, Jean, Education (1966-2001). Washington, Roosevelt, Jr., Education (1974-1996). Phelps, Brent, Visual Art and Design (1980-2011). Weinstein, Bernard, Public Affairs and Community Service Phipps, Graham, Music (1984-2014). (1989-2009).Pickens, Donald K., Arts and Sciences (1965-2006). Wells, Richard, Journalism (1979-2009). Pirtle, Robert M., Arts and Sciences (1980-2011). Wenrich, Wesley, Arts and Sciences (1970-1993). Wheeless, Lawrence, Arts and Sciences (1993-2004). Plummer, Mitty, Engineering (1992-2011). Poe, Stephen, Business (1989-2020). White, Richard, Business (1990-2016). Poirot, James, Education (1976-2014). Wilhelm, Ronald, Education (1991-2013). Powell, James (Don), Business (1977-2019). Williams, Fred, Business (1968-2007). Ramsey, Darhyl, Music (1987-2018). Williamson, John, Education (1968-2006). Renka, Robert, Engineering (1984-2018). Wilson, William, Arts and Sciences (1968-2001). Reynolds, Johnny Sue, Merchandising and Hospitality Management Wu, Fred, Business Administration (1993-2005). (1990-2006).Young, Jon, Education (1977-2015). Reynolds, Kathleen, Music (1995-2020). Youngblood, Judy, Visual Arts (1976-1997). Rich, Carroll Y., Arts and Sciences (1959-1995). Zimmerman, Earl, Arts and Sciences (1970–2009).

Richards, Thomas, Business (1983–2004).

Riggs, James, Music (1973-2008).

Riney, Bobye J., Merchandising and Hospitality Management (1973-

Rutherford, Paris, Music (1978-2009).

Sale, Richard B., Arts and Sciences (1965-1995).

Schafer, Rollie, Arts and Sciences (1976-2007).

Schamber, Linda, Information (1991-2015).

Scharnberg, William, Music (1983-2018). Schietroma, Robert, Music (1977-1998).

Schol, Don, Visual Arts and Design (1969-2011).

Scott, James, Music (2001-2018).

Dates indicate years at UNT.

**Emeritus librarians** 

Bradley, Lou Ann (1974–2010).

Byerly, Gayla, (2000-2016).

Galloway, Margaret E. (1967-1997).

\*Grose, B. Donald (1988-2009).

Harden, Jean (1994-2019).

\*\*Hartman, Cathy, (1995-2016).

\*\*Kelly, Melody (1974–2009).

Lavender, Kenneth (1981-2001).

Martin, Morris (1971-2013). McKnight, Mark (1990-2019.

- \* Dean Emeritus
- \*\*Associate Dean Emeritus

Dates indicate years at UNT.

#### President emeritus

V. Lane Rawlins (2010-2014).

Dates indicate years at UNT.

## 'Fessor Graham award

The most recent winner of the 'Fessor Graham Award is Gloria Cox, Associate Professor in Political Science.

The 'Fessor Graham Award is the highest honor bestowed by the student body at UNT. The award recognizes one faculty member each year for outstanding and unselfish service beyond the call of duty to students. It is named for the late Professor Floyd Graham, who taught at UNT for more than 40 years.

#### **Previous winners**

James Riddlesperger, Political Science, 1972

Charles Foster, Business, 1973

Leo Estrada, Sociology, 1974

Ben Chappell, Speech Communications, 1975

Milan J. Reban, Political Science, 1976

T. Bullock Hyder, Economics, 1977

Anshel Brusilow, Music, 1978

Umesh C. Banerjee, Biology, 1979

Tommie Collins Lawhon, Education, 1980

Douglas P. Starr, Journalism, 1981

David R. Fitch, Business, 1982

Jerry Lee Yeric, Political Science, 1983

John James Haynie, Music, 1984

Lee Knox, Geography, 1985

J. B. Spalding, Business, 1986

John S. Gossett, Communication and Public Address, 1987

Richard H. Wells, Journalism, 1988

Ernest F. Crystle, Foreign Languages and Literatures, 1989

Dan Haerle, Music, 1990

Valerie D. Martinez, Political Science, 1991

Fred Hamilton, Music, 1992

Kenneth Godwin, Political Science, 1993

Robert S. LaForte, History, 1994

Norris D. Fox, Education, 1995

Ann S. Windle, Education, 1996

Donald E. Chipman, History, 1997

P.R. Chandrasekaran, Finance, Insurance, Real Estate and Law, 1998

Juliet Getty, Merchandising and Hospitality Management, 1999

William T. Waller, Biological Sciences, 2000

Gladys H. Crawford, Biological Sciences, 2001

Thomas P. Sovik, Music, 2002

Richard Tas, Merchandising and Hospitality Management, 2003

Brian L. Bowman, Music, 2004

David W. Hill, Kinesiology, Health Promotion and Recreation, 2005

Kimi King, Political Science, 2006

Dee Ray, Counseling and Higher Education, 2007

Donna Ledgerwood, Management, 2008

Lyndal M. Bullock, Educational Psychology, 2009

Gloria Cox, Political Science, 2010

Armin R. Mikler, Computer Science and Engineering, 2011

Shahla S Ala'i-Rosales, Behavior Analysis, 2012

Andrew Enterline, Political Science, 2013

Brian Lain, Communication Studies, 2014

Bethany Blackstone, Political Science, 2015

Michael Thompson, Philosophy, 2016

Brenda Sweeten, Social Work, 2017

Julie Leventhal, Educational Psychology, 2018

Jeannette Ginther, Teacher Education and Administration, 2019

Annie Lund, Biological Sciences, 2020

Gloria Cox, Political Science, 2021

## Accrediting institutions

The University of North Texas is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, masters, and doctorate degrees. Questions about the accreditation of the University of North Texas may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling 404-679-4500, or by using information available on SACSCOC's web site (www.sacscoc.org).

Please note: SACSCOC should be contacted only to inquire about the accreditation status of UNT, to ask questions about the accreditation process, or to pursue procedures for filing complaints against UNT. General inquiries, such as admission requirements, financial aid, and educational programs, should be addressed directly to UNT and not SACSCOC's office.

The University of North Texas offers programs accredited by the following organizations:

## AACSB International—The Association to Advance Collegiate Schools of Business

777 South Harbour Island Blvd, Suite 750 Tampa, FL 33602-5370 813-769-6500 www.aacsb.edu

#### ARET

Accreditation Board of Engineering and Technology 415 North Charles Street Baltimore, MD 21201 410-347-7700 www.abet.org

# Accreditation Commission for Programs in Hospitality Administration (ACPHA)

PO Box 400 Oxford, MD 21654 410-226-5527 www.acpha-cahm.org

## Accrediting Council on Education in Journalism and Mass Communications

University of Kansas School of Journalism Stauffer-Flint Hall 1435 Jayhawk Blvd. Lawrence, KS 66045 785-864-3973 www.acejmc.org

#### American Academy of Forensic Science-FEPAC

410 North 21st Street Colorado Springs, CO 80904 719-636-1100 www.aafs.org

## American Chemical Society

1155 Sixteenth Street NW Washington, DC 20036 800-333-9511 www.chemistry.org

#### **American Library Association**

50 East Huron Street Chicago, IL 60611 800-545-2433 www.ala.org

## American Psychological Association Commission on Accreditation

Commission on Accreditation, Office of Program Consultation and Accreditation
750 First Street, NE
Washington, DC 20002-4242
202-336-5500
www.apa.org/ed/accreditation

#### American Speech-Language-Hearing Association (ASHA)

Council on Academic Accreditation in Audiology and Speech-Language Pathology 2200 Research Blvd Rockville, MD 20850 301-296-5700 www.asha.org

#### Association for Behavior Analysis International

Portage, MI 49024 269-492-9310 www.abainternational.org

550 W. Centre Avenue

#### Commission on English Language Program Accreditation (CEA)

1001 North Fairfax Street, Suite 630 Alexandria, VA 22314 703-665-3400 www.cea-accredit.org

## Council for Accreditation of Counseling and Related Educational Programs (CACREP)

1001 North Fairfax St., Suite 510 Alexandria, VA 22314 703-535-5990 www.cacrep.org

#### **Council for Interior Design Accreditation**

206 Grandville Avenue, Suite 350 Grand Rapids, MI 49503-4014 616-458-0400 www.accredit-id.org

#### Council on Rehabilitation Education (CORE)

1699 Woodfield Rd., Suite 300 Schaumburg, IL 60173 847-944-1345 www.core-rehab.org

#### **Council on Social Work Education**

1701 Duke Street, Suite 200 Alexandria, VA 22314-3457 703-683-8080 www.cswe.org

## National Association of Schools of Art and Design

11250 Roger Bacon Drive, Suite 21 Reston, VA 20190-5248 703-437-0700

#### National Association of Schools of Music

11250 Roger Bacon Drive, Suite 21 Reston, VA 20190 703-437-0700 nasm.arts-accredit.org

# National Association of Schools of Public Affairs and Administration

1029 Vermont Avenue, NW, Suite 1100 Washington, DC 20005 202-628-8965 www.naspaa.org

# National Council for Accreditation of Teacher Education (NCATE)

1140 19th Street, Suite 400 Washington, DC 20036 202-223-0077 www.ncate.org

## State Board for Educator Certification

1701 North Congress Avenue Austin, TX 78701 512-463-9734 www.tea.state.tx.us