## The University of Tennessee at Martin



## 2020-2021 Catalog

 Undergraduate and GraduateRandy Boyd, President, The University of Tennessee System
Dr. Keith Carver, Chancellor, The University of Tennessee at Martin
The University of Tennessee at Martin is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor's and master's degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of The University of Tennessee at Martin.

## Phone Directory

Academic Affairs, Division of ..... 731-881-7010
Academic Records, Office of ..... 731-881-7050
Admissions, Office of ..... 731-881-7020
Agriculture and Applied Sciences, College of ..... 731-881-7250
Athletics, Office of Intercollegiate ..... 731-881-7660
Boling University Center ..... 731-881-7755
Bursar's Office ..... 731-881-7810
Business and Global Affairs, College of ..... 731-881-7306
Business Services, Office of. ..... 731-881-7815
Campus Recreation, Office of. ..... 731-881-7745
Chancellor, Office of the ..... 731-881-7500
Computer Store ..... 731-881-7879
Digital Printing Services ..... 731-881-7842
Education, Health, and Behavioral Sciences, College of ..... 731-881-7125
Educational Outreach ..... 731-881-7080
Engineering and Natural Sciences, College of ..... 731-881-7380
Finance and Administration, Division of ..... 731-881-7800
Financial Aid and Scholarships, Office of ..... 731-881-7040
Graduate Studies, Office of ..... 731-881-7012
HelpDesk ..... 731-881-7900
Housing, Office of ..... 731-881-7730
Human Resources, Office of ..... 731-881-7845
Humanities and Fine Arts, College of. ..... 731-881-7490
Information Technology Services, Office of. ..... 731-881-7890
International Education, Center for ..... 731-881-1023
International Programs and International Admissions, Office of ..... 731-881-7340
Library Services, Office of (Paul Meek Library) ..... 731-881-7065
Margaret N. Perry Children's Center ..... 731-881-7715
Office of Disability Services ..... 731-881-7195
Public Safety, Department of ..... 731-881-7777
Student Affairs, Division of ..... 731-881-7700
Student Health and Counseling Services, Office of ..... 731-881-7750
Student Life, Office of. ..... 731-881-7755
Student Success Center ..... 731-881-7744
University Advancement, Division of ..... 731-881-7626
University Bookstore ..... 731-881-7760
University Honors Programs, Office of ..... 731-881-7436
University Relations, Office of ..... 731-881-7615
UTM Testing Center ..... 731-881-7727

## Calendars for 2020-2022 Academic Years

Fall Semester, 2020
Aug. 14, Friday Advising Aug. 17, Monday. $\qquad$ Classes Begin
Sept. 7, Monday...........Labor Day / Classes will meet Oct. 2, Friday..........Mid-Term Progress Reports Due Oct. 10-13, Sat.-Tues. ..Fall Break / Classes will meet Nov. 25-29, Wed.-Sun..............Thanksgiving Holiday (Classes do not meet)
Nov. 24, Tuesday ................................... Classes End
Dec. 1-5, Tues.-Sat. Online Final Exams
Date TBD Commencement

## Spring Semester, 2021

Jan. 14, Thursday ......Day and Evening Classes Begin Jan. 18, Monday ...............Martin Luther King Jr. Day March 1, Monday ...Mid-Term Progress Reports Due March 8-14, Monday-Sunday...............Spring Break April 2, Friday.................................. Spring Holiday April 30, Friday..................................... Classes End May 3-7, Monday-Friday........................Final Exams May 8, Saturday.............................Commencement


May 17, Monday ................................. Classes Begin
May 31, Monday ................................ Memorial Day
June 4, Friday....................................**Classes End

## Summer Semester, 2021

June 7, Mon......Classes Begin, First Half \& Full Term July 5, Monday. $\qquad$ Independence Day July 9, Friday .....................**Classes End, First Term July 12, Monday....................Advising, Second Term July 13, Tuesday $\qquad$ Classes Begin, Second Term Aug. 13, Friday ...**Classes End, Second \& Full Term Aug. 14, Saturday........................Date of Graduation

Fall Semester, 2021
Aug. 20, Friday .......................................... Advising
Aug. 23, Monday................................. Classes Begin
Sept. 6, Monday...................................... Labor Day
Oct. 8, Friday..........Mid-Term Progress Reports Due
Oct. 9-12, Saturday-Tuesday..................... Fall Break
Nov. 24-28, Wed.-Sunday.........Thanksgiving Holiday
Dec. 3, Friday $\qquad$ Classes End
Dec. 6-10, Monday-Friday ......................Final Exams
Dec. 11, Saturday Commencement

## Spring Semester, 2022

Jan. 13, Thursday ......Day and Evening Classes Begin Jan. 17, Monday ...............Martin Luther King Jr. Day Feb. 28, Monday.....Mid-Term Progress Reports Due March 7-13, Monday-Sunday...............Spring Break April 15, Friday................................. Spring Holiday April 29, Friday.....................................Classes End May 2-6, Monday-Friday........................Final Exams May 7, Saturday..............................Commencement

Maymester, 2022

| May 16, Monday. | Classes Begin |
| :---: | :---: |
| May 30, Monday. | Memorial Day |
| June 3, Friday. | ...**Classes End |

## Summer Semester, 2022

June 6, Mon......Classes Begin, First Half \& Full Term July 4, Monday............................ Independence Day July 8, Friday ....................**Classes End, First Term July 11, Monday....................Advising, Second Term July 12, Tuesday ............Classes Begin, Second Term Aug. 12, Friday ...**Classes End, Second \& Full Term Aug. 13, Saturday Date of Graduation

[^0]Final Exams


## Table of Contents

Phone Directory ..... i
Calendar ..... ii
Campus Map ..... iii
General Information ..... 1
Paul Meek Library ..... 3
Information Technology Services ..... 4
Computer Store ..... 6
Printing and Mail Services ..... 6
Services for Students ..... 6
Services for Students With Disabilities ..... 7
Bookstore ..... 7
Campus Recreation ..... 7
Student Employment Services ..... 8
Student Health and Counseling Services. ..... 8
Children's Center ..... 8
Boling University Center ..... 9
Student Success Center ..... 9
Testing Center. ..... 9
Career Planning and Development ..... 9
Student Life and Multicultural Affairs ..... 10
Automobile Regulations for Student Vehicles. 12
Cooperative Education Program ..... 12
Veterans Services ..... 13
Intercollegiate Athletics ..... 14
ROTC ..... 14
Student Publications ..... 15
Inclement Weather ..... 15
Undergraduate Admission Procedures and Requirements ..... 17
Types of Admission ..... 19
Academic Fresh Start ..... 23
Residency Regulations ..... 24
Orientation, Enrollment and First-Year Initiative ..... 26
Mandatory Placement ..... 29
Academic Advising ..... 30
Course Loads ..... 31
Fees, Expenses, Financial Assistance and Scholarships ..... 32
Refunds ..... 36
Grants ..... 43
Loans ..... 44
Federal Work-Study Program. ..... 44
Veteran Dependent Fee Waiver ..... 45
Housing and Residence Hall Information. ..... 46
Living-Learning Communities. ..... 48
Traditional Apartments ..... 48
Reservations for Housing ..... 48
Living Off Campus ..... 48
Dining Services ..... 49
Educational Outreach ..... 52
Honors Programs ..... 56
General Requirements for a Bachelor's Degree. ..... 61
Credit Hours, Grades, Grade Point Averages and Examinations ..... 68
Other Academic Matters ..... 70
Transcripts of Records ..... 74
Academic Continuation. ..... 74
Drop, Add and Withdrawal from the University ..... 75
FERPA ..... 76
EEO Statement ..... 76
Undergraduate Degrees and Specialized Programs ..... 78
Bachelor of Arts General Education Requirements ..... 80
Bachelor of Science General Education Requirements. ..... 81
College of Agriculture and Applied Sciences ..... 85
Department of Agriculture, Geosciences, and Natural Resources ..... 88
Department of Family and Consumer Sciences ..... 120
Department of Military Science and Leadership ..... 135
College of Business and Global Affairs ..... 140
Department of Accounting, Finance, Economics, and Political Science ..... 150
Department of Management, Marketing, and Information Systems ..... 164
Center for International Education. ..... 171
College of Education, Health, and
Behavioral Sciences ..... 172
Department of Behavioral Sciences. ..... 179
Department of Educational Studies ..... 193
Department of Health and Human Performance ..... 215
Department of Nursing ..... 226
Department of Psychology ..... 234
Office of Interdisciplinary Studies ..... 237
College of Engineering and Natural Sciences ..... 239
Pre-Professional Health Sciences. ..... 241
Department of Biological Sciences. ..... 262
Department of Chemistry and Physics ..... 268
Department of Computer Science ..... 275
Department of Engineering. ..... 279
Department of Mathematics and Statistics. ..... 291
College of Humanities and Fine Arts. ..... 300
Department of Communications ..... 302
Department of English and Modern Foreign ..... 308
Department of History and Philosophy ..... 318
Department of Music ..... 325
Department of Visual and Theatre Arts ..... 344
Course Descriptions ..... 352
Graduate Programs. ..... 538
Graduate Admission Procedures and Requirements ..... 540
Department of Agriculture, Geosciences, and Natural Resources ..... 546
Department of Family and Consumer Sciences ..... 547
College of Business and Global Affairs ..... 548
College of Education, Health, and Behavioral Sciences ..... 550
Department of Communications ..... 552
Academic Regulations ..... 554
Financial Information ..... 559
General Requirements for Graduate Degrees ..... 563
Department of Agriculture, Geosciences, and Natural Resources ..... 567
Department of Family and Consumer Sciences. ..... 570
College of Business and Global Affairs ..... 572
College of Education, Health, and Behavioral Sciences ..... 574
Department of Communications ..... 585
Board, Faculty, and Staff. ..... 588
The University of Tennessee Board of Trustees ..... 589
The University of Tennessee System Administrative Officers ..... 590
The University of Tennessee at Martin
Administrative Units and Positions. ..... 590
UT Martin Colleges and Departments ..... 593
Faculty and Staff. ..... 594
Glossary. ..... 613
Index ..... 616

## Degrees, Majors and Concentrations/Options

Key:

| Degree <br> Major <br> Concentration/ Option |  |  |
| :---: | :---: | :---: |
| BA |  | Public Administration |
| Communications |  | Psychology |
| Broadcasting | BA Music | Sociology |
| Media Design | Music |  |
| News Editorial |  |  |
| Public Relations | BM | BS Agricultural Business |
| English | Music | Agricultural Business |
| Legal Studies 3+3 | Music Education | Agribusiness |
| Literature <br> Secondary English Education | Performance | Farm \& Ranch Management Veterinary Tecbnology \& Man- |
| Writing | BS | agement |
| International Studies | Biology |  |
| International Business \& Development | Cell \& Molecular Biology Ecology \& Environmental Biol- | BS Agriculture <br> General Agriculture |
| International Diplomacy $\mathcal{E}$ Strategy | ogy <br> Organismal Biology | Agricultural Engineering Technology |
| International Diversity \& Multi- | Chemistry | Agricultural Science |
| culturalism | Communications | Animal Science |
| Mathematics | Broadcasting | Plant \& Soil Science |
| General Mathematics \& Statistics | Media Design |  |
| Mathematics | News Editorial |  |
| Secondary Mathematics | Public Relations | Administration |
| Statistics | Computer Science | Accounting |
| Philosophy | Data Science | Economics |
| Political Science | Digital Hardware \& Embedded | Economics |
| General | Systems | General Business |
| International Security Studies | Software \& Systems | International Business |
| Legal Studies 3+3 | Geoscience | Finance |
| Public Administration | Geography | Information Systems |
| Psychology | Geology | Business Communication |
| Sociology | Meteorology | Management Information |
| Spanish | History | Systems |
|  | Mathematics | Management |
| BFA | General Mathematics \& Statistics | Management |
| Fine and Performing Arts | Mathematics | Sport Business |
| Studio/Visual Art, Graphic | Secondary Mathematics Statistics | Marketing |
| Design, Theatre, Teaching/Art Education, Dance Education | Political Science <br> General International Security Studies | BS Chemistry <br> Chemistry |

BS Criminal Justice
Criminal Justice
Corrections
Courts and Law
Forensics
Generalist
Law Enforcement
BS Education
Integrated Studies
Pre K-3 Licensure
K-5 Licensure
6-8 Licensure
Special Education Interventionist K-8
Secondary Education
Secondary Biology
Secondary Business
Secondary Chemistry
Sec. Earth \& Space Science
Secondary Economics
Secondary English
Secondary French
Secondary Geography
Secondary Government
Secondary History
Secondary Mathematics
Secondary Spanish
Special Education Interventionist 6-12

BS Engineering
Engineering
Civil
Electrical
Industrial
Manufacturing
Mechanical
Mechatronics

BS Family \& Consumer Sciences
Family \& Consumer Sciences
Child \& Family Studies
Dietetics
Family \& Consumer Sciences
Education
Fashion Merchandising
Food and Nutrition
Gerontology
Hospitality \& Food Service Management

BS Health \& Human
Performance
Health \& Human Performance
Exercise Science \& Wellness
Human Performance
Licensure K-12
Public Health
BS Natural Resources
Management
Natural Resources Management
Environmental Management
Park Administration
Soil \& Water Conservation
Wildlife \& Fisheries Biology

## BS Nursing

Nursing
BS Social Work
Social Work

## BIS

Interdisciplinary Studies (Individualized)

MS Agriculture \&
Natural Resources
Agriculture \& Natural Resources Agribusiness \& Risk Management
Natural Resources Systems Management
Systems Science in Agriculture

## MS Family \& Consumer

Sciences
Family \& Consumer Sciences
Dietetics
General

## MBA

Business Administration
General Business
Agricultural

## MS Education

Counseling
Clinical Mental Health
Counseling Addictions
School
Student Affairs \& College Counseling
Instructional Leadership
Higher Education Leadership
Teaching
Curriculum \& Instruction
Initial Licensure (Elementary)
Initial Licensure (Secondary)
Initial Licensure K-8 (Special
Education Interventionist
Initial Licensure K-12 (Library
Service)
Interdisciplinary
Literacy
Special Education

## MA Strategic

Communication
Strategic Communication

## General Information

The University of Tennessee at Martin is a primary campus of The University of Tennessee system. As such, UT Martin reflects the solid traditions of excellence that have earned the UT system its outstanding reputation.

## Mission

The University of Tennessee at Martin educates and engages responsible citizens to lead and serve in a diverse world.

## Values

UT Martin values:

## ACADEMIC PROGRAM EXCELLENCE

UT Martin embraces the critical role faculty play in developing and delivering an academically challenging curriculum, advising and mentoring students and participating in scholarly activities.

## STUDENT EXPERIENCE AND SUCCESS

UT Martin is committed to providing a learning environment that encourages degree completion as well as the personal and professional development of our students.

## INCLUSION

UT Martin is committed to creating a culture of belonging and a safe environment for all students, faculty, staff and visitors to the campus.

## ADVOCACY AND SERVICE

UT Martin serves as an educational and cultural leader in West Tennessee, and we strive to partner with educational institutions, community leaders, government entities, business and industry to enhance the quality of life in the region.

## History

Higher education began on The University of Tennessee at Martin campus as Hall-Moody Institute, which was established by the Baptists of Martin in 1900. The property was acquired by The University of Tennessee in 1927 and UT Junior College was established. UT Junior College became a senior college in 1951. Named "The University of Tennessee Martin Branch," it offered bachelor's degree programs in agriculture and home economics. In 1967, the institution officially became The University of Tennessee at Martin and since that time has grown to offer more than 100 different program areas involving undergraduate and graduate levels of study.

## Location

UT Martin is situated in Northwest Tennessee, about 125 miles northeast of Memphis and 150 miles northwest of Nashville and within 50 miles of many popular recreation areas. Tennessee's only natural lake, scenic Reelfoot Lake, offers opportunities for fishing, hiking and other nature experiences. Kentucky Lake on the Tennessee River, and its Land Between the Lakes National Recreation area, offer opportunities for camping, fishing, hiking and water sports. Natchez Trace State Park, Shiloh National Cemetery and Ft. Donelson National Monument are also within easy driving distance.

## Facilities

UT Martin features 48 academic and support buildings, a spacious 320 -acre main campus, and 680 acres of agricultural land that serve as a research and demonstration operation. University facilities support UT

Martin's excellent faculty, Honors Programs, Center for International Education, Student Success Center, OVC Athletics and Campus Recreation program. Beyond the main campus, UT Martin extends its educational reach through five centers located in Jackson, Parsons, Selmer, Somerville and Ripley.

## Academic Programs

UT Martin offers 18 baccalaureate degree programs in more than 100 specialized fields. Master's degrees are offered in business administration, educational leadership, counseling, teacher education, agriculture and natural resources, family and consumer sciences, and strategic communication.

## National Accreditations

The University of Tennessee at Martin is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor's and master's degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-6794500 for questions about the accreditation of the University of Tennessee at Martin.

The University of Tennessee at Martin places great importance on achieving accreditation for eligible academic programs from their appropriate governing bodies. These programs are recognized as maintaining high standards that qualify graduates for the best job opportunities. UT Martin holds accreditation from the following agencies:
-the Accreditation Commission for Education in Nursing (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, telephone 404-975-5000; BS Nursing)

- the Accreditation Council for Education in Nutrition and Dietetics, (120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, telephone 800-877-1600 ext. 5400; BS didactic program in dietetics; MS dietetic internship)
- the Accrediting Board for Engineering and Technology-Engineering Accreditation Commission (http:// www.abet.org) B.S. in computer science and B.S. in engineering.
- the Accrediting Council on Education in Journalism and Mass Communications (1435 Jayhawk Boulevard, Lawrence, KS 66045-7575, telephone 785-864-3973; BS and BA, Communications major)
- the American Chemical Society (1155 Sixteenth Street, NW, Washington, DC 20036, telephone 202-8724589; BS Chemistry)
- the Association to Advance Collegiate Schools of Business, AACSB International (777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602-5730, telephone 813-769-6500; BSBA, majors in Accounting, Economics, Finance, Information Systems, Management, Marketing, MBA)
- the Council for Accreditation of the American Association of Family and Consumer Sciences ( 400 North Columbus Street, Suite 202, Alexandria, VA 22314, telephone 703-706-4600; BS Family and Consumer Sciences)
-the Council for the Accreditation of Educator Preparation (1140 19th Street NW, Suite 400, Washington, DC 20036, telephone 202-223-0077; BS, teacher licensure; MS, initial licensure, school counseling, and educational leadership).
- the Council on Social Work Education (1701 Duke Street, Suite 200, Alexandria, VA 22314, telephone 703-683-8080; BS Social Work)
- the National Association of Schools of Music (11250 Roger Bacon Drive, Suite 21, Reston, VA 201905248, telephone 703-437-0700; BM, BAM)
- the American Veterinary Medical Association Committee on Veterinary Technician Education and Activities (www.avma.org; Veterinary Health Technology Program)


## The Paul Meek Library

In a world that's information rich, the Paul Meek Library (PML) provides resources, services, and expertise to make your time at UTM personally enjoyable and academically fulfilling. PML is a Library Without Walls providing access by chat, telephone, on-site, or online anytime...day, night, or weekends.

## The Library is:

## A Gateway to a World of Information and Knowledge

Library resources include a full complement of materials in a variety of formats including print, non-print, electronic, and online materials. Databases supporting study and research in subject disciplines represent over 25,000 scholarly journals and information sources. The library's website (www.utm.edu/library) provides easy access for faculty and students (both on and off campus) to connect to electronic books, search full-text databases, renew checked-out items, or request materials from other libraries.

PML is a selective government documents depository and a Tennessee State Data Center affiliate featuring an extensive collection of both print and electronic materials from the state and federal governments.

The West Tennessee Heritage Study Center Library, located adjacent to the Alliene and Jimmie Corbitt Special Collections area, features Tennessee regional history and genealogical resources and serves as a local and regional historical community asset. Other unique library collections within Special Collections include the Holland McCombs collection (journalistic investigation of the John F. Kennedy assassination), Wintfred L. Smith Reelfoot Lake collection (ecological/biological materials), papers of Congressman Ed Jones and John Tanner, as well as the legislative papers of Governor Ned Ray McWherter.

## An Intellectual Community Gathering Place

The Meek Library offers many opportunities for members of the UTM community to meet, greet, and work with each other in both formal and informal settings. Traditional study areas are located throughout the building including a variety of group and individual study areas. A leisure reading area features a fireplace and is located adjacent to a coffee bar. Comfortable furniture is mixed with study carrels and tables providing both quiet nooks and more public communal spaces where students, faculty, and staff can pursue scholarly research, write, study, or just catch up on the day's activities with friends or colleagues.

## An Active Partner in the Teaching-Learning Process

You'll find librarians partnering with faculty members in the classroom, providing resources and expertise in support of instructional activities, working one-on-one with information seekers, serving collaboratively as research coaches, and assisting faculty and staff with publications and research projects. Paul Meek library faculty continues to explore dynamic instructional roles which are student centric and actively supporting those who teach and those who learn.

## A Learning Laboratory

The Library supports and hosts a variety of teaching/learning venues which offer a wide selection of educational opportunities. The Steven E. Rogers Media Center houses non-print media materials, K-12 teaching aids, and educational/classroom supplies. The Center offers two fully equipped media classrooms as well as individual multi-media workstations for students who wish to produce, view or listen to material either individually or in groups. The J. Houston Gordon Museum, located within Special Collections' Reading Room, provides UT Martin and the community with diverse and interesting programs and events. It serves as an
exhibit venue for local and traveling exhibits of fine art, history and culture, the sciences and natural history and features. The Library also includes on-site replicas on Congressman Ed Jones' and Governor Ned Ray McWherter's political offices.

Throughout the facility, computer labs and individual computer workstations provide opportunities to connect to the world or work on individual projects and activities. Public scanners and other resources are also available for use by library patrons.

The Paul Meek Library will keep you connected to a world of knowledge and actively assist in your academic success.

## Information Technology Services

The Office of Information Technology Services provides high-quality information technology and communications resources and services through shared resources, common infrastructure and common functions in support of the administrative and academic activities of UT Martin. The services provided by Information Technology Services are in place to provide a flexible infrastructure to meet the rapidly changing needs for instruction, all types of learning, research and administrative functions.

- UT Martin's current recommended student computer configuration is available on the Web site at http://www.utm.edu/departments/help/recommended.php.


## Online Services Available 24 Hours from Anywhere, Anytime

- Use the myUTMartin portal for easy access to online resources.
- Banner Self-Service is the online resource used to:
- Register for classes, check grades, pay fees, view your unofficial transcript, or order textbooks online
- Apply, view, accept Financial Aid, and apply for book loans and computer loans if you have excess Financial Aid
- Put money on your Skyhawk Card, apply for electronic refunds, or set up tuition payments
- See how changing majors impacts your degree requirements on DegreeWorks


## Residence Halls

- High speed internet access and low cost long distance and voice mail services
- Bring your TV with a QAM digital tuner or a QAM digital converter box to view our 72 channel cable TV lineup which includes 4 premium movie channels and many channels in HD
- Wired and wireless network in all campus housing


## Security

- Sign up through the Banner Self-Service to receive a TXT message for emergency notifications
- Anti-virus software required
- Network authentication required for the wired and wireless networks.


## Classrooms

- Canvas, the campus online course management system, provides an online interface between faculty and students for specific course assignments, documents, and activities
- One fourth of the classroom technology is replaced each year
- All classrooms are equipped with multi-media learning systems
- One fourth of the faculty members receive new computers each year


## State of the Art Technology

- Office 2016 and Windows 10 on lab and faculty computers
- One fourth of the computers in all labs are replaced each year
- Google Apps for Education accounts for all students with web access, e-mail, calendars, task management, collaboration and much more
- Microsoft Office 365 (for Mac and PC) available FREE for students!
- File storage space on Google Drive and Microsoft One Drive
- 24-hour access to select labs
- Wireless notebooks available for checkout in the Paul Meek Library
- Color printers and scanners
- Multi-media stations available in the Paul Meek Library to produce all types of digital media for assignments and portfolios
- Interactive Video Network with 5 classrooms on the Martin campus and connections to classrooms in Camden, Gleason, Jackson, Lake County, Memphis, Parsons, Ripley, Selmer, and Somerville for teaching courses through the video network


## Network

- 2.75 gigabit/second connection to the Internet
- Wireless $802.11 \mathrm{~b} / \mathrm{g} / \mathrm{n}$ access in all campus buildings


## Distance Learning Classrooms

- The Office of Information Technology Services is responsible for the technical aspects of the UTM Distance Learning Facilities. There are two classrooms in Gooch Hall, one in the Humanities Building, one in the Business and Public Affairs Building, two at the Somerville center, three at the Selmer center, three at the Parsons center, three at the Ripley center, and one at the Jackson center. These facilities are run by the Office of Educational Outreach. This allows the UTM community to use real-time, compressed video teleconferencing as a part of classes and for academic or administrative meetings.


## Assistance

## Technology Helpdesk

- Located in 247 Paul Meek Library
- Walk-in assistance during Paul Meek Library hours
- Submit a Request online: http://www.utm.edu/helpdesk


## Helpdesk hours

Monday-Thursday.: $7 \mathrm{am}-9 \mathrm{pm}$
Friday: $7 \mathrm{am}-6 \mathrm{pm}$
Saturday: $12 \mathrm{pm}-5 \mathrm{pm}$

Sunday: $12 \mathrm{pm}-9 \mathrm{pm}$
Call 731.881.7900

## Helpdesk Services

- Password resets
- Troubleshooting login problems
- Email Assistance
- Virus and Spyware Removal
- UT Martin Software Installation Assistance
- Troubleshooting computer hardware issues
- Connecting Phone/Computer/Tablet to the wifi
- VPN access


## The UT Martin Computer Store

Students can take advantage of UT volume discounts on hardware, software and accessories through the Computer Store, located in the Boling University Center. Information Technology Services also services the computers that are sold through the Computer Store.

## Skyhawk Printing and Mail Services

A complete host of mail services are provided. In addition, assistance with design, printing, binding, laminating and much more is provided. Skyhawk Printing and Mail Services is located in the basement of Clement Hall.

## Services for Students

The Division of Student Affairs is focused on facilitating student success, promoting student well-being, guiding student development, and providing high-quality student experiences. As the primary advocate for students, the division embraces traditions as well as creates opportunities for new programs and services. Collectively, the offices ensure that students experience a vibrant, living/learning campus community.

The division consists of eight functional areas that include:

- campus recreation and intramural sports
- dining services
- housing and residential life
- student conduct
- student health and counseling services
- career planning and development
- student life and multicultural affair
- disability services and testing (ADD)

Student life and Multicultural Affairs provides oversight for student clubs and organizations, Greek life, multicultural programming and student involvement. The staffs of each area are responsible for providing
activities, support services, and educational programs that increase the students' chances for success.
The Division of Academic Affairs coordinates programs and services related to academic advising and learning assistance. Professors who are assigned as advisers provide academic counseling. Besides the many kinds of assistance provided by academic departments and individual faculty and staff members, UT Martin offers coordinated learning support through the Student Success Center.

## Services for Students with Disabilities

The University of Tennessee provides reasonable accommodations (academic adjustments and auxiliary aids) to ensure equal access to educational content and university programs for students with disabilities. For more information, contact the Disability Services office in the 206 Clement Hall, 731-881-7195.

## Bookstore

Housed in the Boling University Center, the University Bookstore provides a convenient place for the purchase of books, emblematic apparel, and gifts and other supplies students might need. There are several options for textbooks: new, used, rental, and digital. The store is modern and completely self-service.

Students can sell used textbooks back to the bookstore. For specific repurchase guidelines, contact the bookstore.

Hours of service are from 7:30 a.m. to 4:30 p.m., Monday through Friday, and from 9 a.m. to noon on Saturdays (not open on Saturdays during the summer).

## Campus Recreation

The Office of Campus Recreation provides program opportunities for the entire university community to maintain a healthier lifestyle. The program's mission is to enhance student learning through participation in a variety of recreational and leisure activities and programs. Our primary goals include: providing participation in a variety of activities; helping individuals develop and maintain a positive self-image; aiding in recruitment and retention of students, faculty and staff; coordinating use of recreational facilities with various administrative units; providing extracurricular education opportunities that promote leadership positions and contributing positively to institutional relations through high-quality recreational sports programming.

The Student Recreation Center, located near the fitness trail, offers an attractive environment for students to congregate, exercise and play sports while simultaneously providing a wonderful sense of community.

Recreational and Leisure Opportunities include:

- intramural sports
- informal recreation
- fitness
- aquatics
- special events
- outdoor and indoor recreation
- sports clubs
- parlor games

For details go to http://www.utm.edu/departments/campusrec/index.php or contact the Office of Campus Recreation at 731-881-7745.

## Student Employment Services

The Student Employment Program is an opportunity for students to find part-time and temporary on- and offcampus employment while enrolled at UT Martin. Students are allowed to participate free of charge and regardless of their financial needs.

The office is located in the Office of Financial Aid and Scholarships. For additional information, call 731-8817657. A current listing of available on-campus positions can be found here: http://www.utm.edu/departments/ personnel/employment.php

## Student Health and Counseling Services

Student Health and Counseling Services is committed to delivering professional mental and physical health services to a diverse student body. We encourage you to view your health holistically rather than separating your mental health from your physical health. Our mission is to assist students in achieving and maintaining wellness by providing medical and counseling services that address the unique needs of college students. We encourage students to take responsibility for their health and to become active participants in the process.

The office is located behind Cooper Hall and has a staff of licensed master social workers, nurses, and certified family nurse practitioners with an M.D. consultant. SHCS is open Monday to Friday 7:30 a.m. to 5:00 p.m. The office is closed during all university administrative closings. The family nurse practitioners and counselors are available by appointment. Daily walk-in time for counseling is also available.

To be eligible for services, one must be enrolled in classes during that semester. Health-related services include general outpatient care for acute illnesses, first aid, wound care, limited lab and diagnostic services, well women exams, contraception counseling and management, STD and HIV testing, and allergy shot administration. Some prescription medications can also be dispensed. Counseling related services include personal counseling, couples counseling, crisis intervention, and substance abuse support services. Students typically seek help for relationship problems, academic concerns, stress and time management, or mood issues such as anxiety or depression.

There are no charges for a health office visit or counseling session; however, minimal fees are charged for prescription medications and lab tests. All well women care, contraception services and STD screenings and treatment are free of charge. West Tennessee Healthcare Volunteer Hospital is located near the university and is available for medical and surgical services and emergencies, but the student must pay his/her own hospital expenses.
Students are encouraged to carry health insurance to cover illnesses and accidents that may occur while they are enrolled. Information about insurance coverage available to students at low costs can be obtained at Student Health and Counseling Services.

For additional information, call 731-881-7750.

## Margaret N. Perry Children's Center

The Margaret N. Perry Children's Center provides quality care for children of UT Martin students, faculty, staff and community members. Student-parents are given first priority, and children with special needs are included at the center. The state-of-the-art facility is licensed and provides part-day and full-day care for children ages six weeks to 12 years of age.

The Children's Center also serves as a lab setting for students in many of UT Martin's academic departments, including Family and Consumer Sciences as well as Educational Studies. Students observe children's behavior and gain practical experience in the planning and implementation of activities. Professional staff supervise these students as they plan developmentally appropriate activities and curricula. The academic components
are supervised by the director in cooperation with other UT Martin faculty. The Children's Center is administered through the Department of Family and Consumer Sciences. Information about fees and services may be obtained by calling the director at 731-881-7715.

## University Center

The Boling University Center is the student service and activity center for the campus community. These services Computer Store, Sodexo Dining Services, University Bookstore, Student Government Association, Black Student Association, Multicultural Affairs, Welcome Center, and Student Life Offices (Greek Life, Student Organizations, Student Government, Student Activities, and University Center reservations/administration), gameroom, automated teller machines.

The Boling University Center also has multipurpose meeting facilities that can accommodate meetings of groups from six to 600 . Special meeting spaces include a 500 -seat auditorium/theater, 70 -seat tiered "classroom," and a ballroom. All spaces feature access to wireless data service. Catering is available from Sodexo Services (the university's food service provider).

The Boling University Center is located in the center of campus in close proximity to the residential and academic areas of campus and is available for use by students and the campus community.

For more information or to inquire about use of facilities, call 731-881-7755.

## Student Success Center (SSC)

UT Martin coordinates its learning support activities through the Student Success Center, centrally located in Clement Hall. The SSC offers assistance in the areas of success counseling, supplemental instruction, tutoring, and success strategies courses. The full range of services may be viewed at http://www.utm.edu/success. Our staff is trained to work with all students who have a question, need guidance, or who might need help transitioning to college. Freshmen on the main campus will meet with their Success Counselor a minimum of two times per semester. The SSC offers a wide variety of services, including a walk-in STEM tutoring lab located in room 120 in the Library media center. To learn more, visit the Student Success Center in Clement Hall, or call 731-881-7744. Students may also find assistance online at http://www.utm.edu/success/ or by emailing success@utm.edu.

## Testing Center

The Testing Services office offers a variety of exams for students, staff, and the greater community. These include prior learning assessment such as CLEP (College-Level Examination Program), DSST (DANTES Subject Standardized Tests) exams, as well as the HiSET (high school equivalency exam), IT certification exams, and the ACT Residual. This office also administers the senior exit and most major field exams, which all UTM students must take in order to graduate. Students seeking to further their education beyond undergraduate level may also elect to take various graduate aptitude tests such as the GMAT, GRE, MCAT, PRAXIS, NCEES, and MAT through the Testing Services office. For more testing information, contact the testing office in 211 Clement Hall or call 731-881-7727.

## Career Planning and Development

The Office of Career Planning and Development (CPAD) is committed to the career development of every UT Martin student. The CPAD team provides a wide range of individual and group services: career exploration and preparation workshops, outreach activities, career counseling/coaching, job and internship opportunities, professional clothes closet, industry-specific information, networking avenues and assistance with gradu-
ate or professional school. In addition, our counselors assist students with resume and cover letter development, mock interviews, and all aspects of the job search process. The full range of services may be viewed at http://www.utm.edu/careers.

Students who are undecided on a major, exploring options or considering changing their major can receive the tools for self-exploration and career paths from our career counselors. CPAD offers TypeFocus, a career assessment, at no cost for students trying to find the best major or career fit for their values, interests and personality. In addition, we also offer the Myers-Briggs Type Indicator and Strong Interest Inventory assessments at a small fee for a more in-depth assessment of personality and interests including individual interpretation of results by qualified counselors. Students may schedule appointments with CPAD staff to talk about any phase of career exploration and development. Appointments can be made through Handshake, in person or by calling. To learn more about CPAD services, students may stop by our office at 210 Boling University Center from 8 a.m. - 5 p.m., Mon - Fri, or call 731-881-7712.

## Student Life and Multicultural Affairs

The Office of Student Life and Multicultural Affairs offers a host of opportunities for students to become actively involved in the university community and to enrich their collegiate experience. The Office of Student Life and Multicultural Affairs (OSMLA)works to support more than 150 student organizations including professional organizations, honorary societies, service organizations, special-interest groups, and social Greek letter organizations (fraternities and sororities). OSMLA coordinates a number of special activities and events throughout the academic year in conjunction with various student organizations and university departments. In addition, the office works closely with the Office of Campus Recreation in support of the intramural sports, sports clubs, and outdoor recreation programs. Lastly, the OSMLA provides advisement for the Student Activities Council and the Multicultural Affairs Council. These councils provide student activities (both social and educational) for the campus and produces in excess of 105 events annually for students.

For more information, call the Office of Student Life at 731-881-7755 or visit the Web site at www.utm.edu/ departments/studentlife.

## Organizational Opportunities at UT Martin

Academic Organizations - UT Martin has more than 50 student organizations that represent different academic disciplines or career paths. These organizations offer opportunities for students to interact with professionals in their given fields and with students with similar professional interests. Each year, several professional student organizations at UT Martin receive national recognition and honors.

Flight Crew - Flight Crew is charged with providing student entertainment and educational activities for the campus. The programming offered encompasses various social events as well as multicultural events for the entire campus. Participation on Flight Crew is open to all students. There is an application and interview process to be a member of Flight Crew. For more information, contact the Office of Student Life and Multicultural Affairs.

Honorary Organizations - UT Martin hosts several honorary societies that recognize students for significant academic accomplishment and exceptional leadership ability. Phi Kappa Phi is the flagship honorary organization at UT Martin.

Multicultural Organizations - UT Martin is home to a diverse student population and a wide variety of organizations for many different demographics. The organizations serve a wide variety of multicultural areas including race, ethnicity, and religion, to name a few, to provide support and a voice for students.

Professional Organizations - One of the major goals at UT Martin is to help students graduate and become a high-functioning member of society. Professional organizations are a combination of academic and
honors organizations helping student connect to their future careers.
Service Organizations - UT Martin is home to several service-oriented organizations. During the academic year, these organizations engage in community service and philanthropic projects that contribute to the quality of life throughout Northwest Tennessee.

Special-Interest Organizations - Ranging from the Young Republicans Club to the Skyhawk Veteran Association, UT Martin hosts several student organizations that focus on the specific interests of the UT Martin community.

Sororities and Fraternities - UT Martin is home to 21 social, Greek-lettered fraternities and sororities. The fraternity and sorority community offers a unique balance of leadership, academics, philanthropy/service, and social opportunities that enhance the collegiate experience.

For more information on on what organizations UTM hosts or how to join, visit www.utm.edu/departments/ greeklife

Student Government Association (SGA) - The Student Government Association provides opportunities for students to participate in the governance of the university. When a student enrolls at UT Martin, they become' eligible to participate in Student Government. Executive and Senate positions are elected on an annual basis. Representatives of the SGA, along with members of the faculty, serve on major campus committees. Visit www.utm.edu/departments/sga/ for information about SGA.

## Fine and Performing Arts Opportunities

Accompanying offers opportunities for performance with vocal and instrumental soloists as well as with instrumental ensembles. One credit hour. Opportunity to accompany on a non-credit basis is also available.

Concert Jazz Band rehearses throughout the academic year and is open to all students by audition. A variety of jazz, rock, and popular music styles are performed for special events on and off campus, including concerts for area schools. One credit hour.

Dance Ensemble is an auditioned group that performs a variety of dance styles. Student productions in the spring semester provide opportunities for dancing, choreography, stage-managing, lighting, and designing sets and costumes for dance. Two credit hours.

Instrumental Ensembles include brass, woodwind and percussion ensembles and are open to all students by audition. These groups perform in chamber music concerts and for other occasions. One credit hour each.

Lyric Opera Theatre presents at least one staged production during the year, usually in the spring semester. These performances include works from the standard operatic repertoire, as well as contemporary operas. Scenes from operas are also presented. One credit hour.

Music Recitals - Faculty recitals are presented each year by the Department of Music. Junior and senior recitals are given by music majors, and students perform in weekly recitals on Wednesday afternoons. All recitals are open to the public.

New Pacer Singers is an auditioned chamber choir of students chosen for their singing ability. One credit hour. New Pacer Singers scholarships are available by audition.

Pep Band is organized to perform for basketball games and pep rallies. Scholarships are available by audition.

[^1]Private Instruction in Music - Qualified students from all curricula may elect to take individual instruction in applied music in the Department of Music for credit on a "space available" basis.

Aviators Athletic Band is organized fall semester and is open to university students who have a background in instrumental music. The band performs for football games, parades, and exhibition performances at area marching band contests. Band camp is held for one week prior to the start of classes in the fall semester. Aviators Athletic Band carries one credit hour. Scholarships are available.

University Singers is an auditioned choir of 40 to 50 voices that performs both sacred and secular music from all periods of history. The choir meets three times each week. One credit hour.

Vanguard Theatre presents two or three major theatrical productions and a series of one-act plays during the academic year. These provide the opportunity for students to participate in acting, stage-managing, and lighting, as well as designing and constructing stage sets and costumes. In addition, a series of original plays written by students in the playwriting classes is presented in the spring. These performances are directed by students from directing classes. Thus, students work together as playwrights, directors and actors toward the realization of a script.

Wind Ensemble and Concert Band are open to all students with instrumental music experience. These bands perform a variety of wind band repertoire during the spring semester. Band scholarships are available by audition. One credit hour each.

## Automobile Regulations for Student Vehicles

Students who operate vehicles on campus are required to register their vehicles with the Office of Public Safety at registration time or within 24 hours of enrollment or acquiring a vehicle. Students are expected to operate their vehicles in compliance with the current Parking and Traffic Regulations that are available online at the UT Martin Public Safety Web site under parking. One (1) vehicle registration decal may be purchased at a fee of $\$ 85$ per year and is to be displayed inside the front windshield on the front driver's side. Vehicle registration decals are transferable and can be moved from vehicle to vehicle. Disabled students will be given special consideration upon recommendation of a physician. Contact the Traffic Office in Crisp Hall for assistance.

## Cooperative Education Program

Cooperative Education is the integration of classroom theory with practical experience by means of alternating specific periods of attendance at the university with specific periods of employment.

The following factors are used to adhere to this definition: (1) The student's work should be related to his/ her field of study and individual interests within the field. (2) The employment must be considered to be regular, continuing and an essential element in the educational process. (3) The working experience will ideally increase in difficulty and responsibility as the student progresses through the academic curriculum.

Any UT Martin instructional unit that develops an academic program, which permits students to rotate the semesters at the university and the periods of employment, may participate.

## Academic Credit

Cooperative Education students enroll in (Academic Major) 201C-202C-203C-204C-205C-206C (1, 1, 1, 1, 1, 1) Cooperative Education Experience and receive one semester hour credit per work period. Academic qualifications and career training positions, as available, are determined by the coordinator of Career Exploration or the academic adviser from the participating instructional unit who assigns a Pass (P) or Fail (F) grade for the courses. Normally, failing grades will not be given except in cases where students have been dismissed by their employers for unsatisfactory performance or students leave their jobs prior to completion of a work pe-
riod without proper approval from their academic adviser or the coordinator of Career Exploration. In order to receive credit, students must submit a work report and employers are requested to submit an Employer's Rating Form for each work period.

Students majoring in programs which require, or accept, internship credit for professional experience may elect to enroll in (Academic Major) 301C-302C (2-6, 2-6) Cooperative Education and Internship Experience and receive two to six semester hours credit per work period. To receive this experience, approval of the academic adviser and the coordinator of Career Exploration is required. To enroll, students must have at least junior status. An academic adviser from the participating instructional unit is assigned to help coordinate the internship experience and assign letter grades. The students are required to maintain all work reports necessary to satisfy the cooperative education requirements plus any additional assignments.

No more than 12 total credit hours for the entire Cooperative Education Experience and/or Cooperative Education and Internship Experience may be earned. Internship credit hours count toward the requirements of the baccalaureate degree and are not additive. The specific instructional units under which the students participate in the program determine the degree requirements for which the work experience substitutes.

## Student Status

To be eligible for the Cooperative Education program, students must have completed the freshman year and have a 2.3 GPA.

Student fees are assessed according to the current per semester hour rate as shown under Financial Information.

## Veterans Services

The University of Tennessee at Martin is fully approved by the State Approving Agency to provide training under the Vocational Rehabilitation and War Orphans' Assistance programs, the Veterans Readjustment Benefits Act of 1966 and the Veterans Educational Assistance Program.
Educational benefits counseling service for veterans is available in the Office of Veterans Services in 125 Gooch Hall. All students planning to enter under provisions of a veterans' educational program are urged to apply to the appropriate agency for necessary authorization well in advance of their registration date. Ten semester hours of credit will be given to students with a DD214 or DD295 that shows successful completion of basic training. Military schooling may not duplicate these 10 semester hours of credit. The ACE Guide is used in awarding credits for military schools. Official transcripts must be sent from the service person's education office (AARTS or SMARTS transcripts are recommended) in order to receive military credit. All other residency requirements must be met. Up to 60 semester hours of military and/or examination credit may be applied toward degree requirements.

Service members, veterans and dependents of veterans who are eligible beneficiaries of U.S. Department of Veterans Affairs education benefits or other governmentally funded educational assistance, subject to the conditions and guidelines set forth in Tennessee Code Annotated 49-7-104 as amended, may elect, upon formal application, to defer payment of required tuition and fees until the final day of the term for which the deferment has been requested. Application for the deferment must be made no later than 14 days after the beginning of the term and the amount of the deferment shall not exceed the total monetary benefits to be received for the term. Students who have been granted deferments are expected to make timely payments on their outstanding tuition and fees balance once education benefits are being delivered and eligibility for such deferment shall terminate if the student fails to abide by any applicable rule or regulation, or to act in good faith in making timely payments.

UT Martin will certify only those courses which are included in the major field of study selected by the student; certification of "elective courses" will be limited to the number of elective hours permitted in the
designated major. Electives must be selected from the academic areas prescribed in the college catalog for each specified major.

The student receiving benefits must show evidence of making "satisfactory" progress toward his/her educational objective, as defined in the university catalog. Class attendance will be a major factor in determining satisfactory academic progress.
Certification will not be allowed for any course(s) previously passed (D or above), unless the catalog states a C or above is required, or any course(s) designated as "incomplete."

Tennessee Code Title 49. Education §49-7-152
a) As used in this section, "military veteran" means a person who has entered and served honorably in the United States armed forces on active duty, active national guard or active reserves.
b) A military veteran who is a current resident of this state or whose home of record for military purposes is Tennessee and who is a student at a public institution of higher education shall be allowed to register for classes prior to the general student population at any public institution of higher education. Early regis tration shall occur using the same procedure used by student athletes, disabled students and honor students, if such groups are permitted to early register.
For more information, call 731-881-1689

## Intercollegiate Athletics

The UT Martin Intercollegiate Athletics program consists of 20 teams. The department sponsors the following sports: baseball, basketball, beach volleyball, cheerleading, cross country, dance, equestrian, football, golf, rifle, rodeo, soccer, softball, tennis, track and field and volleyball.

The UT Martin Skyhawks participate in Division I of the NCAA and are members of the Ohio Valley Conference. The rodeo team competes in the Ozark Region of the National Intercollegiate Rodeo Association.

For more information, visit the official Web site for UT Martin Athletics, www.UTMSports.com.

## Opportunities in ROTC

Cadet Professional Development Training (CPDT) - Annually, the Department of Military Science and Leadership coordinates training opportunities for cadets to attend Airborne, Air Assault or Mountain Warfare School. Given the difficulty and physical rigor associated with these Army schools, opportunities are limited to cadets who are physically fit and capable of executing all course tasks. Course graduates obtain a training diploma and are eligible to wear the associated skill badge on their uniform. For more information, refer to the ROTC Web site.

Cadet Troop Leadership Training (CTLT) - CTLT is an internship program which attaches individual cadets to an active Army unit for a period of three weeks. In addition to exposing cadets to the Army, they also become familiar with the duties and responsibilities of junior officers. Cadets must complete the Cadet Leader Course at Fort Knox, Kentucky as a prerequisite to this internship.

UT Martin Rangers - The Rangers are a highly trained, elite and motivated organization under the direction of advanced-course ROTC students and are supervised by the Department of Military Science and Leadership cadre. Membership in the Rangers is limited to students who are enrolled in military science and interested in developing skills associated with patrolling, mountaineering, survival training, weapons and similar activities. Members must meet medical standards required of contracted ROTC cadets and maintain a GPA of 2.0 or higher.

ROTC Color Guard - The Color Guard presents the national colors, state flag and university flag at intercollegiate athletic, university and community events.

## Opportunities to Work on Student Publications

The Office of Student Publications, located in the Department of Communications, 305 Gooch Hall, oversees the operations of UT Martin's three primary student publications: The Pacer student newspaper, The Spirit magazine and BeanSwitch literary and visual arts magazine.

The Pacer is published in print form biweekly during the academic year and distributed free to the campus community. Subscriptions are not taken because The Pacer's website, www.thepacer.net, also is available at no charge.

The Spirit currently is available online. Older copies of The Spirit may be obtained by contacting the Department of Communications, 305 Gooch Hall, 731-881-7546.

BeanSwitch is published online and in print annually. The magazine provides a selection of poetry, fiction, non-fiction, art and photography from the university community. Copies may be obtained by contacting any staff member or the Department of English and Modern Foreign Languages at 731-881-7300. Work also may be submitted to the Department of English and Modern Foreign Languages or to the publication's editors.

To apply for paid staff positions on any of the publications, students should first contact the Office of Student Publications at 731-881-7558 or via email at tomimc@utm.edu and then be directed to the appropriate faculty adviser for each publication. The hiring process typically occurs in April or May annually.

## Inclement Weather

Students, faculty and staff should check the university's home page, e-mail, UT Martin social media, and the My UTMartin Portal for cancellations and schedule changes when inclement weather occurs. Area radio and television stations are also sources of information. UT Martin offices will be open unless announcements specifically say that all offices are closed. Students, faculty and staff should use their best judgment in deciding whether or not it is safe to travel to campus. Students should contact their instructors for more information on classes and class work. Please review the rest of this section for additional information.

Announcement Procedures:

- A decision about main campus operations will be provided to the Chief Communications Officer or designee by 5:30 a.m.
- Center directors will also contact the Chief Communications Officer or designee by 5:30 a.m. with the decision to remain open, close, or operate on an alternate schedule.
- Updates will be made first to the news headlines on the university's home page, to the My UTMartin Portal, and to official UT Martin social media. (Note: Power outages and/or technical issues can possibly delay these updates.)
- Media contacts will then be made, starting with local radio stations.
- Every effort will be made by the Office of University Relations to complete updates and media contacts by 6 a.m.
- Notifications for evening classes will be made starting at approximately 4 p.m.
- Text messages from the Department of Public Safety will only be sent to announce an unscheduled closing. (Note: These notifications only address main campus operations.)
- The automated message at 731-881-7000 will be updated, letting callers know of schedule changes at all locations.
- Television stations (WBBJ, WPSD, KFVS-12) normally do not announce openings. If UT Martin is open on a regular schedule, no information will appear on the screen or on the stations' websites.

If the main campus is officially closed, certain essential activities such as food services, physical plant, public safety, computer services, and telephone services will continue to operate. Some facilities, such as the Paul Meek Library, Student Recreation Center, and Boling University Center, will, if possible, continue to function as a service to students and faculty. When the university is officially closed, the Days of Administrative Closing Policy will apply for staff exempt and staff non-exempt employees.
In the event of inclement weather when the university remains open, all faculty, administrators and staff will be expected to make every reasonable effort to maintain their regular work schedules, but are advised to avoid undue risks in traveling. Employees who anticipate arriving late or not arriving at all should notify their immediate supervisors. Employees will have the option of charging their time off to annual leave or leave without pay.

Students will be responsible for any academic work that they miss due to absences caused by severe weather conditions. It is the individual student's responsibility to take the initiative to make up any missed class work, and it is the instructor's responsibility to provide a reasonable opportunity for students to complete assignments or examinations missed due to such absences.

## Undergraduate Admission

## Procedures and Requirements



The University of Tennessee at Martin

## Undergraduate Admission <br> Procedures and Requirements

## Destin Tucker - Director of Admissions

200 Hall-Moody Administration Building
731-881-7020
fax 731-881-7029

## Steps in Applying for Admission (Beginners and Transfers)

1. Complete the online application for admission available at www.utm.edu. If a paper application is needed, contact the Undergraduate Admissions Office at 731-881-7020.
2. A $\$ 30$ non-refundable application fee is required with application. First time freshmen and Veterans may be eligible for a fee waiver. More details at www.utm.edu/feewaiver.
3. Forward a high school transcript to the Admissions Office (including courses taken during senior year). Transfer students must have transcripts forwarded from each institution attended including high school.
4. Students who completed the GED or HiSet must have scores forwarded to the Admissions Office instead of high school transcripts.
5. First-time freshmen must have a copy of ACT (or SAT) scores forwarded to the Admissions Office (may be on high school transcript).*
6. Upon graduation, request that a final high school transcript be sent to the Admissions Office.
*Not required if applicant has been out of high school for three years or longer.

## Selective Service

Students must complete the Selective Service Draft Registration statement as a part of admission to UT Martin.

## Credit through Advanced Placement, International Baccalaureate, American Council on Education, DANTES Subject Standardized Tests, College Level Examination Program, and Proficiency Examination

A qualified applicant may gain credit hours through the following measures:

1. Advanced Placement (AP) -- Applicants who score three, four, or five on Advanced Placement may receive credit for the introductory sequence in certain disciplines (up to eight semester hours).
2. International Baccalaureate (IB) -- International Baccalaureate test scores accepted for advanced credit by the various departments at The University of Tennessee at Martin are listed below. Students who have taken tests in other areas may submit their scores to the Registrar's Office for evaluation by the appropriate departments.
For details go to http://www.utm.edu/transfertables and click on Transfer Equivalency Tables then click on CLEP/AP \& IB Placement Exams.
3. College Credit Recommendation Service, a program of the American Council on Education (ACE) -- only as approved by individual departments and degrees committees.
4. DANTES Subject Standardized Tests (DSST) program, a registered trademark of Prometric. Subject exams approved for credit by the American Council on Education.
5. College Level Examination Program (CLEP) administered by the College Entrance Examination Board. Applicants who score at or above the minimum score established by the university for credit in the Defense Activity for Nontraditional Education Support and/or College Level Examination Program will be awarded the amount of credit for general and subject exams as set by the university. In order to receive credit by DSST and/or CLEP for a specific course, a student need not register for that course. Details on tests and testing dates are available from the Testing Center in the Student Success Center, located in 210 or 211 Clement Hall. Students will receive a grade of P in these classes.
6. Proficiency Examination -- A qualified applicant may earn credit by proficiency examination upon the recommendation of the dean of his/her college and the approval of the registrar. A minimum grade of $B$ must be scored. A recording fee of $\$ 30$ per course is required. Proficiency Credit in a foreign language may be awarded. See the Department of English and Modern Foreign Languages section for further details.

Students may use a maximum of 60 credit hours earned by any combination of AP, IB, ACE, DSST, CLEP, and proficiency examination. Credits earned by examination do not count toward UT Martin hours, nor toward four-year institutional hours.

## Unit Requirements

| English | 4 units <br> Mathematics <br> 4 units (Algebra I, Algebra II, Geometry, and a fourth higher level math course; <br> OR Integrated Math I, Integrated Math II, Integrated Math III, and a fourth higher |
| :--- | :--- |
| level math course) |  |

## Types of Admission

## Regular Admission

Graduates from high schools with state accreditation may enter UT Martin with regular admission status by meeting one of the following criteria:

1. ACT Composite score of 21 (or SAT equivalent) or above and a minimum cumulative GPA of 2.70 on a 4.0 scale, OR
2. ACT Composite score of 19 (or SAT equivalent) or above and a minimum cumulative GPA of 3.00 on a 4.0 scale.

UT Martin employs a superscore policy for both ACT and SAT scores, which allows the creation of a new composite, based on the highest scores earned in parts of the same exam taken more than once. With the advent of the "new" SAT exam in March 2016, UTM has developed the following policies to accommodate the use of scores both the "new" and "old" SAT and the ACT.

## ACT

In the admission process, all scores are expressed as ACT or ACT equivalents, based on concordance tables $(2008,2016)$ developed by the College Board for SAT scores. ACT scores received from the testing company or that are part of an official high school transcript are entered in the UT Martin admissions system. If the ACT was taken more than one time, a superscore is calculated based on the highest score achieved in each of the four test areas. The optional essay is not required or used by UT Martin.

## SAT

The "old" SAT, administered before March 2016, is superscored using only the Critical Reasoning (CR) and Math (M) scores. The writing section of the "old" SAT has never been used by UT Martin as part of an applicant's test score.

The "new" SAT, administered beginning March 2016 is superscored using only the Evidence-based Reading and Writing (ERW) and Math (M) scores. The new optional essay is not required or used by UT Martin.

SAT superscores are calculated only within the "old" or "new" SAT and not between the "old" and "new." An SAT superscore will only be calculated if there are two or more "old" scores or two or more "new" scores.

## Decisions

The test score used in decisions will be the highest of (1) an ACT superscore, (2) the ACT equivalent of an "old" SAT superscore, or (3) the ACT equivalent of a "new" SAT superscore.

Graduates from high schools without state accreditation, home-school graduates, or students who did not complete high school should contact the Undergraduate Admissions Office for specific admission criteria information regarding ACT and GED or HiSet test score requirements.

An ACT score is not required if the applicant has been out of high school three years or longer. See NonTraditional Adult Admission later in this section.

## Entrance Deficiencies

Applicants must have successfully completed the required high school units listed above. Applicants from high schools which did not offer the course(s) needed to fulfill one or more entrance requirements may be admitted but must remove any deficiencies beginning with the first semester enrolled and each succeeding semester until all deficiencies are removed. All deficiencies must be removed during the first two academic years of study or 60 semester hours (whichever comes first). Applicants who graduated from high school three or more years ago are exempt (except for American History). See Non-Traditional Admission later in this section.

A transfer student may be admitted with deficiencies, but deficiencies must be removed within the deadline specified earlier in this section (see Regular Admission). Exception: the deadline will be extended until a transfer student has attempted 30 semester hours at UT Martin. The student must take the prescribed course(s) for removal of deficiency (deficiencies) each semester of enrollment, beginning with the first semester, until all deficiencies are removed.

## Concurrent/Dual Admission

A student who has completed two semesters in an accredited high school may be concurrently enrolled in the university for no more than eight semester hours per term if he/she has a minimum 3.00 GPA and the consent of his/her principal/counselor, parents and the Director of Admissions. An additional three-hour course may be taken if the student's ACT composite score is a minimum of 28 . A student admitted concurrently must meet the high school unit requirements and apply for admission to enroll as a regular student after high school graduation.

## Special Admission (Non-degree)

An applicant who is 18 years of age and whose high school class has graduated may be enrolled in classes as a special student if he/she is not seeking a degree from the university. Anyone denied degree-seeking status must wait a minimum of one full year before applying for Special Admission. A student who has previously been enrolled in the university as a regular student may not be readmitted as a special student unless he/she has already earned a bachelor's degree. In this case, he/she will be enrolled as a Post-Baccalaureate student.

Special Admission students may accumulate a maximum of 60 semester hours (including previous college work) in this manner. They may convert at any time to a degree-seeking status if they meet the ACT and High School GPA requirements in place at the time of conversion. Students who cannot meet those requirements may convert, with the approval of their academic adviser, after completing a minimum of 15 college-level semester hours at UT Martin with a cumulative UT Martin GPA of 2.00 or better. Upon conversion, students must meet all high school unit deficiencies that have not been satisfied, either in high school or through completion of the appropriate college courses.

Financial aid is not available to non-degree seeking students.

## Conditional Admission

A limited number of applicants who do not meet regular admission requirements will be considered for admission with Conditional Admission status. The transcripts of these applicants will be reviewed individually to assess their course-taking patterns. Conditional admission students may be required to enroll in Success Strategies dependent upon the first semester performance.

Students admitted with Conditional Admission status must take placement tests prior to freshman registration and will be placed in specific English, mathematics, and/or reading courses if appropriate.

## Early Admission

A student who has completed the junior year of high school with a minimum 3.50 GPA and a composite ACT score of at least 26 may be enrolled in the university with recommendation from his/her principal/counselor, the consent of his/her parents and the Director of Admissions. Deficiencies in high school unit requirements will be waived.

## Non-Traditional Adult Admission

Any applicant who has been graduated from high school for three (3) years or longer (non-traditional applicant) and has completed less than 12 hours of college-level coursework is eligible for Regular Admission if criteria is met.

If the applicant does not have an American College Test (ACT) score or other assessment to determine course level placement, the applicant may opt to begin in basic level courses or take a placement test (i.e., ACT Residual or Accuplacer) to determine appropriate level courses.

A non-traditional applicant who has not graduated from high school should contact the Undergraduate Admissions Office for specific admission criteria information regarding ACT and GED or HiSet test score requirements.

The State of Tennessee high school unit requirements are not required for non-traditional applicants, but see information regarding the American History requirement under the catalog section titled, General Requirements for a Bachelor's Degree.

## Transfer Admission

Transfer Students - Any students who have completed a minimum of 12 college-level quarter/semester
hours prior to enrollment at UT Martin must have a 2.00 GPA to be admitted to the university. If a student has not attended college for a semester or longer (excluding summer semester), the student may be admitted on academically eligible-warning status at the discretion of the Director of Admissions.

A transfer student with junior standing (minimum 60 semester hours) at the receiving institution is exempt from meeting the high school unit requirements (excluding American history). Transfer students with less than 60 semester hours who graduated from high school after 1988 are required to have the high school units in affect at the time they graduated.

A transcript from each former institution along with the high school transcript must be presented for evaluation, even if no credit was earned. All courses from a regionally accredited college are accepted for transfer; however, they may not all count toward a degree. Once all transcripts have been received and the grades posted to the UT Martin transcript, the student will be able to review the credit received on the student portal. The UT Martin course number for equivalent courses, or the designation LD for lower-division credit and UD for upper-division credit if no equivalent course exists, will be posted to the student's academic transcript. LD and UD credits may be applied toward degree requirements that do not designate specific course number requirements (e.g., Art LD might fulfill a non-specific art course requirement or a general elective). The student's academic adviser will use the degree audit program to identify how each of the transferred courses may be used to satisfy specific degree requirements.

Students wishing to appeal the evaluation of any transferred courses should contact the registrar to request re-evaluation of those courses. Students may be asked to provide a copy of the course description and syllabus from the original institution. The registrar may consult the department chair for the involved discipline and the associate vice chancellor for academic affairs regarding the final designation of the course. Students wishing to further appeal the results of the transfer evaluation should follow the Degree Appeals (Special Request) process outlined in the catalog.

To earn a University of Tennessee degree, an applicant from a junior/community college must complete a minimum of 60 semester hours toward a degree in an accredited four-year school. At least 30 semester credit hours, but no less than $25 \%$ of coursework in their degree (as stated in the catalog of graduation), must be completed at UT Martin. To qualify for honors graduation (see Honors and Awards), a transfer student must complete at least four semesters ( 60 semester hours minimum) in The University of Tennessee system.

Transfer students who have not attended a college or university for a minimum of four consecutive calendar years may apply for the Academic Fresh Start Policy described later in this section.

Transient students - Any transfer student who meets admissions standards but who is enrolling for one semester only, usually the summer semester, will be classified as a transient student. A statement of academic good standing is required from the former institution. Should the student decide to remain for a longer period, he/she will be required to meet all university admission requirements, which includes having transcripts of previous college work mailed to the Admissions Office.

## Readmission

Students who have previously attended UT Martin must complete a new application for admission but are not required to pay the application fee. Students who have attended another college(s) since enrollment at UT Martin must have a transcript(s) forwarded to the Admissions Office. A readmitted student must meet the high school unit requirements effective at the time of his/her first enrollment.

## International Admission

The University of Tennessee at Martin welcomes international students from around the world. International applicants seeking admission to undergraduate programs must furnish the following in addition to all other entrance requirements:

1. a completed, online application for international undergraduate admission.
2. a non-refundable payment of $\$ 130$ ( $\$ 30$ application fee and $\$ 100$ processing fee).
3. a bank letter or other documents of financial support. Financial aid is not available for international students.
4. official school or university transcript(s) with certified translations if the records are in a language other than English. Transcripts must include descriptive course titles, credit hours for each subject and grades received to earn credit.
5. high school transcript in English with a 2.50 grade point average
6. evidence of one of the following:

- A TOEFL score of 61 on the internet-based version
- A TOEFL score of 500 on the ITP paper-version, generally offered once per semester at UTM or acceptable from partner universities
- An IELTS score of 5.5
- A PTE Academic score of 45

The following will be considered on a case-by-case basis for TOEFL or IELTS waiver:

- Other exam scores from partner institution contexts
- Applicants submitting documentation of senior year of high school in the U.S. with a 2.5 GPA and requisite ACT score;
- Applicants completing for-credit freshman English composition Levels 1 and 2 (face-to-face instruction) at another university with a grade of C or higher.
- Applicants with high school diplomas or four-year degrees from the following English-speaking nationalities: Anguilla, Antigua \& Bermuda, Australia, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cana (English-speaking provinces) Cayman Islands, Dominica, Fiji Islands, Grenada, Guyana, Jamaica, Liberia, Montserrat, New Zealand, St. Vincent \& Grenadines, Sierra Leone, St. Kitts \& Nevis, St. Lucia, South Africa, Trinidad \& Tobago, United Kingdom, U.S. Virgin Islands, West Indies, Zimbabwe

Upon arrival on the campus, all degree-seeking international students and resident aliens must enroll (and remain enrolled each semester) in the appropriate English composition courses until the student has successfully completed English 112. For further details, see "Placement of Students Who Are Not Native Speakers of English" in the Department of English and Modern Foreign Languages section.

Information on International Admissions can be found at www.utm.edu/international. Click on Future International Students for information and the international application.

Only one I-20 will be issued for each admission. I-20s start dates can be deferred if there is a delay in arrival. International students are required to report to the Admissions Office in person within 30 days after arrival in the U.S.

## Academic Fresh Start

Undergraduate students (all categories) with a cumulative GPA below 2.10 who have not attended a college or university for a minimum of four consecutive calendar years may obtain entrance through the Academic Fresh Start policy.

Specifically, Academic Fresh Start affects grades of F for courses taken prior to entrance as follows:

## Calculation of Cumulative Grade Point Average

- Any grades of F will not be counted toward cumulative GPA for Academic Standing.
- Any grades of F will not be counted toward cumulative GPA for Graduation.
- All grades - including grades of F - will be counted toward cumulative GPA for consideration for Honors Graduation.


## Degree Requirements

- Any grades of F for any previous courses will not count as credit toward graduation.
- Students must select a graduation catalog in existence at the time of or after the year in which Academic Fresh Start was granted.


## Transcript

- Courses and grades on transcript - includes all previous courses and grades on the transcript. Any courses and grades of F that are not counted for Academic Standing or Graduation will still appear on the student's official transcript.

To be considered for Academic Fresh Start, the student must

- Meet the requirements for Academic Fresh Start
- Submit a written request for Academic Fresh Start to the Admissions Office prior to the term for which admission/readmission is requested

Students who transfer directly to UT Martin after attending another college or university within the last four years will still be eligible if they were granted a "Fresh Start" from the transferring institution. The policy will apply to grades received prior to the fresh start granted by the transferring institution.

## Students can be admitted with Academic Fresh Start only one time, and once granted, Academic Fresh Start cannot be cancelled.

## Residency Regulations

It is the intent that the public institutions of higher education in the State of Tennessee shall apply uniform rules, as described in these regulations and not otherwise, in determining whether students shall be classified as in-state or out-of-state students for fees and tuition purposes.

## Rules for Determination of Status

1. Every person having his or her domicile in this State shall be classified "in-state" for fee and tuition purposes and for admission purposes.
2. Every person not having his or her domicile in this State shall be classified "out-of-state" for fee and tuition purposes and for admission purposes.
3. The domicile of an unemancipated person is that of his or her parent, except as provided in paragraph (4) of this section. Unemancipated students of divorced parents shall be classified "in-state" when one
(1) parent, regardless of custodial status, is domiciled in Tennessee, except as provided in paragraph (4) of this Section.
4. A student shall be classified as "in-state" for fee and tuition purposes if the student is a citizen of the United States, has resided in Tennessee for at least one (1) year immediately prior to admission, and has:
(a) Graduated from a Tennessee public secondary school;
(b) Graduated from a private secondary school that is located in Tennessee; or
(c) Earned a Tennessee high school equivalency diploma.
5. The spouse of a student classified as "in-state" shall also be classified "in-state."
6. All classifications shall be subject to the Eligibility Verification for Entitlements Act, Tennessee Code Annotated § 4-58-101 et seq.

## Out-of-state Students Who Are Not Required to Pay Out-of-state Tuition

1. An unemancipated, currently enrolled student shall be reclassified out-of-state should his or her parent, having theretofore been domiciled in the State, remove from the State. However, such student shall not be required to pay out-of-state tuition nor be treated as an out-of-state student for admission purposes so long as his or her enrollment at a public higher educational institution or institutions shall be continuous.
2. An unemancipated person whose parent is not domiciled in this State but is a member of the armed forces and stationed at Fort Campbell pursuant to military orders shall be classified out-of-state, but shall not be required to pay out-of-state tuition. Such a person, while in continuous attendance toward the degree for which he or she is currently enrolled, shall not be required to pay out-of-state tuition if his or her parent thereafter is transferred on military orders.
3. Part-time students who are not domiciled in this State but who are employed full-time in the State shall be classified out-of-state but shall not be required to pay out-of-state tuition. This shall apply to part-time students who are employed in the State by more than one employer, resulting in the equivalent of fulltime employment.
4. A member of the U.S. Armed Forces on active duty for more than thirty (30) days and who has a permanent duty station in the State of Tennessee (or the spouse or dependent child of such a member) who should be classified out-of-state in accordance with other provisions of these regulations will be classified out-of-state but shall not be required to pay out-of-state tuition. This provision shall continue to apply to such a member, spouse, or dependent child while continuously enrolled at that public higher education institution, notwithstanding a subsequent change in the permanent duty station of the member to a location outside the State.
5. A person who is domiciled in the Kentucky counties of Fulton, Hickman, or Graves shall be classified out-of-state and shall not be required to pay out-of-state tuition at The University of Tennessee at Martin if qualified for admission. This exemption is on condition that Murray State University in Murray, Kentucky, continues to admit Tennessee residents from selected Tennessee counties to enroll at that institution without payment of out-of-state tuition.
6. Any dependent child not domiciled in Tennessee but who qualifies and is selected to receive a scholarship under the "Dependent Children Scholarship Act" (T.C.A. § 49-4-704) because his or her parent is a law enforcement officer, fireman, or emergency medical service technician who was killed or totally and permanently disabled while performing duties within the scope of employment, shall be classified out-ofstate but shall not be required to pay out-of-state tuition.
7. A veteran enrolled in any public institution of higher education in this State shall not be required to pay out-of-state tuition or any out-of-state fee, if the veteran:
(a) Has not been dishonorably discharged from a branch of the U.S. Armed Forces or the National Guard;
(b) Is eligible for Post-9/11 GI Bill benefits or Montgomery GI Bill benefits; and
(c) Enrolls in a public institution of higher education, after satisfying all admission requirements, within twenty-four (24) months after the date of discharge as reflected on the veteran's certificate of release or discharge from active duty, Form DD-214, or an equivalent document.

To continue to qualify for in-state tuition and fees under this subsection, a veteran shall:
(a) Maintain continuous enrollment (as defined by the public institution of higher education in which the veteran is enrolled); and
(b) Within one (1) year of enrolling in the public institution of higher education:

1. Register to vote in the State of Tennessee; or
2. Demonstrate by objective evidence intent to be a resident of the State of Tennessee by obtaining at least two (2) of the following:
(i) A Tennessee driver's license;
(ii) A Tennessee motor vehicle registration;
(iii) Proof of established employment in the State of Tennessee; or
(iv) Other documentation clearly evidencing domicile or residence in this State, as determined by the Tennessee Higher Education Commission.
3. Students not domiciled in Tennessee but who are selected to participate in institutional undergraduate honors programs specified by the public higher education institution in which the student is enrolled shall be classified out-of-state but shall not be required to pay out-of- state tuition.
4. A "covered individual" under the federal Veterans Access, Choice, and Accountability Act of 2014, Public Law 113-146, who maintains continuous enrollment at the same public institution of higher education.

## Residency Appeal

The decision of the Office of Undergraduate Admission may be appealed to the Extenuating Circumstances Admissions and Residency Appeals Committee at UT Martin, which shall, after full review of the documents provided in the case, determine the appropriate resident classification of the student.

## Orientation, Enrollment, and First Year Initiative (FYI)

To assist with the transition from high school to college, UT Martin offers students an opportunity to participate in the First-Year Initiative, beginning with Summer Orientation and Registration (SOAR). SOAR programs begin in May and continue throughout the summer. Students who attend SOAR will connect with peers, meet with an academic adviser, and register for fall semester classes. Also, parents will be involved in information sessions during the one day program.

The second phase of the First-Year Initiative combines Welcome Weekend activities and the General Studies 101 (GENS 101) class. Welcome Weekend begins on the Thursday prior to the first day of regular classes when first-year students take part in a variety of programs and activities designed to orient them to the university environment. It is during this weekend that students will be introduced to their faculty mentor and specially trained peer mentor (PEP Leader) and begin their General Studies 101 class. The class meets weekly during the fall semester and the class content places great emphasis on study skills and student success principles. Detailed information about Welcome Weekend and the General Studies 101 class will be mailed to all
students who apply for admission. General Studies 101 is a two credit-hour semester-long class graded "A-F" that counts in scholarship grade point average calculation. The university strongly encourages all first-year students to enroll in the First-Year Initiative. It provides the needed foundation for building success which leads to graduation.

A health history (immunizations) form is a state requirement and should be forwarded to Student Health and Counseling Services upon acceptance to the university.

## UT Martin Identification Card

Each student is required to have an identification card (the Skyhawk Card) with a photograph and student ID number issued from the university at the time of enrollment. Students should upload a picture for his/her Skyhawk Card at www.utm.edu/requestmyid. Completed cards will be distributed at SOAR orientation. Students who do not attend SOAR should pick up their Skyhawk Card at the Bursar's Office Skyhawk Card Services window.

## Course Selection

UT Martin uses high school GPA and entrance exam composite and subscores (when available) to make placement recommendations. These recommendations identify the best starting point for freshmen and guide them in selecting courses for which they have adequate preparation. Placement recommendations allow students to begin where they are likely to do well, assisting them in acquiring both hours toward graduation and a minimum GPA of 2.00 . Entering students with an ACT Composite score below 21 are required to follow placement recommendations (see Mandatory Placement). For those students with an ACT Composite score of 21 or above, disregarding placement recommendations often leads to failure.

## Chemistry

Mathematics Placement Consideration. An entering student whose mathematics ACT score indicates the need for Mathematics 100-110 Essentials of Algebra I, II should complete the sequence before registering for any chemistry course.

Placement Recommendations. Chemistry placement recommendations are based on the student's high school GPA and ACT scores. Course recommendations indicate a student's readiness to take Chemistry 121. In some cases, where students are borderline in terms of academic preparation, the recommendation will indicate the need to advise students carefully. No recommendation is made if any of the components used to make the determination is missing.

## English

Freshman English. Recommendations for initial placement in freshman English courses are based upon the student's ACT score in English and high school grade-point average. If the student's ACT Composite score is less than 21, then mandatory placement applies. All English 105 and 111 instructors may administer an impromptu diagnostic writing assignment during the first class meeting. Instructors who feel that they have an improperly placed student may recommend a different placement. Students who are inappropriately registered for English 105 or 111 will be dropped from that course and should see their advisers immediately to add the appropriate course during the add period.

Honors English. Students who score 28 or above on the English portion of the Enhanced ACT may enroll in the freshman honors sequence $(111 \mathrm{H}-112 \mathrm{H})$ which offers enrichment and variety, collegial contact with other excellent students and an obvious designation of distinction on the academic transcript. Any student who earns an A in English 111 may enroll in English 112H, if space is available.

International students. International students normally begin the English sequence with English 100, but may be placed higher based on their results on the English Writing Proficiency Placement Exam. At least once each semester, the Department of English and Modern Foreign Languages administers an English Composition Placement Examination to ensure the appropriate English placement for international students. Eligibility for enrolling in English 100 or taking the placement exam requires that the student meet one of the following criteria:

Enrollment in or completion of Level 6 of the Tennessee Intensive English Program, OR achievement of a minimum UT Martin institutional TOEFL score of 500 (paper) or 173 (computer), OR achievement of a minimum iBT score of 61 (Internet-based),
OR achievement of a minimum IELTS score of 6.0.
Enrollment in English 111 requires successful completion of the Tennessee Intensive English Program and placement in the respective course based on the results of the placement examination.

## Mathematics

The usual beginning mathematics courses are:

- Mathematics 100 Essentials of Algebra I
- Mathematics 130 The Nature of Mathematics
- Mathematics 140 College Algebra
- Mathematics 185 Precalculus
- Mathematics 251 Calculus

Entrance Deficiencies. Students with entrance deficiencies in high school mathematics will need to take mathematics courses to remove the deficiencies. Each course will remove one unit of deficiency. Students with deficiencies in Algebra should start with Mathematics 100 to remove the deficiencies.
Mandatory Placement. Mandatory placement applies to students with ACT Composite scores of less than 21 and prevents students who place in Mathematics 100 from enrolling in a course with a higher number.

Consideration of the Requirements for a Student's College Curriculum. Students in engineering, chemistry, mathematics, computer science and some areas of agriculture, education, pre-medicine and business need the Mathematics 251-252 Calculus sequence. If the student has not studied trigonometry in high school or college, the student must complete Mathematics 170 or Mathematics 185 before enrolling in Mathematics 251. Students who place in Mathematics 140 but need Mathematics 185 to prepare for calculus may enroll in the 185 course. ACT scores, reading level, English placement and high school grade-point average are considered as a part of the advising.

## Reading

Recommendations for enrollment in Reading 100 are based on the student's ACT reading score. Anyone with an ACT Reading score of 21 or less will be placed in Reading 100. Students who enroll in this class can expect to receive instruction and practice in reading strategies required to handle beginning college text material. Reading 100 should be completed prior to, or in conjunction with, enrollment in any reading intensive courses such as Biology, Business Law, Geology, History and Psychology.

Students with ACT Composite Scores 21 or Above. Research studies have shown that most freshmanlevel textbooks used by UT Martin are written above the 12 -grade equivalent level. Students with ACT Reading scores below 21 should enroll in Reading 100 to increase their chances of academic success. Reading 111 is available for students with ACT Reading scores of 21 or above who wish to become skilled in advanced comprehension and vocabulary.

Students with ACT Composite Scores Below 21. Mandatory placement in Reading 100 will apply to all students with ACT Composite scores below 21 and/or ACT Reading scores below 21.

Students without an ACT Reading score on file. Beginning students must either produce an ACT Reading score or sign up to take Reading 100. They will then take the Nelson-Denny Reading test during class to determine whether or not they test out of Reading 100. Students testing out will then be instructed as to how to drop Reading 100. There are no provisions for testing in addition to those provided in regularly scheduled Reading 100 sections.

## Foreign Language

Entrance Deficiencies. An entrance deficiency in foreign languages can be removed by passing 111, the first semester of the elementary sequence of a foreign language, or 115 if continuing a foreign language begun in high school.

Foreign Language Placement. Students who enter with two or more high school units of Spanish or French, and who wish to continue in the same language, will take the department's placement exam and, based on the results of that exam, will be advised to enroll in Spanish or French 115 or a more advanced class. Continuing students in German, Japanese and Portuguese may start with 122 or a more advanced class, depending on their score on the placement exam. Students who enroll in 111 to remove a deficiency will receive elective credit for that course.

Scores on the French/Spanish/German placement exams are used to place freshmen in the appropriate language at one of the following levels:

- 111 - First level for students who have a foreign language deficiency, who took German, or who took less than two years of French or Spanish in high school
- 115 - First level for students with two or more years of French or Spanish in high school
- 122
- 222
- 341,342 , or another advanced class.

Students who studied foreign language in high school and begin their language study at UT Martin with an intermediate or advanced-level course and attain a grade of B or better in the course may earn retroactive credit for up to eight semester hours.

## Mandatory Placement

Placement in one or more of the following courses is mandatory for students with ACT composite scores less than 21 whose placement results show they need to enroll in: English 105, Mathematics 100 and/or Reading 100. Students who do not have ACT scores must take the university's placement tests in English, mathematics and reading and follow placement results or opt to begin in basic level courses. International students must comply with the additional English proficiency requirements listed under item 4 of the requirements for admission as an international student (see admission requirement information earlier in this section). Students must complete all mandatory placement courses during the first two years of academic study or 60 semester hours, whichever comes first. Exception: Enrollment in English 105 or Mathematics 100 is optional for transfer students (i.e., anyone who completed 12 or more college-level credit hours prior to first-time enrollment at UT Martin) if they have already passed a college-level course in that discipline. Enrollment in a reading course is also optional.

## Enrollment and Minimum Completion Grades in English Composition

The University of Tennessee at Martin believes that writing skills are an important key to academic success. To that end, all students are expected to 1) enroll each semester, with the exception of summer term, in the
appropriate English composition course, as determined by ACT scores and high school grade point or the ESL Writing Proficiency Placement Exam, and 2) remain enrolled each semester in the appropriate course (English 105, 110, 111, or 112; minimum grade of C required for completion) until the student has successfully completed English 112 or its equivalent. Students must complete English 112 within the first 60 hours with a grade of C or better or registration restrictions will be imposed.

## Academic Advising

UT Martin provides academic advisement to all regularly enrolled students. Each student will be assigned a faculty adviser by the appropriate department chair if the student has declared a major; or in the appropriate Exploratory Major within the college of interest. Advisers will aid the students in selecting and scheduling appropriate courses and will be available to counsel them in all matters pertaining to their academic programs and career objectives. See section on Student Success Center for special academic support services offered.

In support of the academic advising program, the university shall:

1. provide students with information on policies, procedures and programs of the campus;
2. assist students in exploring educational and career opportunities;
3. assist students in establishing life goals;
4. assist students with the development of an educational plan of study and the selection of courses; and
5. make students aware of the range of services and educational opportunities pertinent to their educational objectives at this campus.

The vice chancellor for academic affairs is responsible for the academic advisement program that is based upon a system of policies, procedures, publications, personnel and services that are adopted on a universitywide basis. The deans of the individual colleges are accountable to the vice chancellor for academic affairs for the effectiveness of the advisement programs within each college. Deans of each college are responsible for implementing the academic advising system which is determined as being most effective in meeting the advising needs of the students within each college. Academic deans are responsible for ensuring that advisers have accurate information for each new advisee assigned. Advising records available to all advisers should include the following: ACT and/or SAT student profile reports, campus placement scores, TOEFL scores (if appropriate), admission confirmation, academic planning worksheet, academic progress information, record of referrals to other student services and academic advising agreement. Academic deans are also responsible for seeing that files are promptly forwarded to the appropriate office or adviser when students change colleges, majors or advisers.

In support of the academic advising program, the university shall:

1. provide advisers with current and accurate information related to student educational preparation and progress;
2. provide advisers with appropriate training in academic advising;
3. periodically evaluate the effectiveness of the advisement program and individual advisers; and
4. consider academic advising in tenure, promotion and merit decisions.

## Student Advisement

Each student will be assigned a faculty adviser by the appropriate department chair if the student has declared a major; or in the appropriate Exploratory Major within the college of interest. Advisers will aid the students in selecting and scheduling appropriate courses and will be available to counsel them in all matters pertaining to their academic programs and career objectives.

## Course Loads

Students may enroll during the fall and spring semesters for a maximum of 20 credit hours with their adviser's approval (nine hours during each summer term). No more than 6 hours will be allowed during Maymester. The appropriate college dean's written approval must be obtained in order to register for additional credit hours.

Students with an academically eligible-warning status may not register for more than 16 credit hours per semester or eight credit hours per summer term without the written approval of the appropriate college dean. (See Academic Continuation - Academically Eligible-Warning.)

An Overload Approval form must be submitted to the Office of Academic Records for processing. Only the credit hours of courses required for a student's degree program can be considered when calculating federal Title IV financial aid awards.

## Fees, Expenses, Financial Assistance and Scholarships



The University of Tennessee at Martin

## Financial Information

Stacey Jackson, Bursar

116 Hall-Moody Administration Building
731-881-7810
fax 731-881-7813

Fees and tuition are established in June by the Board of Trustees in conjunction with legislative action which determines the annual appropriation to the institution. Any changes from the fees and expenses detailed here will be available prior to registration for the semester to which a student applies. The general fees in effect for 2020-2021, are as follows, and are subject to change.

## Fees and Expenses

## Campus Fees:

Maintenance Fee (In-state Fee) - Undergraduate Fee Per Semester ..... \$4,107
Programs \& Services Fee - Undergraduate Fee Per Semester ..... $\$ 560$
Technology Fee - Undergraduate Fee Per Semester ..... \$125
Facility Fee - Undergraduate Fee Per Semester ..... \$75
Publication Per Semester (Fall and Spring Only) ..... \$7
Total In-State Undergraduate Full-Time Fees Per Semester ..... \$4,874
Additional Tuition for Domestic Out-of-State Students Per Semester ..... \$3,020
Additional Tuition for International Out-of-State Students Per Semester ..... \$6,972
Online Fees ( $\mathbf{1 2}$ hours or more):
Online Courses fees - In-state (per credit hour) ..... \$419
Online Courses fees - Domestic Out-of-state (per credit hour) ..... \$455
Online Courses fees - International Out-of-state (per credit hour) ..... \$495(See Residency Regulations in the section of university catalog titled Undergraduate Admission Proceduresand Requirements.)
*Check the Web at www.utm.edu/bursar for revisions to fees and expenses. The amounts above are estimates.

## Part-Time Student

Any regular undergraduate student who enrolls for fewer than 12 academic hours is a part-time student.

## Optional Hourly Rate

In lieu of the above charges for Maintenance Fee (In-state Fee), Programs, Facilities and Technology Fees (and tuition for out-of-state students), part-time students pay fees computed by the semester hour credit (or audit) as follows:

## Campus Fees (enrolled in less than 12 hours):

Maintenance Fee (In-state Fee) Per Hour $\$ 342$ per semester hour
Programs \& Services Fee Per Hour ..... $\$ 47$ per semester hour
Technology Fee Per Hour \$11 per semester hour
Facility Fee Per Hour $\$ 6$ per semester hour
Total In-State Undergraduate Hourly Fee $\$ 406$ per semester hour
Additional Tuition for Domestic Out-of-State Students Per Hour $\$ 252$ per semester hour
Additional Tuition for International Out-of-State Students Per Hour $\$ 581$ per semester hour
Online Fees (cost per credit hour):Students who are enrolled for online undergraduate courses are assessed additional fees at $\$ 419$ per credit hour(in-state), or $\$ 455$ per credit hour (domestic out-of-state), or $\$ 495$ per credit hour (international out-of-state)if enrolled in 12+ hours as detailed at www.utm.edu/bursar under Fee Schedule.
Undergraduate Application Fee ..... $\$ 30$
(plus additional processing fee for international students)Each initial application for admission must be accompanied by a fee of $\$ 30$ before it will be processed. Thisfee is not refundable.
Late Registration Service Fee. ..... $\$ 50$Students who register for classes after the first official day of classes for the semester will be assessed the lateregistration fee. Such a charge also applies to late payment of other charges past due. This fee is not refundable.
Course Change Fee$\$ 25$ per courseA fee of $\$ 25$ per course will be assessed for courses dropped after the official late registration period. This feeis not refundable and does not apply to students who withdraw from the university.
Audit Fee/Special Fee Policy for Totally Disabled and/or Senior CitizensFees for courses being audited are the same as those taken for credit. For information concerning the specialfee policy for totally disabled who wish to enroll in courses for non-credit or credit, contact the Office ofDisabilities (731-881-7605). For information concerning the special fee policy for persons 60 years or olderwho wish to enroll in courses for non-credit or credit, contact the Bursar's office (731-881-7831).

## Laboratory Fee/Academic Enrichment Fee/Other Course Related Fees

Students enrolling in classes within the following units/areas are subject to additional fees (such as academic enrichment, lab, supply, or other fees). These fees assess per course per semester.

| Department of Agriculture, Geosciences and Natural Resources <br> College of Business and Global Affairs | Academic Enrichment Fee <br> Academic Enrichment Fee | $\$ 20-300$ <br> $\$ 10 /$ credit <br> hour |
| :--- | :--- | ---: |
| Department of Educational Studies |  | $\$ 35 /$ credit |
|  | EPP Fee | hour |

Music Fee (For Individual Instruction in Music)
Per Semester:
One-half hour lesson weekly ..... \$80
One hour lesson weekly ..... \$150
Payment Plan Enrollment Fee. ..... $\$ 30$
Late Fee on Payment Plan $\$ 50$ of the installment due
Although fees, rent and other university expenses are due and payable at the beginning of each semester (prior to the next semester if the student has registered in advance), eligible students may request a payment plan. Current maintenance fee (in-state fee), out-of-state tuition, programs and services, facility, technology, publications fee, course related fees, full semester dorm or apartment rent and meal plans are the only charges that can be deferred. The first deferment payment (one-fourth of deferrable balance after all financial aid is applied plus the service fee) is due on the published fee payment deadline (www.utm.edu/bursar).
Monthly apartment rent for Grove, University Courts and University Village is NOT deferrable in a payment plan.
Prior term charges are not deferrable. Current financial aid funds may NOT be used to pay prior term charges in most cases. The Bursar's Office can be of assistance in determining repayment options.
Accounts due the university in addition to fees, rent, etc., may be paid at registration time. Students are responsible for advising cashiers at the time of registration of any charges levied in error and of any omissions such as residence hall rent or meal plan. Failure to notify the cashier and make payment constitutes a delayed payment subject to the service fee.

For spring and fall semesters, the 2nd, 3rd and 4th payments of the payment plan are due on the 15th of the 2nd, 3rd, and 4th month of each semester. See www.utm.edu/bursar for payment plan details. For summer semester, the deferred charge is due no later than July 10. If the payment plan is not paid by the due date, $\$ 50$ late fee will be added.

Students owing only the fourth installment of their payment plan will be allowed to schedule for the upcoming term. If the fourth installment of the Spring or Fall payment plan or the second payment of the Summer payment plan is not paid within two business days after the due date, the student's classes for the upcoming term will be automatically purged.

Students must set up the deferment and make the first payment online in Banner Self-Service (Student Records, Request Deferment of Fees, \& Online Payments and Deposits).

## Billing Statements

Current students will be billed electronically by e-mail unless they sign an election for paper bill form in the Bursar's Office (116 Administration Building). Banner self-service will provide an electronic, printable billing statement.

## Student Identification Card - Initial Issue

No Charge
Each student at his/her first registration is issued a plastic identification card. The student is expected to retain this ID card during his/her entire enrollment at UT Martin and to have it with him/her at all times for purposes of identification. The card is property of the university and may be reclaimed if used by any person other than the one whose signature it bears.
Lost ID Card Replacement ..... \$25

Loss of an ID card should be reported promptly to the Bursar's Office Skyhawk Card Service window. Upon payment of this charge, a replacement card will be issued.

The student is not charged for the first copy of his/her diploma. Additional copies are $\$ 15$ plus a mailing fee per copy, including diplomas that must be relettered.

## Telephone Service

Telephone connections are in each residence hall room. Charges for basic telephone service are included in the residence fee. Long-distance telephone service is available upon application each semester in the HelpDesk Office ( 212 Boling University Center). Students must provide their own telephone instruments.

## Bad check charges (not refundable; all returned checks) \$30

The charge applies to all checks returned to the university by the appropriate bank for insufficient funds, stop payments, or other legitimate reasons. The writer of the check will be notified immediately at the address that appears on the check. Failure to respond within 15 days of the notice will result in withdrawal from school. If withdrawal occurs, the appropriate refund percentage will be used to determine the balance due on fees for that term. Returned checks must be picked up with cash or a money order. Students with more than one returned check per school year will be required to pay fees and university accounts with cash or a money order for the balance of that school year. Students with more than two returned checks in consecutive school years will be required to pay fees and university accounts with cash or a money order for the balance of their enrollment.

## Refunds

## Excess Financial Aid (loans, scholarships, Vocational Rehab, any other awards)

When a student's total financial aid exceeds total charges, the excess will be disbursed to the student. The excess aid is calculated based on money received, not money expected. Students can have their refunds deposited directly into their bank account by signing up for e-refunds as detailed at www.utm.edu/bursar.

## Financial Aid Recipients

Financial aid recipients must successfully complete two-thirds of their attempted hours, not to exceed 180 attempted hours, in order to maintain satisfactory academic progress toward their degree. Students who do not successfully complete two-thirds of their attempted hours may request an appeal to have their financial aid reinstated. UT Martin's full satisfactory academic progress policy as well as the appeal form can be located on the Web at www.utm.edu/SAP.

## Dropping Hours (Continue with a reduced class load)

When a student decreases the number of hours attempted during a term to less than a full course load (12 hours if campus courses), charges for these hours will be calculated based upon the official drop day as presented to Bursar's Office from the Office of Academic Records. Charges for the dropped hours will be calculated as follows:
Calendar Days of Term\% Charged\% Refund
Day 1-7. no charge ..... 100\%
Day 8-14. no charge ..... 100\%
Day 15-21 ..... 40\% ..... 60\%
Day 22-28. . $60 \%$ ..... 40\%
Day 29-end of term. ..... 100\% ..... 0\%Refunds of tuition are based on the fees charged, not the amount paid. If the student is receiving financial aid,refunds will be returned to the financial aid accounts, including lenders of student loans, before any money isreturned to the student. Credit balances from all sources of the university, with the possible exception of TitleIV funds, will be applied to outstanding charges before a refund is issued.

## Withdrawing (Dropping all classes)

Withdrawing from school for any reason during any term must be made by submitting a request to withdraw in Banner Self-Service. Failure to attend classes does not cancel enrollment. The date of the withdrawal is one factor used to determine the amount of fees to be returned. Other factors include whether or not a student is receiving Title IV financial aid and whether unpaid charges (total institutional costs minus the sum of total aid paid to institutional costs and cash paid by the student) remain on the student's account. The institutional refund percentages will be used to calculate charges on hours dropped (tuition, fees and room):

## Calendar Days of Term

Day 1-7.
no charge
100\%
Day 8-14............................................................no charge............................................................. 100\%
Day 15-21............................................................. $40 \%$. . $60 \%$
Day 22-28............................................................. $60 \%$. . $40 \%$
Day 29-end of term.............................................. $100 \%$..................................................................... $0 \%$
Refunds of tuition are based on the fees charged, not the amount paid. If the student is receiving financial aid, refunds will be returned to the financial aid accounts, including lenders of student loans, before any money is returned to the student. Credit balances from all sources of the university, with the possible exception of Title IV funds, will be applied to outstanding charges before a refund is issued.

Summer school term is shorter than fall and spring and the summer term is divided into sessions. Therefore, charges for hours dropped (or withdrawals) will be calculated on the following basis:

|  | Maymester |  | 1st Session | 2nd Session | Full Term | \% Charged |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | $1-2$ | $1-4$ | $1-4$ | $1-7$ | no charge | $100 \%$ |
| Day | $3-4$ | $5-7$ | $5-7$ | $8-14$ | no charge | $100 \%$ |
| Day | $5-6$ | $8-11$ | $8-11$ | $15-21$ | $40 \%$ | $60 \%$ |
| Day | $7-8$ | $12-14$ | $12-14$ | $22-28$ | $60 \%$ | $40 \%$ |
| Day | 9-end | $15-$ end | $15-$ end | $29-$ end | $100 \%$ | $0 \%$ |

Refunds may not be made until two weeks after the close of registration during the regular school year and two weeks after the close of second session summer semester registration.

## Example:

The student's institutional charges for the semester total $\$ 4,130$, which was paid by a personal check. The student withdrew on the sixteenth calendar day following regular registration. The refund would be \$2,478.80.

Calculation: . Semester rate - [ (\# of hours) x (\% Charged) x (per hour rate) $]=$ Refund

$$
. . \$ 4,130-[(12) \times(40 \%) \times(\$ 344)]=\$ 2,478.80
$$

The federal refund calculation policy will be used for students who have attended classes at UT Martin and are receiving Title IV financial aid. Under this refund policy, withdrawals on the first day of classes will permit a $100 \%$ refund of institutional charges (fees, tuition, room and board, with no allowance for deposit or consumption on room and board). Withdrawals after the first day of classes will be calculated based on the number of days the student completes in the enrollment period.

## Example:

The student has enrolled at UT Martin and is receiving a federal Pell Grant and loan of $\$ 5,525$. The institutional charges are $\$ 4,130$. The student withdrew on the 15 th day of the enrollment period. The enrollment period is 110 days in length $(15 / 110=13.6 \%$ completed days). The refund percent will be $86.4 \%$. Therefore, $\$ 4,130 \times 86.4 \%=\$ 3,568.32$ will be returned to the federal loan or Pell accounts.

## Confirmation of Enrollment

All students must settle accounts with the Bursar's Office and complete the registration for courses before attending classes. Students who have an outstanding balance and have not made payment arrangements or paid in full by the deadline date are at risk of their classes being dropped for non-payment. Students who have accepted financial aid awards will be able to make arrangements for the remaining amount owed after their financial aid is credited to their account. All charges are subject to subsequent audit. Errors will be corrected by refund or additional charge. Personal checks (see "Bad Check Charges").

## Delinquent Charge Holds

The university is authorized by statute to withhold diplomas, grades, transcripts and registration privileges from any student until debts and obligations owed to the university are satisfied. This does not include student loans being repaid in accordance with the repayment agreements.

## Inquiries

Any question regarding a student's financial account due the university should be directed to the Bursar in the Bursar's Office ( 116 Administration Building). In the event a student does not feel that the amount in question is correct, he/she may appeal the matter to university officials in the following order: (1) Bursar, (2) Vice Chancellor for Finance and Administration and (3) Chancellor. As circumstances warrant, other officials may be contacted for assistance and information.

## Financial Aid Repayment - Withdrawals

Any financial aid recipient who withdraws from the university prior to completing $60 \%$ of the term may have to repay to the appropriate financial aid account(s) a portion of financial aid funds received.

## Financial Aid and Scholarships

## Amy Mistric - Assistant Director of Financial Aid and Scholarships

205 Hall-Moody Administration Building
731-881-7031

## Financial Aid Repayment / Student Financial Assistance

The University of Tennessee at Martin offers financial assistance to students based on need and academic achievement. To determine student need, the university utilizes the Free Application for Federal Student Aid (FAFSA), which takes into consideration certain factors relating to family financial status.
Three basic types of financial aid are made available by the university: (1) scholarships/grants, (2) loans and (3) part-time employment. Some funds for grants and loans are provided through programs sponsored by the federal and state governments. To receive federal and/or state financial assistance, students must be admitted as a regular student, seeking a degree and maintaining satisfactory academic progress. Federal financial aid is calculated based on the credit hours of courses that a student is taking that are required for his/her degree program. Students are strongly encouraged to visit the financial aid homepage at utm.edu/departments/
finaid/ to review the Satisfactory Academic Progress policy and other rules and regulations regarding financial aid.
Application for financial assistance, except for Army ROTC Scholarships, should be made by completing an Application for Admission and a FAFSA. The FAFSA is completed online at www.fafsa.gov. The school code for UT Martin is 003531 . To receive priority consideration for the coming year, the FAFSA should be processed by January 17 .

The Federal Pell Grant and Federal Supplemental Educational Opportunity Grant (FSEOG) programs are reserved for undergraduate students seeking their first bachelor's degree. Students who have completed undergraduate degree requirements must not accept Pell Grant and/or FSEOG funds. Failure to begin attendance in one or more classes may cause a reduction in financial aid. Students who have completed the requirements for a bachelor's degree are no longer eligible to receive federal or state grants.

## Scholarship Awards

Scholarships are awarded based on high scholastic achievement, financial need, character and leadership ability. Scholarships are available in most major areas of study but some are restricted to certain localities, others to certain curricula. Scholarships vary in amounts ranging up to $\$ 5,000$. In many cases, one-half of the amounts are paid each semester at registration. All students are urged to use the Aviator, our online scholarship manager, to apply for our donor-funded scholarships. To access the Aviator, go to www.utm.edu/aviator.

## Incoming Freshmen, Four-Year Merit Scholarships

## Chancellor Scholarship

- \$3,000 per year/\$12,000 for four years
- Average academic criteria: ACT 29/Average GPA 3.90 (The qualifying academic criteria used to award this scholarship is based on a combination of the ACT score and high school GPA)
- Continuation requirements: Students must be enrolled full time and maintain a 3.20 minimum cumulative GPA, checked at the end of each spring semester.
- Chancellor's scholarship recipients are eligible to enroll in honors courses.
- How to apply: Your UT Martin admission application
- Deadline: February 1
- Out-of-state students will also receive a waiver to cover out-of-state fees (additional estimated value: $\$ 6,400$ per year/\$24,160 for four years)


## Dean Scholarship

- $\$ 2,000$ per year $/ \$ 8,000$ for four years
- Average academic criteria: ACT 26/Average GPA 3.85 (The qualifying academic criteria used to award this scholarship is based on a combination of the ACT score and high school GPA)
- Continuation requirements: 3.0 GPA at the end of each spring semester, remain a full time student, and Complete required courses
- How to apply: Your UT Martin admission application
- Deadline: February 1
- Out-of-state students eligible for the Dean's Scholarship will also receive the Explorer Out-of-State Scholarship.


## Excellence Scholarship

- $\$ 1,000$ per year $/ \$ 4,000$ for four years
- Average academic criteria: ACT 24/Average GPA 3.80 (The qualifying academic criteria used to award this scholarship is based on a combination of the ACT score and high school GPA)
- Must be a Tennessee resident
- Continuation requirements: 3.0 GPA at the end of each spring semester, remain a full time student
- How to apply: Your UT Martin admission application
- Deadline: February 1
(Update: This scholarship fund has been fully expended for the 2016-17 aid year.)


## Advance Scholarship

- \$750 per year /\$3,000 for four years
- Average academic criteria: ACT 23/Average GPA 3.70 (The qualifying academic criteria used to award this scholarship is based on a combination of the ACT score and high school GPA)
- Must be a Tennessee resident
- Continuation requirements: 2.75 GPA at the end of each spring semester, remain a full time student
- How to apply: Your UT Martin admission application
- Deadline: February 1
(Update: This scholarship fund has been fully expended for the 2016-17 aid year.)


## Achieve Scholarship

- $\$ 500$ per year $/ \$ 2,000$ for four years
- Average academic criteria: ACT 21/Average GPA 3.20 (The qualifying academic criteria used to award this scholarship is based on a combination of the ACT score and high school GPA)
- Must be a Tennessee resident
- Continuation requirements: 2.75 GPA at the end of each spring semester, remain a full time student
- How to Apply: Your UT Martin admission application
- Deadline: February 1
(Update: This scholarship fund has been fully expended for the 2016-17 aid year.)


## University Scholars Program

- \$2,500 per year/\$10,000 for four years
- Scholarship is combined with the Chancellor's Scholarship for a total award of $\$ 5,500$ per year $/ \$ 22,000$ for four years.
- Qualifying criteria: $28 \mathrm{ACT} / 3.5 \mathrm{GPA}$
- Selective scholarship
- Thirty students selected by program directors are allowed into the program each year with a maximum of 120 students in the program at one time
- Continuation requirements: must have a 3.3 GPA at the end of spring semester; participate in a special ten-semester hour curriculum for University Scholar students; and be active in extra-curricular activities including group community service, cultural activities, and service to the student organization.
- Students who successfully complete the program graduate with the distinction of "University Scholar"
- How to Apply: Must turn in a University Scholars Application and attend the Scholars Prospect Weekend
- Deadline: February 1


## Harold Conner Scholarship

- \$2,000 per year/\$8,000 for four years
- Selective scholarship
- To be considered, students must be a Tennessee resident, have a minimum ACT of 21 and a 3.25 high school grade point average
- Continuation requirements: must have a 3.0 GPA at the end of each spring semester
- Recipients must be full time students and participate in seminars and attend lectures with distinguished campus visitors
- The Admissions Office, in conjunction with Financial Aid and Scholarships Office, will make the selection from eligible candidates
- Awards will be made on the basis of the high school academic and leadership record and ACT score
- Preference will be given to students from underrepresented groups.
- How to apply: Your UT Martin admission application
- Deadline: February 1


## Other Four-Year Scholarships

## Explorer Out-of-State Scholarship

- *\$5,000 per year/\$20,000 for four years
- First-time freshmen must have a 22 ACT and 3.0 high school GPA
- Must be a full-time student and remain in good standing
- Must live in university housing each semester
- Must purchase an on-campus meal plan each semester
- How to apply: Your UT Martin admission application


## Music Scholarship

- \$300-\$1000 per year
- Awarded by audition to students regardless of major
- Renewable each academic year


## Band Scholarship

- Awarded by audition to students regardless of major
- Renewable each academic year


## Army R.O.T.C. Scholarship

- The U.S. Army offers four, three, and two-year scholarships to qualified men and women on a merit basis. They pay for tuition and fees (or room and board), books, and related academic expenses.
- A tax free subsistence allowance of approximately $\$ 3,000-\$ 5,000$ per year is provided to students who enroll in the advance course or for each year an ROTC scholarship is in effect.
- UT Martin provides $\$ 2,000 /$ year dormitory scholarships to recipients of the ROTC scholarships.


## Transfer Scholarships

## Elam Transfer Scholarship

- $\$ 1,000$ per year for up to three years
- Completed $24+$ credit hours
- Eligibility criteria: 3.5 cumulative transfer GPA
- Tennessee resident
- Renewal criteria: 3.00 GPA at the end of each spring semester, remain a full time student
- Qualifying students are allowed only one transfer scholarship
- How to apply: Your UT Martin admission application


## Elam Transfer, Advance

- $\$ 750$ per year for up to three years
- Completed $24+$ credit hours
- Eligibility criteria: 3.25 - 3.49 cumulative transfer GPA
- Tennessee resident
- Renewal criteria: 2.75 GPA at the end of each spring semester, remain a full time student
- Qualifying students are allowed only one transfer scholarship
- How to apply: Your UT Martin admission application


## Elam Transfer, Achieve

- $\$ 500$ per year for up to three years
- Completed $24+$ credit hours
- Eligibility criteria: 3.00-3.24 cumulative transfer GPA
- Tennessee resident
- Renewal criteria: 2.75 GPA at the end of each spring semester, remain a full time student
- Qualifying students are allowed only one transfer scholarship
- How to apply: Your UT Martin admission application


## Explorer Out-of-State Transfer

- $\$ 5,000$ per year for up to three years (proposed)
- Out-of-State transfer students must be regularly admitted with $12+$ transfer hours and a 2.0 cumulative GPA
- Must be a full-time student and remain in good standing
- Must live in university housing each semester
- Must purchase an on-campus meal plan each semester
- How to apply: Your UT Martin admission application


## Phi Theta Kappa

- $\$ 1,000$ per year/\$2,000 for two years
- Eligibility criteria: 3.0 cumulative transfer GPA with $24+$ completed credit hours, must be an active member of Phi Theta Kappa
- Renewal criteria: 2.75 GPA at the end of each spring semester, remain a full time student


## State Lottery Scholarship

## Tennessee Education Lottery HOPE Scholarship (TLS)

The Hope Lottery Scholarship is available to Tennessee residents graduating from an eligible Tennessee high school. Students must be admitted to and enroll at least half-time in an eligible Tennessee postsecondary institution no later than 16 months following graduation from high school, home school, or GED program. Students must have a minimum 3.0 high school GPA or a 21 ACT, home school students must have a minimum 21 ACT and GED students must have a minimum 525 GED score and a 21 ACT. ACT scores are from National or State Test dates and must be attained before the student enrolls in postsecondary education. The FAFSA is required each year for the Hope Lottery Scholarship and must be completed by September 1 for Fall and February 1 for Spring or Summer. Students are encouraged to apply by March 1 of each year. Currently, the awards range up to $\$ 4,000$ for fall/spring and $\$ 2,000$ for summer for students who first received the Lottery Scholarship Fall 2009 and after. In addition to the Hope Scholarship those students who have a minimum 3.75 weighted GPA and a 29 ACT can qualify for the General Assembly Merit Scholarship (TLSM). This is a supplement to the Hope Scholarship and students must meet the regular Hope requirements to be eligible. The awards range up to $\$ 1,000$. Those students who meet certain income requirements as determined by the FAFSA may qualify for the Aspire Award (TLSN). Awards range up to $\$ 1,500$. Students can receive either the Merit Award or the Aspire but not both. For additional information regarding Tennessee Lottery Scholarship requirements, visit www.tn.gov/collegepays.

## Grants

## Federal PELL Grant (PELL)

The Federal Pell Grant Program is available to undergraduate students seeking their first bachelor's degree. The grants are based on a federal formula which measures the ability of the students and his/her family to meet educational expenses. The form used to determine eligibility for all aid programs is the FAFSA. The FAFSA is completed online at www.fafsa.ed.gov. Grants range up to $\$ 5,815$. Students can receive the Federal Pell Grant for no more than 12 full-time semesters or the equivalent.

## Federal Supplemental Educational Opportunity Grant Program (FSEOG)

FSEOG is a campus-based grant program awarded to undergraduate students with exceptional financial need. Priority is given to Pell Grant recipients.

## Teacher Education Assistance for College and Higher Education (TEACH)

The TEACH Grant provides up to $\$ 4,000$ per year to students who intend to teach in a public or private Title I elementary or secondary school in a high-need field. To be eligible for the TEACH Grant, students must complete the FAFSA each year, be a U.S. citizen or eligible non-citizen, be enrolled in course work that is necessary to begin a career in teaching, score above the 75th percentile on a college admissions test or maintain a cumulative 3.25 GPA and sign an Agreement to Serve each year. If the student does not fulfill all obligations, all amounts of the TEACH Grants received will be converted to a Federal Direct Unsubsidized Stafford Loan. Students will be assessed interest from the date the grant was disbursed.

## Tennessee Student Assistance Award Program (TSAA)

The Tennessee Student Assistance Award Program (TSAA) was established to provide non-repayable financial assistance to financially-needy undergraduate students who are residents of Tennessee. Applicants must be enrolled or accepted for enrollment, at least half-time, at a public or an eligible non-public postsecondary institution in Tennessee. Funds are awarded on a first come, first served basis. To be considered for the TSAA, the student must complete the FAFSA no later than the published deadline date for Tennessee on the FAFSA. Because funds are limited, students are strongly encouraged to apply as soon as possible after October 1 each year. Award amounts vary.

## Loans

## The William D. Ford Direct Loan Program

Students are eligible to borrow under the Direct Loan Program. There are two types of Direct loans, the Subsidized Stafford Loan and the Unsubsidized Stafford Loan. With the Subsidized Stafford Loan the interest is paid by the federal government while the student is enrolled at least half-time. With the Unsubsidized Stafford Loan the student is responsible for paying the interest while enrolled in school. Students have the option to allow the interest to accrue; however, at the end of the year the interest is rolled into the principle of the loan. For both loans, repayment begins six months after graduation, withdrawal, or when the student is no longer enrolled at least half-time.

To determine eligibility, a student must apply for financial aid through the FAFSA and be admitted to or enrolled at least half-time as a degree-seeking academically eligible student at the university.

## Direct PLUS Loans

PLUS loans are made to graduate or professional students and parents of dependent undergraduate students in order to help pay for education expenses not covered by other financial aid. Students must be attending at least six (6) credit hours in order to be eligible. Graduate students and parents of dependent students may borrow up to the full cost of education expenses including tuition and fees, room and board, books and supplies, transportation and living allowance, less any other financial aid the student receives. Repayment typically begins 60 days after the loan is fully disbursed and is paid in full within 10 to 25 years. The FAFSA must be completed in order to process PLUS loans.

## Work-Study Program

## Federal Work-Study Program

The university participates in the Federal Work-Study Program, a federal government project to make part-time employment opportunities available to students. To be eligible, a student must be accepted for
full-time enrollment or be academically eligible if currently enrolled, must be making satisfactory academic progress and prove financial need as a result of completing the FAFSA. The Office of Financial Aid and Scholarships (205 Administration Building) recommends that students not work more than 20 hours per week while attending classes. Students are required to successfully interview for positions posted through student employment. Payroll periods are biweekly and students are paid through direct deposit. In addition to providing financial assistance, the work-study program is designed to help the student develop a sense of responsibility and accomplishment as well as certain mechanical skills.

## Special State and Federal Laws for Educational Purposes

Elderly and Persons with Disabilities. Tennessee residents who are at least 60 years old may audit classes without payment of fees, if space is available. Tennessee residents who are 65 or older may take courses for credit at reduced rates. Totally disabled persons may be eligible for either option. Verification of age, residency and permanent disability must be provided.

All students who register under these provisions must process the correct paperwork with either the Bursar's Office (Administration Building 116) or the Office of Disability Services (Clement Hall 208) prior to the deadline for adding courses.

## Fee Waiver for Dependents of POW's, MIA, or Deceased in Combat Veterans.

A dependent child or spouse is entitled to a waiver of tuition, maintenance fees, student activity fees and required registration or matriculation fees when a parent or spouse veteran was killed, died as a direct result of injuries received or has been officially reported as being either a prisoner of war or missing in action while serving honorably as a member of the United States armed forces during a qualifying period of armed conflict or was formerly a prisoner of war or missing in action under a qualifying period of armed conflict. All students who register under these provisions must process the correct paperwork with the Bursar's Office (Administration Building 116).

## Housing and Residence Hall Information



The University of Tennessee at Martin

# Housing Information 

Gina McClure - Assistant Vice Chancellor for Student and Residential Life<br>270 Clement Hall<br>731-881-7730<br>fax 731-881-7753

Ryan Martin - Assistant Director

269 Clement Hall
731-881-7730
fax 731-881-7753
www.utm.edu/housing

One of the best predictors of success in college is how involved students are and how much they feel a part of the campus. The halls are positive residential communities that support the academic mission of the university. The residence halls provide programs, services and a diverse community environment that contribute to individual learning, growth and development and in which respect and responsible behavior are encouraged. The residence halls provide safe, comfortable, affordable and well-maintained facilities for residents. Electricity, water, wireless and hard-wired data connection, cable service and local phone service are included in the lease payment for all of our Residence Halls and University Village. The residence hall staff members are trained to assist students with the transition to college and to assist residents in reaching their maximum potential and personal goals.

## University Village Phase I

University Village Phase I is a 396-bed apartment-style complex for upperclassmen. All bedrooms are private and have a connected private bathroom. Each apartment is fully furnished and includes a living room suite, full-sized refrigerator and stove, dishwasher, washer/dryer unit, full-sized bed with mattress, desk with chair and a chest of drawers. Two-, three, and four-bedroom apartments are $\$ 3,375$ per semester for an academic year lease.

## University Village Phase II

University Village Phase II is a 402-bed apartment-style complex and is freshmen preference. Each apartment is fully furnished and includes a living room suite, refrigerator and two-burner cook-top, stacked washer/ dryer unit, extra-long twin-sized bed, desk with chair and a chest of drawers. Two-, three-, and four-bedroom apartments are $\$ 3,210$ per semester; a one-bedroom apartment is $\$ 3,820$ per semester.

## Residence Halls

Ellington and Browning Halls are for both freshmen and upperclassmen, with males and females living on separate floors. Each building is designed with a bathroom located between two rooms. Rates are $\$ 1,460$ for double occupancy and $\$ 2,245$ for a private room per semester. Ellington Hall also houses our Global Experience Living Learning Community.

## Living Learning Communities (LLC)

Cooper Hall is for both freshmen and upperclassmen, with males and females living in separate suites. The hall has a suite-type arrangement including a living room and four or five rooms with a shared bathroom containing two private showers, two stalls, and three sinks. The four-story rectangular building surrounds a beautiful open courtyard with a large multi-level fountain. Each floor of the LLC will have a community room with social area, presentation technology, study rooms, and a break room. Academic Major LLCs are currently available for Pre-Professional Health, Engineering, Future Teachers, Criminal Justice, Music, and Agriculture. Additional LLCs are available for University Scholars, Call Me Mister, and ROTC. Rates are $\$ 1,750$ for double occupancy and $\$ 2,495$ for a private room per semester.

## Traditional Apartments

Campus housing facilities provide for faculty, staff, and students with one-, two- and three-bedroom apartments. Ranges, air-conditioning units, refrigerators, basic cable, wired and Wi-Fi data connections, water and local phone service are furnished in all units. Residents must provide their own furniture and electricity.

Rental rates per semester are as follows:
University Courts: 1 bedroom $\$ 2,135$
2 bedroom $\quad \$ 2,290$
3 bedroom $\quad \$ 2,700$

## Reservations for Housing

Applications for Ellington, Browning, Cooper, University Village or University Courts can be made online. To reserve a room, complete the housing application and submit a $\$ 150$ deposit.

The housing deposit is refundable if a written request for cancellations is received in the housing office by June 1 for the fall semester or by December 1 for the spring semester. The deposit will be forfeited if the cancellation dates are not met or if the room or apartment is not claimed by $1 \mathrm{p} . \mathrm{m}$. on the first day of class for the semester for which the student has applied. Applications received and cancelled after the cancellation dates will result in forfeiture of the deposit. Students may not transfer deposits to other applicants.

## Living Off Campus

The university requires that students enrolled with less than 45 completed credit hours before the first day of classes sign an academic year lease.

Students who will be 21 before the first day of classes of their first term of enrollment are automatically exempt from the requirement to live on campus.

Students may also be exempt from the requirement to live on campus while they live in the principal residence of a parent or legal guardian within the counties of Weakley, Henry, Carroll, Gibson, and Obion in Tennessee; and the counties of Fulton, Hickman, and Graves in Kentucky. Students desiring this exemption must apply and give supporting documentation.

Requests for exemption to the live-on requirement on the basis of compelling personal circumstances will also be considered. To begin the exemption process, students should first contact Mrs. Teresa Hibbard in the Office of Housing at 731-881-7737 or thibbard@utm.edu.

Students who meet the live-on requirement, have registered for classes, and have not completed a housing application/deposit or been approved for a housing exemption will receive a housing assignment at the lowest residence hall rate.

## Dining Services



The University of Tennessee at Martin

## Dining Services

## Ken Bullock, General Manager

Boling University Center
731-881-7772

## UT Martin Dining Services - Sodexo is located in the Boling University Center.

All incoming freshmen with 30 earned hours or less who are living in University residential housing are required to purchase a meal plan for each of their first TWO (2) semesters. Transfer students with less than 30 earned credit hours when entering the University are also required to purchase a meal plan for TWO (2) semesters. Freshmen may choose from any plan listed under the Traditional and Freshman Meal Plan Information section with the exception of the Upperclassmen and Commuters Block Meal Plans.

More information about UT Martin Dining Services can be found at www.utm.sodexomyway.com or contact 731-881-7770.

## - Skyhawk Dining Hall

The Skyhawk Dining Hall provides 'all you care to eat' daily meal service featuring a wide variety of fresh food designed to satisfy everyone's appetite. Finding your favorite foods on campus is easy. We are proud to offer a dining program complete with signature brands and menu selections that include just about every item you can imagine.

- The Food Court

The Food Court offers an array of on-the-go dining options, such as Chick-Fil-A, Sandella's Café, and Mein Bowl, featuring Southern Tsunami Sushi. Check out the menus.

- On the Fly

On the Fly is our convenience store that offers groceries, snack items, energy drinks, and other miscellaneous items. Also available are Simply-to-go items that are prepared fresh daily such as: sandwiches, salads, desserts, fresh fruit cups, veggie cups and much more.

- Simply To Go

Located in Gooch Hall, Simply-to-go is made for those who don't have time to stop by the Skyhawk Dining Hall. It offers a variety of gourmet sandwiches, salads, bakery items, yogurt parfaits, vegetable cups, and much more, all prepared fresh daily.

- Captain's Coffee

Captain's Coffee, located in the Paul Meek Library, proudly serves Starbucks, espresso drinks, hot chocolate, and Teavana teas, both hot and cold. In addition, there is a large selection of pastries that are made fresh daily from the Sodexo bakery.

- The Hanger

The Hangar, located in the University Center, proudly serves Starbucks, espresso drinks, hot chocolate, and Teavana teas, both hot and cold. In addition, there is a large selection of pastries that are made fresh daily from the Sodexo bakery.

- Catering Services

UT Martin Dining Services is committed to making your event a success. Our team of catering professionals is available to assist you with planning every aspect of your event. Our culinary team has designed a variety of menus to fit a wide range of tastes and budgets, including regional ingredients, university favorites and speciality items.

## Educational Outreach



The University of Tennessee at Martin

## Educational Outreach

## Erica Bell, Director of Educational Outreach

110 Gooch Hall
731-881-7080

The Office of Educational Outreach (OEO) is a group of diverse units that all focus on outreach and service to communities, moving beyond the traditional main campus to provide educational opportunities across the state and throughout the region. The office expands UT Martin's capacity as a primary campus of the state's land-grant university to connect working adults, parents, veterans and active military, as well as traditionalaged college students and youth, with higher education opportunities and resources.

OEO connects Tennesseans with the university through outreach centers in Jackson, Parsons, Ripley, Selmer, and Somerville. Online delivery options enable students to complete degrees and other educational opportunities near home or work, and at times that fit their busy schedules. College credit provided through high school dual enrollment helps students shorten their time to college graduation and reduce college debt. Non-degree programs offer a variety of Continuing Education Units (CEUs) and other professional workforce development enhancements; and, creative educational programs for children and youth throughout the year provide rich connections with future generations of students and their families.
With options available for those interested in earning a degree, expanding professional development and training through non-degree classes, or pursuing personal interests, OEO helps individuals, organizations, and businesses meet their educational needs. Through innovative approaches that expand the classroom and other university resources to impact communities where our students live, work, and play, the office comprises an integral component of the university's strategic mission by helping Tennesseans solve real-world problems every day and succeed in the classroom, workforce, and beyond.

## How to Contact Educational Outreach

UT Martin Center's course offerings and available programs can be easily accessed on the Web site at www. utm.edu/departments/ecos. Students or interested individuals can stop in or contact any Outreach Center directly at the locations below, or by email at connect@utm.edu.

## Main Campus

110 Gooch Hall
731-881-7080
800-482-5199

## Selmer

1269 Tennessee Ave.
731-646-1636
888-654-6897

## Jackson

2046 North Parkway
731-425-9277
888-UTM-GRAD

## Parsons

975 Tennessee Ave. N.
731-847-3883
877-735-0005

## Ripley

317 S. Washington
731-221-8778
866-295-8956

## Somerville

214 Lakeview Rd.
901-465-7313

## Degree Programs/Courses

OEO offers an extensive schedule of college credit courses throughout West Tennessee during the day, in the evening and on weekends at Outreach Centers in Jackson, Selmer, Parsons, Ripley, and Somerville, and online. The courses carry fully-credentialed academic credit and provide opportunities for interested students
to work toward a bachelor's or master's degree, professional recertification, occupational upgrading, or simply study in academic areas of interest.

## Online Delivery

Students take advantage of online classes and programs for a variety of reasons. Some students complete their degrees entirely online while others use this option to mix a few online courses, or even a single class, with other degree offerings at the Main Campus or Outreach Centers. Online classes let people continue their education when they can't come to campus and with the flexibility that allows them to better fit their education around other commitments. Tuition and fees for online courses may differ from regular rates.

Currently, several undergraduate degree programs are available fully online:

- Bachelor of Arts in Philosophy
- Bachelor of Science in Agricultural Business with Agricultural Business Concentration
- Bachelor of Science in Agricultural Business with Farm and Ranch Management Concentration
- Bachelor of Science in Agricultural Business with Veterinary Technology and Management Concentration
- Bachelor of Science in Business with a major in Management
- Bachelor of Interdisciplinary Studies; and
- Registered Nurse to Bachelor of Science in Nursing.

At the graduate level, fully online degree programs include:

- Master of Business Administration
- Master of Science in Agriculture and Natural Resources
- Master of Science in Education
- Master of Science in Family and Consumer Science; and
- Master of Science in Strategic Communications


## Dual Enrollment

OEO offers dual-enrollment courses on-site, through synchronized distance-learning, and online to high school students across West Tennessee. These courses depend on high schools' needs and scheduling availability, and are taught by fully-qualified university faculty. High school students who meet the requirements for Concurrent/Dual Admission (see Undergraduate Admission Procedures and Requirements section) qualify to participate. Students receive both high school and college credit for dual-enrollment courses.

## Non-Degree Programs/Courses

EO also connects children, teens, and adults with a wide range of programs covering topics such as test preparation, software mastery, professional development, and personal enrichment. We offer programs in a variety of modes, helping people of all ages earn CEUs and certificates, accomplish professional development goals, and pursue recreational and intellectual interests. Diverse educational opportunities, quality programs, and dedicated service connect lifelong learners to the vast and valuable resources and expertise of the university. Courses are available on the Main Campus, Outreach Centers, online or on-demand at other locations. The Office of Academic Records maintains a permanent record of all CEUs, and many programs provide participants with a Certificate of Completion.

## Professional Development

Professional development courses are available to meet yearly in-service requirements for individuals or organizations. These programs can be offered on-site to businesses and industry and are designed to address educational and training needs specific to the organization. Programs can be developed to meet certification and in-service requirements of many professional groups, including law enforcement and others. All specialized training for law enforcement personnel is provided by the UT Law Enforcement Innovation Center, and all programs are approved by the Tennessee Peace Officer Standards and Training (POST) Commission.

## Programs for Youth

Summer camps, seminars, and other programs educate, prepare, and inspire youth in a variety of educational and extracurricular activities. Participants further their education and skills, with a focus on learning in a stimulating environment. ACT-Prep courses provide additional opportunities to empower high school students to connect with each other, pursue academic challenges, and experience personal and academic development. Kid College connects children in kindergarten through 5th grade with more than 60 classes in areas such as science, reading, fine and performing arts, and physical activities. EO offers the annual program on the Main Campus, several Outreach Center sites, and other locations, as requested. Kid College also includes a space program and each year one student earns a scholarship to Space Camp in Huntsville, Ala. Other children/youth programs include: LEGO Camp, Robotics Camp, Reading Clinic, STEMulation Camp and a vast array of Camps on Campus programs in collaboration with the Department of Intercollegiate Athletics and numerous academic departments.

## Honors Programs



The University of Tennessee at Martin

## Honors Programs

Dr. John V. Glass III, Director<br>Dr. Jeffrey Longacre, Assistant Director<br>16 McCombs Center<br>731-881-7436<br>honors@utm.edu

## Mission

The mission of the Honors Programs is to provide an academic experience offering gifted and motivated students find opportunities for intellectual challenge, creative expression, cultural enrichment and personal growth.

The University Scholars Program provides a select group of highly motivated and capable students with a particular, enhanced learning environment, an integrated curricular experience, and foreign study with a goal to develop skilled critical thinkers and citizens educated through engaging the works and ideas that remain central to human civilization and culture.

Responsibility for direction of the Honors Programs lies with the Honors Programs Director and the Honors Council. Current Honors Programs include the University Scholars Program and Honors-designated courses offered by departments at the University of Tennessee Martin. These programs are described under separate titles below.

## Honors Designated Courses

All students awarded a Chancellor's Scholarship are eligible and encouraged to enroll in Honors (H) Designated courses. These courses are offered at the discretion of individual departments and may fulfill General Education requirements or may be courses that satisfy requirements for specific major fields of study. Courses with H designation are designed to provide motivated students with opportunities for intellectual challenge, cultural enrichment, and personal growth.

## Chancellor's Scholarship

Students with a minimum 28 ACT and 3.5 GPA are guaranteed an award of $\$ 3,000$ per year for up to four years. They must maintain a minimum 3.2 GPA to continue receiving this award in their 2nd, 3rd, and 4th years.

## Courses

Art 110H
Chemistry 122H
Communications 230 H
Communications 337H
Dance 110H
Engineering 315H
English 111H
English 112H
English 250H
English 251H
English 260H

Honors Understanding Visual Art (3)
Honors General Chemistry (4)
Honors Public Speaking (3)
Honors Argumentation and Debate (3)
Honors Understanding Dance (3)
Honors Engineering Analysis (3)
Honors English Composition (3)
Honors English Composition (3)
Honors British Literary Tradition (3)
Honors British Literary Tradition (3)
Honors American Literary Tradition (3)

English 261H
Geoscience 110H
Geoscience 120H
Geoscience 130H
Geoscience 140H
Health 111H
History 121H
History 122H
Honors 367
Honors 368
Mathematics 210 H
Mathematics 251H
Music 111H
Music 112H
Physics 212H
Psychology 101H
Sociology 202H
Theatre 110H

Honors American Literary Tradition (3)
Honors Geosciences in Everyday Life (4)
Honors Earth Materials and Processes (4)
Honors Global Change and Earth History (4)
Honors Weather and Climate (4)
Honors Principles and Concepts in Personal Health (3)
Honors Development of World Civilization I (3)
Honors Development of World Civilization II (3)
Honors United States Travel-Study (3)
Honors International Travel-Study (3)
Honors Elementary Statistics and Probability (3)
Honors Calculus I (4)
Honors Masterpieces of Music (3)
Honors Music in Our Time (3)
Honors College Physics (4)
Honors Introduction to Psychology (3)
Honors Social Problems (3)
Honors Understanding Theatre (3)

## University Scholars Program

## General

The University Scholars Program offers qualified, highly-motivated students the opportunity to live and work in a community of peers engaged in the study of works and ideas foundational to the modern world. In their first two years, students in the University Scholars Program satisfy elements of the university's general education requirements with a sequence of six courses and a seventh required elective course. In their third year, students participate in a study abroad experience. In their fourth year, students complete a thesis or equivalent project in their major field of study. In their first two years University Scholars are housed in the University Scholars Program Living Learning Community (LLC) located in Cooper Hall. Upperclassmen may choose to continue to be housed in the LLC. The University Scholars Program aims to produce exceptional critical thinkers who are prepared to meet the challenges of their individual pursuits after graduation.

## University Scholars Scholarship

Students accepted to the program will receive a scholarship of \$5,500 renewable for four years and contingent upon their successful completion of the program requirements.

## University Scholars Curriculum

## First-Year Courses

Fall: HNRS 101: Great Works I - The Ancient World and Classical Antiquity
HNRS 110: Public Speaking and the Rhetorical Tradition
Spring: HNRS 102: Great Works II - Late Antiquity to the Middle Ages
HNRS 120: Development of Mathematical Enquiry

## Second-Year Courses

Fall: HNRS 201: Great Works III - Late Middle Ages to the Renaissance HNRS 210: Development of Scientific Enquiry
Spring: HNRS 202: Great Works IV - The Enlightenment to Modernity

## Third-Year

Following the completion of HNRS 202, students participate in an extended study abroad program.

## Fourth-Year

Students in their fourth year complete a thesis or equivalent project in their major field of study.

Students who successfully complete the requirements of the program graduate with the designation "University Scholar."

## Application and Admission to University Scholars Program

## Effective Fall 2019

Students with a minimum 28 ACT and 3.5 GPA are invited to apply for admission to the University Scholars Program at the University of Tennessee at Martin. Thirty entering freshmen are selected on the basis of their high school record, standardized test scores, application essay, and a campus interview. Continuation in the program is contingent upon performance.

Application materials must be received by 15 November. Qualifying applicants will be notified by the Honors Program Director and invited to campus for interviews during the University Scholars Prospect Weekend. Following the campus visit and interview process, applicants accepted to the program will be notified by 01 February.

Please send application materials to:
University Scholars Program
16 McCombs Center
The University of Tennessee at Martin
Martin, TN 38238
731-881-7436;
lellis14@utm.edu

## Courses Offered by Honors Programs

Honors 101 Great Works - The Ancient World and Classical Antiquity (F)
Honors 102 Great Works - Late Antiquity to the Middle Ages (Sp)
Honors 110 Public Speaking and the Rhetorical Tradition (F)
Honors 120 Development of Mathematical Inquiry (Sp)
Honors 200 Topics in Honors (F, Sp)
Honors 201 Great Works - Late Middle Ages to the Renaissance (F)
Honors 202 Great Works IV - The Enlightenment to Modernity (Sp)
Honors 210 Development of Scientific Inquiry
Honors 367 United States Travel-Study (as needed)
Honors 368 International Travel-Study (as needed)
Honors Seminar 108 Honors Seminar (F, Sp)
Honors Seminar 208 Honors Seminar (F, Sp)
Honors Seminar 308 Honors Seminar (F, Sp)
Honors Seminar 408 Honors Seminar (F, Sp)

University Scholars 118 Seminar (F)
University Scholars 128 Seminar (Sp)
University Scholars 218 Reading-Discussion Group (F)
University Scholars 228 Project Management (Sp)
University Scholars 318 Specialized Studies (F)
University Scholars 328 Specialized Studies (Sp)
University Scholars 418 Specialized Studies (F)
University Scholars 488 Senior Project (Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

## General Requirements for a

 Bachelor's Degree

The University of Tennessee at Martin

# General Requirements for a Bachelor's Degree 

To receive a bachelor's degree from the University of Tennessee at Martin, a student must complete all of the requirements listed below:

## General Education Core Curriculum

The mission of general education at the University of Tennessee at Martin is to support life-long learning by helping students develop tools and resources to become critical thinkers, creative problem solvers, and effective communicators as they transform into responsible citizens.

A student seeking any bachelor's degree at The University of Tennessee at Martin must satisfy the General Education Core Curriculum requirements outlined in this section. Specific degree programs may have additional general requirements and/or may restrict the options from which a student may choose in one or more of the categories of study. Any course in the General Education Core Curriculum will meet all of the outcomes within its respective category. Students should consult with their respective academic advisers to determine which combination of courses from the General Education Core Curriculum best meets their individual needs and the graduation requirements for their major.

## Biological and Physical Systems: 8 Credit Hours Required

Courses that meet the Biological and Physical Systems requirement are designed to help students: 1) actively explore and understand the basic concepts and nature of scientific knowledge, and 2) develop scientific reasoning as a critical component in the process of problem solving. The goals of this requirements are to enable students to be informed citizens and develop processes of critical thinking.

The learning outcomes for Biological and Physical Systems are as follows:

1. Students will demonstrate an understanding of the basic concepts in a discipline of science.
2. Students will demonstrate any or all of the following: the application of the scientific method, laboratory techniques, and/or data analysis for reasoning and problem solving.

Curriculum Requirements: All students must successfully complete two courses from among the following:
Astronomy 201 Astronomy (4)
Astronomy 202 Astronomy (4)
Biology 110 Introductory Cell Biology and Genetics (4)
Biology 120 Introductory Plant and Animal Biology (4)
Biology 130 Foundations of Biology: Ecology, Evolution and Diversity (4)
Biology 140 Foundations of Biology: Cell and Molecular (4)
Chemistry 111 Introduction to Chemistry I: General and Inorganic Chemistry (4)
Chemistry 112 Introduction to Chemistry II: Organic and Biochemistry (4)
Chemistry 121 General Chemistry (4)
Chemistry 122 General Chemistry (4)
Geoscience 110 Geoscience in Everyday Living (4) or equivalent honors course
Geoscience 120 Earth Materials and Processes (4) or equivalent honors course
Geoscience 130 Global Change and Earth History (4) or equivalent honors course
Geoscience 140 Weather and Climate (4) or equivalent honors course
Microbiology 251 General Bacteriology (4)
Physics 101 Physics in Everyday Life (4)

Physics 102 Physics in Everyday Life (4)
Physics 211 College Physics (4)
Physics 212 College Physics (4)
Physics 220 University Physics (4)
Physics 221 University Physics (4)
Zoology 201 Human Anatomy and Physiology (4)
Zoology 251 Human Anatomy and Physiology I (4)
Exceptions: No exceptions for any major

## Communication: 9-10 Credit Hours Required

The purpose for the Communications requirement is to prepare students to communicate information, thoughts, and viewpoints effectively through oral and written forms of expression.

The learning outcomes for Communication are as follows:

1. Students will evaluate oral and/or written expression by listening and reading critically for elements that reflect situation, audience, purpose, and diverse points of view.
2. Students will organize research to develop logical discourse in support of a central idea.
3. Students will develop written and/or oral presentations employing correct diction, syntax, usage, grammar and mechanics.
4. Students will demonstrate critical thinking skills through the appropriate use of opinions, facts and inferences in in rhetorical strategies.

Curriculum Requirements: All students must successfully complete each of the following courses unless noted below:

English 105 English Composition (3) or
English 111 English Composition (3)
English 112 English Composition (3) or
English 113 English for Technical Writers (3)
Communications 229 Public Communication Online or
Communications 230 Public Speaking (3) or
Honors 110 Public Speaking and the Rhetorical Tradition (3)

## Fine Arts: 3 Credit Hours Required

Courses in this area are designed to expose students to the fine arts in a broad societal and cultural context. These core courses encourage students to discover and develop an awareness, emotional response, and intellectual understanding of the fine arts in our Western and global communities.

The learning outcomes for Fine Arts are as follows:

1. Students will interpret the meaning of art within its context.
2. Students will develop a personal aesthetic response.
3. Students will analyze the relevance of art in a global society.

Curriculum Requirements: All students must successfully complete one of the following courses:
Art 110 Understanding Visual Art (3)
Art History 210 The History of Art (3)
Art History 211 The History of Art (3)

Dance 110 Understanding Dance (3)
Music 111 Masterpieces of Music (3)
Music 112 Music in Our Time (3)
Music 113 Survey of Western Masterpieces and World Music (3)
Music 114 Historical Survey of Jazz (3)
Music 115 Music for the Masses: A Study of Popular Music (3)
Theatre 110 Understanding Theatre (3)
Theatre 111 Understanding Theatre (3)
Exceptions: No exceptions for any major

## Humanities: 9 Credit Hours Required

Studying the Humanities develops responsible citizens by teaching students to recognize, interpret, and evaluate human action, thought, and expression. Courses in this area allow students to compare their thinking with that of persons from other regions and times, thus enabling them better to understand themselves, their society, and their world.

The learning outcomes for Humanities are as follows:

1. Students will analyze major primary sources of the humanities.
2. Students will examine the diversity of human experience in various humanistic media.
3. Students will recognize the continuity and change within the human experience as understood in the humanities.

Curriculum Requirements: All students must successfully complete three of the following courses:
English 250 British Literary Tradition (3)
English 251 British Literary Tradition (3)
English 260 American Literary Tradition (3)
English 261 American Literary Tradition (3)
English 270 World Literature (3)
English 271 World Literature (3)
French 250 France Today: The French People and Their Culture (3)
German 250 Germany Today: The German People and Their Culture (3)
History 121 Development of World Civilization I (3)
History 122 Development of World Civilization II (3)
History 201 History of the United States I (3)
History 202 History of the United States II (3)
Honors 101 Great Works I - The Ancient World and Classical Antiquity (3)
Honors 102 Late Antiquity to the Middle Ages (3)
Honors 201 The Late Middle Ages to the Renaissance (3)
Japanese 250 Japan Today: The People and Culture of Japan (3)
Philosophy 110 The Adventure of Ideas (3)
Philosophy 120 The Adventure of Ideas (3)
Philosophy 130 Ethics and Race (3)
Philosophy 160 Introduction to Ethics (3)
Religious Studies 201 Introduction to Religious Studies (3)
Spanish 250 Latin America Today: The Peoples and Cultures of Latin America (3)
Exceptions: No exceptions for any major

## Mathematics: 3 Credit Hours Required

The purpose of the Mathematics requirement is to teach students to organize, evaluate and solve problems using both abstract and quantitative approaches. The courses in this area enable students to communicate using the language of mathematics.

The learning outcomes for Mathematics are as follows:

1. Students will use appropriate notation and vocabulary to communicate mathematics.
2. Students will use symbolic and numerical methods to perform calculations.
3. Students will solve problems with real-world applications.

Curriculum Requirements: All students must successfully complete one of the following courses.
Mathematics 110 Essentials of Algebra I (4)
Mathematics 130 The Nature of Mathematics (3)
Mathematics 140 College Algebra and Elementary Functions (3)
Mathematics 160 Calculus for Business and Life Sciences (3)
Mathematics 185 Precalculus (5)
Mathematics 210 Elementary Statistics and Probability (3)
Mathematics 251 Calculus I (4)
Honors 120 Development of Mathematical Enquiry (3)
Exceptions: No exceptions for any major

## Social and Behavioral Sciences: 6 Credit Hours Required

Courses in the Social and Behavioral Sciences are designed to expose students to the scientific study of humankind. The purpose of this requirement is to assist students in creative and critical examination of humans and human institutions.

The learning outcomes for Social and Behavioral Sciences are as follows:

1. Students will describe the influence of geographic, political, economic, cultural and/or family institutions on the individual and society.
2. Students will explain the connection between social/behavioral science research and everyday life.
3. Students will analyze key ethical issues as examined by the social/behavioral sciences.

Curriculum Requirements: All students must successfully complete two of the following courses:
Agriculture 295 International Food and Fiber (3)
Animal Science 270 Animal Welfare and Ethics (3)
Economics 201 Principles of Macroeconomics (3)
Economics 202 Principles of Microeconomics (3)
Engineering 100 Society and Technology (3)
Geography 151 Introduction to Regional Geography: North America, Europe and Russia (3)
Geography 152 Introduction to Regional Geography: Asia, Africa and Latin America (3)
Geography 202 Introduction to Cultural Geography (3)
Health 111 Principles and Concepts in Personal Health (3)
Honors 202 Great Works IV - The Enlightenment to Modernity (3)
Natural Resources Management 101 Wildlife, Conservation and Environmental Issues (3)
Natural Resources Management 250 Global Perspectives in Natural Resource Based Recreation (3)
Nutrition 100 Introductory Nutrition (3)
Political Science 210 American Government and Politics (3)

Political Science 220 American Political Institutions and Policy (3)
Political Science 230 Introduction to World Politics (3)
Psychology 101 Introduction to Psychology (3)
Social Work 220 Understanding Human Diversity and Oppressed Populations (3)
Sociology 201 General Sociology (3)
Sociology 202 Social Problems (3)
Sustainability Studies 200 Introduction to Sustainability (3)
Women's and Gender Studies 201 (3)
Exceptions: No exceptions for any major
UT Martin is committed to recognizing successful completion of general education requirements from schools within the Tennessee Board of Regents (TBR) system. The learning outcomes for the UT Martin general education requirements incorporate many of the TBR general education goals with adaptations made as needed to accommodate differences that exist between the two sets of requirements. The following guidelines have been established to facilitate the transfer of TBR general education credits to satisfy the general education requirements at UT Martin.

If a student transfers from a TBR school to UT Martin and that student has taken, at a TBR school, all the courses within one or more of the six TBR general education categories and has therefore satisfied the TBR general education requirement within one or more of the categories, then that student will have satisfied the requirements for the corresponding general education categories at UT Martin. Specifically, satisfying the TBR general education category in either Communication, Mathematics, Natural Sciences or Social and Behavioral Sciences will automatically satisfy the corresponding general education requirements in Communication, Mathematics, Biological and Physical Systems or Social and Behavioral Sciences at UT Martin. Satisfying the TBR general education History requirement and the literature component of the Humanities and/or Fine Arts category will automatically satisfy the general education requirements in Humanities at UT Martin. Finally, satisfying the TBR general education requirement in Humanities and/or Fine Arts will automatically satisfy the general education requirements in Fine Arts at UT Martin.
If a student transfers from UT Knoxville or UT Chattanooga to UT Martin and that student has completed the course requirements for general education at the school of transfer, then the student will have completed general education requirements at UT Martin. If the student transfers to UT Martin before completing general education requirements, then the student will receive credit for having completed general education blocks that correspond to those at UT Martin.

## Other General Requirements for a Bachelor's Degree

## Curricular Requirements and Senior Testing

1. File an application for a diploma with the Office of Academic Records, 103 Administration Building, before registering for final semester. This is an online process.
2. Complete satisfactorily all requirements of the curriculum for which the student is enrolled, as described in the portion of this catalog devoted to the college or department offering the curriculum. A student is allowed to satisfy requirements for a bachelor's degree under any catalog in effect within 10 years of the date of graduation and provided that he/she was enrolled at UT Martin or any accredited community college or university when the catalog was in effect. Continuous enrollment is not required and this does not obligate the university to offer a discontinued course.

## Notes:

A. For students seeking additional bachelor's degrees where a minor is required, students may not use the same minor for more than one degree.
B. In programs that allow double majors, the second major can be completed in place of the required minor. Students cannot have a double major and a minor.
C. Double minors are not allowed in any degree program. Not all programs allow double majors. Not all programs allow minors.
D. All major and/or minor requirements must be completed using the same catalog.
3. Complete satisfactorily the General Education Core (38-39 hours).
4. Comply with General Assembly of the State of Tennessee's law that one unit of American history from high school, a passing total score on the high school equivalency exam, or six semester hours of collegiate work be satisfactorily completed. Completion of six hours from History 201, 202, or 331 will satisfy the requirement.
5. Complete two assessment measures addressing general education and the major field of study. Proficiency core skill areas in general education will be assessed using a standardized test approved by the Tennessee Higher Education Commission. Proficiency in the major field will be assessed using a standardized or locally-developed comprehensive test or graded portfolio review approved by the Office of Curriculum and Assessment.

## Grade-Point Average

6. Maintain a cumulative GPA of at least 2.00 on all college work attempted at all institutions attended.
7. Maintain a GPA of at least 2.00 on all work attempted at the University of Tennessee at Martin.

## Residency

8. Must complete a minimum of 60 semester hours toward a degree in an accredited four-year institution.
9. Must complete at least 30 semester credit hours but no less than $25 \%$ of coursework in their degree (as stated in the catalog of graduation) at UT Martin. A minimum average GPA of 2.00 must be earned in these classes. All courses from an accredited college are accepted for transfer; however, a maximum of 9 upper-division credit hours only may be transferred from another institution to be applied toward a degree unless approved by the degrees' committees. An applicant from a junior/community college must complete 60 semester credit hours toward a degree in an accredited four-year college or university.

## Fees

10. Satisfy all financial obligations (fees or fines) owed to the university.

Note: Some of the colleges and departments within the university have special requirements above and beyond those stated here and students are advised to consult the appropriate section of this catalog for any additional degree requirements.

## American History Requirement

In order to receive a bachelor's degree in the state of Tennessee, a student must have completed one unit of American history on the high school level, a passing total score on the high school equivalency exam, or six semester hours of collegiate American history (three semester hours of Tennessee history may be substituted for three semester hours of American history) as required by the General Assembly of the State of Tennessee (Tennessee Code Annotated 549-3253).

## Second Bachelor's Degree

A student who holds a bachelor's degree may receive a second bachelor's degree from the University of Tennessee at Martin by satisfying the following requirements:

1. meet all requirements for both degrees, as specified above.
2. complete at least 30 semester hours beyond the total hours required for the first bachelor's degree.

## Degree Appeals (Special Requests)

Individual student petitions concerning deviation from degree requirements should be prepared in consultation with the student's adviser on a Special Request form. Special requests are submitted to the student's college degrees committee for approval. Special requests which are denied by the college committee may be resubmitted to the committee for a second and final judgment. Special requests which involve exceptions to university degree requirements must also receive approval from the Undergraduate/ Graduate Council after receiving approval from the college committee. All Special Request forms must include verifying documentation to support the student's request. This documentation should include:

1. description of course(s) taken, or to be taken, that is sufficient in fulfilling the degree requirement, as verified by the student's adviser, department and college;
2. letters from Student Health and Counseling Center or private physician;
3. letters from employer on company letterhead; or
4. other written evidence which supports the student's request.

If the Undergraduate/Graduate Council denies the student's request, it may not be resubmitted to the council. Any appeal to the vice chancellor for academic affairs must be limited to an alleged procedural violation.

## Grade Appeals

Students who wish to appeal a grade that is alleged to be lower than that academically earned must initiate the process within the first three weeks of the next semester.

The aggrieved student shall first discuss the matter with the teacher involved to see if there is some error or misunderstanding which can be resolved between them.

If the student and the teacher are not able to resolve the grade issue, then the student may take the matter to the department chair. See the Student Handbook for detailed information.

## Credit Hours, Grades, Grade-Point Averages, and Examinations

The basic unit of credit at the University of Tennessee at Martin is the semester hour. This normally represents one hour of lecture or recitation or two hours of lab work per week. Each course at the university carries a number of semester hours of credit specified in the course description. At the completion of each course, a student will be assigned a grade reflecting the student's performance in the course. Passing grades normally carry with them a certain number of quality points per semester hour of credit in the course. A student's grade-point average (GPA) is obtained by dividing the total number of quality points the student has accumulated by the total number of GPA hours the student has attempted, not including hours for which grades of W, WD, WP, I, P, SP, S, AU, NR, and PP have been received. (See the next pages for explanation of these grades and grade calculation when repeating courses.)

Undergraduate students are graded on the following scale:
Grade
Performance
Level
Quality Points
Per Semester Hour of Credit

| A | Superior | 4 |
| :--- | :--- | :--- |
| B | Good | 3 |
| C | Average | 2 |
| D | Below Average | 1 |
| F | Failure | 0 |

Failure (F). A student whose work is wholly unsatisfactory shall be marked "failure" with grade of F. To receive credit for a course in which he/she has made an F , a student will be required to register for the same course again and earn a passing grade. However, if a senior does not successfully pass one subject during the semester of his/her intended graduation, that student shall have the privilege of taking the examination at the opening of or during the next semester. If he/she is successful, he/she will receive his/her degree at the next commencement.

Conditional (E). A student whose work is unsatisfactory, but who, in the judgment of the instructor, is capable of removing the deficiency without repeating the work in class, shall be marked "conditional" with a grade of E . If a student is reported conditional in any subject, the conditional grade will be allowed to stand, but will be counted as a failure in computing the average until the E has been removed. It is expected that the student will remove the E during the next semester in which he/she is in residence, but no later than two years after he/she receives the conditional grade. The student need not be enrolled to remove the E grade. After two years, the work must be repeated in class if credit is to be gained. A senior conditional in any subject may be given the opportunity to remove the deficiency before the close of the semester, but no later than the last day before commencement, provided that successfully passing these courses will make him/her eligible for graduation.

Incomplete (I). The work of a student who is passing a course satisfactorily but cannot complete all of the requirements due to illness, accident, or unavoidable circumstances shall be reported as "Incomplete" with the grade of I. Any faculty member may give an I in any course to a student whom the faculty member regards as deficient in English in that course, but who is otherwise passing. The I will be removed when the Department of English and Modern Foreign Languages certifies to the instructor that the student has made the necessary improvement. It is expected that the student will remove the I grade by the end of the next full semester after it is received. The student granted a bona fide I by his/her instructor may have the next full semester to complete the work necessary to erase the I before it is computed as an F. Thereafter, it shall be computed as an F until changed by the original instructor as a result of student action within one academic year. If the work is not completed within that time, the I shall become a permanent F on the student academic record. The student need not be enrolled to remove the I.

Auditor (AU). Students may audit courses subject to the approval of the adviser and of the instructor whose class is visited. Instructors have the authority to drop a student who is auditing if the student does not satisfy the requirements as outlined by the instructor when permission is granted to audit a course. Auditors may take part in lab or fieldwork only by permission of the instructor, consistent with departmental policy. Students not registered for credit courses may be admitted as auditors only with the consent of the dean of the college in which the course is offered. Auditors are required to register, process appropriate paperwork and pay the regular fees prior to the end of the period designated for adding courses. An AU will be assigned instead of a grade.

Other Grades (NR, P, PP, S, SP, U). NR (not reported) is assigned if an instructor does not report a grade by the administrative deadline. The NR will calculate the same as an Incomplete. P (pass) designates a passing grade without further indication of performance level. The grade of P is also used to indicate satisfactory progress on graduate thesis and problems courses in lieu of thesis. PP (portfolio passed) is assigned to portfolio credit that has been awarded. Portfolio credit is limited to the B.I.S. degree area of interest and calculates the same as a P. PP credit does not count toward University of Tennessee at Martin
hours, nor toward four-year institutional hours. S (Satisfactory) grades are limited to mid-term grading and Honors Seminar. When the Faculty Senate has approved extension of a one-semester course beyond one semester and the college cannot assign proportional credit and grades, the grade of SP (Self-Paced) may be recorded. The SP grade will be assigned to students not completing all required coursework for the semester, but satisfactorily completing a specified minimum percentage of the coursework. The minimum for each course will be determined by the department offering the course but will not be less than 50 percent of the work required for the full semester. A student receiving an SP grade will re-register for the same course and will be required to finish the remaining coursework during the second semester, at the end of which he/she will receive grades of A, B, C, D, or F. If a student receives an F after the second semester, he/she may register for the course a third time but must finish all work during that semester. If a student does not re-register for the course in which he/she received an SP grade, or if he/she does not return to UT Martin the next semester, he/she will receive an F at the end of that semester. The SP grade will not compute in the cumulative average. An S (satisfactory) grade will be assigned at the end of the first semester for a course which requires two semesters to complete. The hours credit will be counted in the course load but will not be counted in computing the grade-point average for the first semester. To receive credit in a course for which an S grade has been assigned, the student must complete course requirements during the next semester. At the end of the second semester, the student will receive a grade of P (Pass) or F (Failure). Use of the S grade is limited to Honors Seminar 108, 208, 308, 408 (Honors Seminar). U (Unsatisfactory) grades indicate unsatisfactory performance and are limited to mid-term grading.

Repeating Courses. A student may repeat a course in which he/she had earned a grade of D or F. Effective for courses taken beginning summer 1999, when a course is repeated, only the last grade earned will be counted in computing the GPA and in fulfilling requirements for a degree. A student who had earned an A or B in a course will be allowed to re-enroll in that course only as an auditor - any exception to this policy will require approval by the vice chancellor for academic affairs. A student earning $C$ in a course may repeat the course with the approval of his/her adviser. Courses with an earned grade of A, B, or C that are repeated with approval will be evaluated by the same procedure as given for repeated courses with the grade of D or F .

Examinations. Examinations are held at the end of each semester.

## Other Academic Matters

## Academic Integrity

The University of Tennessee at Martin has chosen as its primary objective quality undergraduate education. Commitment to this objective must include an obligation by all members of the university community to promote and protect the highest standards of integrity in study, research, instruction and evaluation. Dishonesty or unethical behavior does not belong at an institution dedicated to the promotion of knowledge and learning.

Integrity of the academic process requires fair and impartial evaluation by faculty and honest academic conduct by students. A student may be found to have violated this obligation if he/she:

1. refers during an academic evaluation to materials, sources, or devices not authorized by the instructor.
2. provides assistance during an academic evaluation or assignment to another person in a manner not authorized by the instructor.
3. receives assistance during an academic evaluation or assignment from another person in a manner not authorized by the instructor.
4. possesses, buys, sells, obtains, or uses a copy of any materials intended to be used as an instrument of
academic evaluation in advance of its administration.
5. acts as a substitute for another person in any academic evaluation or assignment.
6. utilizes a substitute for another person in any academic evaluation or assignment.
7. practices any form of deceit in an academic evaluation or assignment.
8. depends on the aid of others, in a manner expressly prohibited by the instructor, in the research, preparation, creation, writing, performing, or publication of work to be submitted for academic credit or evaluation.
9. provides aid to another person, knowing such aid is expressly prohibited by the instructor, in the research, preparation, creation, writing, performing, or publication of work to be submitted for academic credit or evaluation.
10. indulges in plagiarism by presenting as one's own, for academic evaluation or assignment, the ideas, representations, or works of another person or persons without customary and proper acknowledgment of sources.
11. submits the work of another person in a manner that represents the work to be one's own.
12. knowingly permits one's work to be submitted by another person without the instructor's authorization.
13. attempts deceitfully to influence or change one's academic evaluation or record.
14. indulges in conduct that is so disruptive as to infringe upon the rights of an instructor or fellow students during a class or examination session.
For additional information, see the Faculty Handbook and Student Handbook.

## Changing Rules and Procedures

The university reserves the right to change the rules regulating admission to the institution and any other regulations affecting the granting of degrees. The course offerings and requirements of the university are continually under examination and revision. This catalog presents the offerings and requirements in effect at the time of publication, but there is no guarantee that they will not be changed or revoked. Current information may be obtained from the following sources:
Admission Requirements Executive Director of Enrollment Services and Student Engagement
Course Offerings..............................................................................................Department offering course
Degree Requirements .............................................................. Registrar, faculty adviser, or dean of college
Fees and Tuition ............................................................................. Division of Finance and Administration
The university further reserves the right to refuse to release to any student his/her transcript, grade report, or degree for failure to return university property or failure to pay any accounts due the university.

## Class Attendance Policy

Classroom attendance is an integral part of the educational experience; therefore, it is the responsibility of the student to attend class. The instructor of a course may determine his/her own attendance policy with the provision that the policy must be applied consistently to all students in the course. The attendance policy should be reasonable and it should be explicitly and unambiguously stated in each class at the beginning of each semester.

Faculty will monitor class attendance and report to the Office of Financial Aid and Scholarships any student listed on the class roll who has not started attendance. Reports will be made at the end of the second week of classes. These reports will be used to determine changes in the level of enrollment (full-time, three-quartertime, half-time, or less than half-time) for students receiving Federal Financial Assistance. Enrollment status
for financial aid purposes is determined at the end of the drop/add period, which is the first week of classes during regular semesters. Thereafter, changes in enrollment status occur only for non-attendance as reported by the instructor.

## Classification

All degree-seeking undergraduate students will be classified according to the following chart, which is based on number of hours earned:
Freshman ..... 0-29.9
Sophomore. ..... 30-59.9
Junior ..... 60-89.9
Senior. ..... 90 and above

Post-Baccalaureate. A person who has completed a baccalaureate degree may be enrolled as a postbaccalaureate student provided he/she does not wish to work toward a degree. (See Undergraduate Admission Procedures and Requirements.)

Special. A person (18 years of age or over) who does not meet entrance requirements may be enrolled and classified as a special student provided he/she does not wish to work toward a degree. (See Undergraduate Admission Procedures and Requirements.)

## Courses

Course Numbers. Course numbers beginning with " 0 " or followed by a slash " $\rho$ " or a pound sign "\#" do not count toward degree requirements. Courses numbered in the 100 and 200 groups are lower-division courses, primarily for freshmen and sophomores. Courses numbered in the 300 and 400 groups are upperdivision courses, primarily for juniors and seniors. Courses in the 500 through 700 groups are for graduate credit only.

Frequency of Course Offerings. Courses are offered in rotation. The frequency of course offerings is designated by (F) for fall semester, (Sp) for spring semester, (Su) for summer semester, or (as needed). If a course is offered only in odd- or even-numbered years, the designation will include "odd" or "even." Frequency designations are located in Courses Offered by the Department at the end of each departmental section.

Minimum Class Size. Minimum class size is determined by the department chair and dean. A regularly scheduled course may not be given for fewer than five students except by permission of the vice chancellor for academic affairs. The university reserves the right to cancel, postpone or combine classes when necessary.

Physical Activity Courses. A student may elect a maximum of eight semester hours of physical activity courses to count toward degree requirements. ONLY two physical activity courses may be taken for credit during any given semester.

Upper-division Courses. To be eligible for upper-division courses, students (transfers as well as those having previous attendance at the university) must have attained sophomore status unless approval is granted by the dean of the student's college.

## Honors

## University Honor Roll

Recognition is given to undergraduate students who complete a semester's work with:
Honors


To be eligible for the university honor roll, a student must have carried 12 or more academic hours, not counting work taken for pass-fail credit.

## Honors Graduation

The diplomas of graduating seniors show honors categories based on the following scale:

To qualify for one of these honors categories, a student must complete at least four semesters ( 60 semester hours minimum) in The University of Tennessee system. These honors categories are based on a student's cumulative average at the end of the semester preceding the graduation semester for the purpose of the commencement ceremony; however, a final check will be completed after the students' final semester's grades have been averaged into the cumulative grade point average for the purpose of the transcript and diploma. (Students transferring work from other colleges or universities must qualify on both their cumulative average and the University of Tennessee at Martin average. The honors designation is based upon the lower of the two averages.)

## "University Scholar" Designation at Graduation

The 10 hours of the University Scholars curriculum are required for graduation with the designation "University Scholar."

## Phi Eta Sigma

Phi Eta Sigma is a national honor society that recognizes high academic achievement in the freshman year. Students who achieve a 3.5 average at the end of their first year of study are eligible for membership.

## Phi Kappa Phi

Phi Kappa Phi is a national honor society that honors students in all academic fields on the basis of excellent scholarship and integrity of character. Juniors and seniors may be accepted into membership in a number up to one-tenth of the graduating class.

## Who's Who

Who's Who in American Colleges and Universities is a national organization that publishes the names and records of outstanding college students from all over America. The selection is based on scholastic ability, citizenship and leadership. Any junior or senior is eligible for consideration. Selections are made by a special faculty and student committee.

## Awards

An annual Honors Day Program in the spring gives recognition to students who have made outstanding achievements in scholarship, leadership and citizenship. In addition to more than 50 special honors and awards, college and departmental honors are given to outstanding students chosen by the college dean and chairs of the departments. Also included in the program are four awards presented to faculty for their outstanding teaching and advising.

## Transcripts of Records

Any person who wishes to receive a copy of his/her academic transcript must place an order with the Office of Academic Records. Orders can be placed one of two ways: 1) in person in our office, or 2 ) online at the National Student Clearing House at www.getmytranscript.com. A transcript will not be issued unless the student's record is clear with all offices of the university. It is recommended that a transcript be mailed directly from the Office of Academic Records to the official to whom it is to be sent. Many institutions will not accept a transcript from the student. There is a $\$ 5$ fee for each transcript sent. Special Services, such as overnight mail, rush orders, etc., will incur additional fees.

## Academic Continuation

Students are required to have a minimum cumulative grade-point average (GPA) of 2.00 to receive the baccalaureate degree from the University of Tennessee at Martin. Academic standards of performance have been established to ensure satisfactory progress toward a degree. These performance standards form the basis for the following academic classifications:

1. academically eligible
2. academically eligible-warning
3. academically ineligible

Guidelines and procedures for placing students in the previous classifications are explained in the following paragraphs.

Academically Eligible. A student is considered to be academically eligible so long as the number of quality points earned is equal to twice the number of GPA hours attempted. This is equivalent to a cumulative GPA of 2.00 .

Academically Eligible--Warning. A student will automatically be placed on warning at the end of any semester if he/she fails to have a 2.00 cumulative GPA. If a student on warning fails to achieve a 2.00 cumulative GPA, the student may continue (on warning) as long as a semester GPA of 2.00 is maintained. Warning will be removed once a cumulative GPA of 2.00 is regained, indicating satisfactory progress. Should the student fail to demonstrate satisfactory progress after one or more continuous semesters of warning, he/ she will be academically ineligible. Students on warning may not register for more than 16 credit hours per semester or eight hours per summer term without the written approval of the appropriate college dean. (See Undergraduate Admission Procedures and Requirements: Course Loads)

The student must enroll in a 1-credit hour Success Strategies course to develop a contract for improving his or her academic progress. In this course, the student will work on the established plan that will lead toward improved academic progress. This plan will be tailored to meet the individual needs of each student and may include supplementary work with reading, writing, mathematics, and study skills computer software, work in the Hortense Parrish Writing Center or the Math Lab, and/or work in a group of individual tutoring sessions.

Academically Ineligible. A student on warning for one or more continuous semesters will be academically ineligible for one semester unless one of the following occurs: (1) the cumulative GPA is raised to 2.00 or better; or (2) a 2.00 or better semester GPA is achieved. A student may appeal for reinstatement to the term immediately following his/her first academic ineligibility. If the student is academically ineligible a second time, the student must leave the university for one academic semester, excluding summer, and may apply for readmission after the one-semester ineligibility. If the student is academically ineligible a third time, the student may apply for readmission after a minimum period of one calendar year.

The student must apply for readmission to the Office of Admissions no later than one month prior to registration for the semester for which he/she is applying. An academically ineligible student may not engage in correspondence study. Students who enroll at another institution while academically ineligible at UT Martin will not be readmitted to UT Martin until their cumulative GPA from all institutions attended meets the UT Martin continuation requirement of a cumulative GPA of 2.00.

## Drop, Add and Withdrawal from the University

Note: Dropping coursework may affect financial aid awards, including Lottery Scholarships.

## Drop Policy

Within First Eight Weeks. With permission of a student's adviser, a course may be dropped during the first eight weeks of the semester. Drops executed during the first 14 days will leave no record on the student's academic transcript. A drop executed after the fourteenth day through eighth week will result in a grade of $\mathbb{W}$ (withdrawal).

After First Eight Weeks. Courses may not be dropped after the first eight weeks of a semester unless it can be clearly demonstrated that one of the following exists:

1. serious illness or injury of the student as verified by Student Health and Counseling Center or private physician;
2. serious personal or family problems as verified by a minister, physician, or other appropriate professional; or
3. necessary change in work schedule which conflicts with the class being dropped, as verified by the student's employer submitted in writing on company letterhead.

In the event of such certification, and the approval of the student's adviser and the registrar, the student will receive the grade of $W$. Under normal circumstances, a student may not drop a course after the last day of class or after administration of the final exam, whichever occurs first.

A student will not be permitted to drop a course after the first eight weeks of the semester simply to avoid a poor grade.

Summer Deadlines: Students should consult the summer term timetable for the appropriate summer deadlines.

## Add Policy

Adding Courses. With permission of the student's adviser, a course may be added through the first week of class for the fall and spring semesters. All course section adjustments must be completed during the first week of the semester. Students should consult the registrar's Web site for all partial-term deadlines, as well as the appropriate summer deadlines.

## Withdrawal Policy

Withdrawing from University. All official withdrawals (dropping the student's entire schedule) from the university are processed by the Office of Academic Records.

Within First Eight Weeks. Withdrawals executed during the first 14 days of the fall and spring semesters will leave no record of the courses for which the student registered. Withdrawals executed after the fourteenth day through the eighth week of the semester will result in a grade of W (withdrawal) in all courses for which the student registered.

After First Eight Weeks. Withdrawals are not permitted after the first eight weeks of a semester unless it can be clearly demonstrated that one of the following exists:

1. serious illness or injury of the student as verified by Student Health and Counseling Center or private physician;
2. serious personal or family problems as verified by a minister, physician, or other appropriate professional; or
3. necessary change in work schedule which conflicts with the class being dropped, as verified by the student's employer submitted in writing on company letterhead.

In the event of such certification, and the approval of the vice chancellor for student affairs, the student shall receive $\mathrm{a} W$ in all courses for which the student registered. Under normal circumstances a student may not withdraw from the university after the last day of class or after administration of the final exam, whichever occurs first.

A student will not be permitted to withdraw after the first eight weeks of the semester simply to avoid a poor grade.

Summer Deadlines: Students should consult the summer term timetable for the appropriate summer deadlines.

## Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act ("FERPA") provides for the confidentiality of personally identifiable information contained in student records, including student academic records; however, FERPA also permits UT Martin to disclose certain information, called "directory information," to a third party without a student's written consent.

UT Martin has designated the following information as directory information: student's name, address, telephone number, date and place of birth, major, dates of attendance, degree and awards, the most recent previous educational agency or institution attended, participation in school activities and sports, weight and height (for members of athletic teams), photograph, email address and classification. UT Martin may disclose directory information to a third party without a student's consent unless a student, prior to the 14th day after each semester begins, notifies the registrar in writing of his or her desire to restrict directory information from being published. For more information on students' rights under FERPA, refer to the registrar's Web site at www.utm. edu/registrar or the Student Handbook at http://www.utm.edu/students.php.

## EEO/Title VI, Title IX/Section 504/ADA/ADEA Statement

All qualified applicants will receive equal consideration for employment and admissions without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, or covered veteran status.

Eligibility and other terms and conditions or employment benefits at the University are governed by laws and regulations of the State of Tennessee, and this non-discrimination statement is intended to be consistent with those laws and regulations.

In accordance with the requirements of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of

1990, the University affirmatively states that it does not discriminate on the basis of race, sex, or disability in its education programs and activities, and this policy extends to employment by the University.

Inquiries and charges of violation of Title VI (race, color, national origin), Title IX (sex), Section 504 (disability), ADA (disability), Age Discrimination in Employment Act (age), sexual orientation, or veteran status should be directed to the Office of Equity and Diversity (OED), 303 Administration Building, The University of Tennessee at Martin, Martin, TN 38238, telephone 731-881-4889 (V/TTY available) or 731-8813505. Requests for accommodation of a disability should be directed to the ADA Coordinator at the Office of Equity and Diversity.

## Undergraduate Degrees and Specialized Programs



The University of Tennessee at Martin

## University-Wide Degree Programs

UT Martin offers undergraduate degrees that can be completed in four years with full-time enrollment. There are more than 80 specialized programs in support of those degrees. Most of these degrees and supporting programs are offered by a specific college or department. They are described in the succeeding sections of the catalog devoted to each college and its departments. There are two degrees, however, that are university-wide in nature. They are the Bachelor of Arts (B.A.) and Bachelor of Science (B.S.). The requirements for these degrees follow. The following subject areas are available as majors or minors in support of the B.A. and/or B.S. degrees.
SUBJECT AREA BA BS MINOR SUBJECT AREA BA BS MINOR
Accounting .................................................................X Japanese .....  $X$
African-American Studies ..... X
Leadership. ..... X
Agriculture ..... X
Art .....  X
Art History .....  X
Athletic Coaching ..... X
Biology ..... X ...........X
Business Administration .....  X
Business Communication Information Systems ..... X
Canadian Studies ..... X
Chemistry .....  X
Communications. ..... X ......... $\mathrm{X} \ldots \ldots \ldots . . . \mathrm{X}$
Computer Science. ..... X ...........X
Criminal Justice ..... X
Dance ..... X
Engineering, Electrical ..... X
English ..... X
Entrepreneurship ..... X
Family and Consumer Sciences ..... X
Fashion Merchandising. .....  X
Finance .....  $X$
Forensic Science. ..... X
French. ..... X
Geoscience X
Legal Studies. ..... X
Management ..... X
Management Information Systems ..... X
Marketing ..... X
Mathematics ..... X
Meteorology .....  $X$
Military Science and Leadership .....  X
Music ..... X
Neuroscience ..... X
Nutrition ..... X
Park Administration ..... X
Philosophy. ..... X
Physics ..... X
Political Science .....  $X$
Psychology. .....  X
Public Health .....  X
Religious Studies ..... X
Sociology. ..... X
Spanish. ..... X
Sport Business ..... X
Statistics .....  X
Geology .....  X
Theatre. .....  X
Women's and Gender Studies .....  X
German .....  X
Gerontology ..... X
Graphic Design ..... X
History. X ..........X ..... X
International Studies. ..X ..... X

A student seeking any bachelor's degree at the University of Tennessee at Martin must satisfy the university-wide general education requirements found at the beginning of the catalog. Specific degree programs may have additional general requirements and/or may restrict the options from which a student may choose in one or more of the categories of study. A student should consult the appropriate section of this catalog and work closely with an academic adviser to ensure that all requirements of the specific degree for which he/she is a candidate are met.

## Bachelor of Arts General Education Requirements

## Graduation Requirements

Minimum credits required for graduation ..... 120
Minimum credits in upper-division courses ..... 36
Maximum credits in any one subject counted toward graduation ..... 50Complete requirements for a major (see Major section which follows)Complete requirements for a minor (see Minor section which follows)
General Requirements
I. Communication Requirement
A. English 105 or 111 , and 112 (or equivalent honors courses)
B. Communications 230 (or equivalent honors course) or Honors 110

## II. Foreign Language Requirement

Completion of 222 in a foreign language or the equivalent. (See Satisfying the B.A. and B.S. Foreign Language Requirement section.)

## III. Humanities Requirement

A. Complete a sequence from one area and one course from two other areas:

English: English 250-251, or 260-261, or 270-271 (foreign language literature courses numbered 300 or above may be substituted for English courses.)
History: History 121-122, or 201-202 (or equivalent honors courses)
Honors 101-102, 201 (For students in the University Scholars Program, these courses will satisfy the requirement in Humanities A of a sequence in one area and one course in another area.)
Philosophy and Religious Studies: Philosophy 110-120 or Religious Studies 201 or 301
B. Complete one course in two of the following four areas:

Art 110; or Art History 210, 211
Dance 110
Music 111, 112, 114, 115
Theatre 110, 111
C. Complete Philosophy 160

## IV. Laboratory Science Requirement

Complete one sequence outside of major:
Astronomy 201-202
Biology 120 or 130, and 110 or 140
Chemistry 111-112, or 121-122
Geosciences 110 or 110 H and either 120, 130, or 140 or equivalent honors course
Physics 101-102, or 211-212, or 220-221

## V. Social Science Requirement

Outside of major complete one sequence and one additional course in a different area (one course must come from Economics 201, 202; Political Science 210; Psychology 101; or Sociology 201)
Economics 201-202
Geography (Regional) 151-152

Geography (Physical and Cultural) 201-202
Honors 202
Political Science 210-220 or 220-230
Psychology 101 (or equivalent honors courses)
Sociology 101, 300
Sociology 201-202
Women's and Gender Studies 201

VI. Mathematical Reasoning Requirement<br>Complete one math course from the following: Mathematics 110, 130, 140, 160, 185, 210, 251 (or equivalent honors course), or Honors 120

## Bachelor of Science General Education Requirements

## Graduation Requirements

Minimum credits required for graduation ..... 120
Minimum credits in upper-division courses ..... 42
Maximum credits in any one subject counted toward graduation ..... 50Complete requirements for a major (see Major section which follows)Note: Certain majors may require students to complete a minor (see Minor section which follows)

## General Requirements

I. Communication Requirement
A. English 105 or 111, and 112 or 113 (or equivalent honors courses)
B. Communications 230 or Honors 110

## II. Foreign Language Requirement

Bachelor of Science students fulfill the foreign language requirement by completing a foreign language course numbered 122 or higher, unless they are taking the same language that was used to fulfill an entrance deficiency, in which case the sequence 122-222 in that language is required. International students and resident aliens for whom it is determined that English is a second language may satisfy the requirement either as stated above or by taking an English course at the 200 level or higher and passing with a grade of C or better. (See Satisfying the B.A. and B.S. Foreign Language Requirement.)

## III. Humanities Requirement

A. Complete one sequence and one course from a different discipline chosen from:

English 250-251, or 260-261, or 270-271
History 121-122 or 201-202
Honors 101-102, 201 (For students in the University Scholars Program, these courses will complete the Humanities A requirement.)
Philosophy 110-120
B. Complete one course selected from:

Art 110
Art History 210 or 211
Dance 110
Music 111 or 112 or 114 or 115
Theatre 110 or 111
IV. Laboratory Science RequirementComplete two of the following sequences outside the major:Astronomy 201-202
Biology 110-120 or 130-140Chemistry 121-122Geosciences 110 or 110 H and either 120, 130, or 140 or equivalent honors coursePhysics 211-212 or Physics 220-221
V. Social Science RequirementComplete two courses from different disciplines outside the major:
Economics 201, 202
Geography 151, 152, 202
Honors ..... 202
Political Science (American Government) 210, 220, (World Politics) 230
Psychology 101Sociology 201Women's and Gender Studies 201
VI. Mathematics RequirementComplete Mathematics 185-Precalculus or any two of the following courses:
Mathematics 110 or Mathematics 140
Mathematics 160
Mathematics 170
Mathematics 210
Mathematics ..... 251
Mathematics ..... 252
Honors 120

For the Bachelor of Arts and Bachelor of Science general education requirements, where an honors course exists equivalent to any course listed above, that honors course will automatically substitute for the listed course.

## Satisfying the B.A. and B.S. Foreign Language Requirement

The foreign language requirement for the degree of Bachelor of Arts is satisfied by completion of 222 or the equivalent. International students and resident aliens for whom it is determined that English is a second language may satisfy the requirement either as stated above or by taking an English course at the 200 level or above and passing with a grade of C or better.

Bachelor of Science students fulfill the foreign language requirement by completing a foreign language course numbered 122 or higher, unless they are taking the same language that was used to fulfill an entrance deficiency, in which case the sequence 122-222 in that language is required. International students and resident aliens for whom it is determined that English is a second language may satisfy the requirement either as stated above or by taking an English course at the 200 level or higher and passing with a grade of C or better.

## Major Requirements for B.A. and B.S.

Each student in a Bachelor of Arts or Bachelor of Science degree program must complete a major program of study consisting of no fewer than 18 semester hours of upper-division courses (up to six hours of these courses may be replaced by lower-division work in certain departments). A minimum grade of C (2.00) must be made in every course offered for the major, exclusive of lower-division prerequisites. Required and elective courses taken for pass/fail ( $\mathrm{P} / \mathrm{F}$ ) where a P is recorded will count as satisfying the minimum-grade requirement. Transfer students must earn at least six hours in the major while in residence at The University of Tennessee at Martin. Requirements for the major are specified by the individual departments. Certain majors may also require a student to complete a minor program of study. (See individual departmental listings.)

For information on preparation for legal study or pre-theological study, see the Department of History and Philosophy section. For information on pre-professional curricula in the health sciences, see the College of Engineering and Natural Sciences section.

## Minor Requirements for B.A. and B.S.

A minor in support of the B.A. or B.S. degree consists of not less than 12 hours of upper-division courses in a subject outside the major. Up to six hours of these courses may be replaced by lower-division work in certain departments. For requirements for minors other than those listed below, see the individual departmental listings.

A second major can be completed in lieu of a required minor.
The Canadian Studies Minor (2080) consists of Interdisciplinary Studies 250 plus 15 hours of approved courses distributed as follows: (a) one course in Geography, History, or Political Science (select from Geography 151, Geography 380, History 461, History 462, Political Science 314, Political Science 362); (b) one course in Literature or Culture/Civilization (select from English 350, English 401, English 475, French 250, French 350, French 495) ; (c) three electives from two different fields, one of which must not have been studied in (a) or (b) (select from Agriculture 295, Economics 333, Finance 332, International Studies 200, Marketing 410, Nursing 362). These electives may include two advanced French courses (taught in French), numbered 300 and above. Students must complete six hours of the above requirements in Canada, through study at an approved Canadian institution (e.g., the University of Quebec at Chicoutimi; the University of New Brunswick at Saint John), a travel-study program, or an international internship. As a final requirement, students must demonstrate advanced-level proficiency in the French language by completing French 222 or the equivalent.

The Sustainability Studies Minor (1500) The Sustainability Studies Minor consists of at least 18 credit hours, including SUST 200 and five additional courses, at least four of which must be upper division ( 300 or 400 -level). The five additional courses must include at least one course from each of the following three categories: Environmental Sustainability (AGET 250; AGRI 295; BIOL 444; ENGR 456; GEOG 472; METR 420; NRM 101, 210); Economic Sustainability (ECON 322, LDSP 323, MGT 462) and Social Sustainability (SOC $202,309,333,386,431$; PHIL 355). Up to two of the five additional courses may be substituted with SUST 380 and/or SUST 450 (each taken for at least 3 hours credit).

## Courses Offered by General, Interdisciplinary, and Women's and Gender Studies

General Studies 101 General Studies, Seminar in Freshman Studies (F) General Studies 134 Success Strategies (F, Sp)
General Studies 150 Information Literacy and Research Skills (F, Sp)
General Studies 180-189 General Studies Minicourse [Title] (as needed)
General Studies 201 Career Exploration (F, Sp)
General Studies 211 College Study Skills (F, Sp)
General Studies 280-289 General Studies Minicourse [Title] (as needed)
General Studies 300 Fundamentals of Career Entry (as needed)
General Studies 301 Portfolio Development (as needed)
General Studies 302 Leadership for Learning Organizations (as needed)
General Studies 380-389 General Studies Minicourse [Title] (as needed)
General Studies 400 Senior Seminar (as needed)
General Studies 480-489 General Studies Minicourse [Title] (as needed)
Interdisciplinary Studies 110-120 Introduction to Leadership (as needed)
Interdisciplinary Studies 150 Introduction to the Canadian People and Their Culture (as needed)
Interdisciplinary Studies 110-120 Introduction to Leadership (as needed)
Interdisciplinary Studies 250 Foundations in Canadian Studies (as needed)
Interdisciplinary Studies 450 (650) Energy Studies (as needed)
Interdisciplinary Studies 711-112 Environmental Studies (as needed)
Women's and Gender Studies 201 Introduction to Women's and Gender Studies (as needed)
Women's and Gender Studies 450 Travel Study (Selected Topics) (as needed)
Women's and Gender Studies 460 Independent Study (as needed)

## The College of Agriculture and Applied Sciences



The University of Tennessee at Martin

# The College of Agriculture and Applied Sciences 

Dr. Todd A. Winters, Dean<br>251 Brehm Hall<br>731-881-7250<br>fax 731-881-7948

## Mission

The primary mission of the College of Agriculture and Applied Sciences is to provide a high quality education leading to 1) bachelor of science degrees in five majors: Agricultural Business, Agriculture, Geoscience, Natural Resources Management, and Family and Consumer Sciences; 2) master of science degrees in two areas: Agriculture and Natural Resources, and Family and Consumer Sciences; and 3) commissioning of 2nd lieutenants in the United States Army. The distinctive feature of the B.S. degree programs is that each provides graduates some exposure to all principal disciplines of the major. At the same time, each B.S. degree program has the flexibility to allow students to choose a concentration of courses in one of several disciplines within the major. The college is also committed to be of public service and outreach to taxpayers of the region and to involve students in limited and applied research.

## Organization

The College of Agriculture and Applied Sciences is composed of three departments: Agriculture, Geosciences, and Natural Resources; Family and Consumer Sciences; and Military Science and Leadership.

## Programs Available in the College

The College of Agriculture and Applied Sciences offers five baccalaureate degree programs in agricultural business, agriculture, family and consumer sciences, geoscience, and natural resources management; a Master of Science in family and consumer sciences and a Master of Science in agriculture and natural resources. All graduate programs are offered by distance delivery (see Graduate Study section).

The Department of Agriculture, Geosciences, and Natural Resources offers undergraduate programs with three concentrations/options in agricultural business, ten concentrations/options in agriculture, three concentrations in geoscience, and five concentrations/options in natural resources management. Complete information about this program may be found in the agriculture, geosciences, and natural resources departmental pages.

The Department of Family and Consumer Sciences offers an undergraduate program leading to a bachelor of science in family and consumer sciences. The major in family and consumer sciences includes seven concentrations. The department is accredited by the American Association of Family and Consumer Sciences for its undergraduate program. In addition, a graduate program leading to a master of science in family and consumer sciences is offered (see Graduate Study section). For complete information and details about family and consumer sciences curricula, refer to the family and consumer sciences departmental pages.

The Department of Military Science and Leadership offers the ROTC Program, a four-year program divided into two parts - the basic course and the advanced course. Veterans and community college transfer students
may bypass the basic course under certain conditions. Upon successful completion of the advanced course and graduation, cadets may be awarded a commission as a second lieutenant in the U.S. Army, the Army National Guard, or the U.S. Army Reserve. For more detailed information about the ROTC Program, refer to the military science departmental pages.

## Scholarships

Many different types of financial aid are available to incoming freshmen, transfer and returning students and may include employment, loans, grants and scholarships. Financial aid can be made available for one to four years, depending on the situation. For more information and scholarship application forms visit the university website: https://utm.academicworks.com.

# Department of Agriculture, Geosciences, and Natural Resources 

Dr. Wesley Totten, Chair<br>257 Brehm Hall<br>731-881-7262<br>fax 731-881-7968

## Faculty

Clint A. Ary, William A. Bird, Emalee B. Buttrey, Matthew D. Chesnut, John T. Cole, Meghan M. Cunningham-Corvin, Barbara A. Darroch, Craig S. Darroch, Anthony R. Delmond, Thomas A. DePriest, Stan P. Dunagan, Paula M. Gale, Jessica M. Crews-Garcia, Michael A. Gibson, Kimberly J. Leiter, Isaac Lepcha, Joey E. Mehlhorn, Sandy A. Mehlhorn, Zachary M. Morphis, Scott D. Parrott, Audrey N. Pattat, Eric C. Pelren, J. Ross Pruitt, Jason F. Roberts, Jefferson S. Rogers, Robert M. Simpson, Philip L. Smartt, Rachna Tewari, F. Wesley Totten, Angela M. Van Boening, Amanda M. Waldon, Danny R. Walker, Timothy J. Wallace, Diana L. Watson, Todd A. Winters, Bethany R. Wolters, Tara L. Woods

## Mission

The Department of Agriculture, Geosciences, and Natural Resources is in the College of Agriculture and Applied Sciences. The primary mission of the Department of Agriculture, Geosciences, and Natural Resources is to provide a high quality undergraduate education, with extensive experiential learning activities, to all students who major in agricultural business, agriculture, geosciences, and natural resources management. This goal is achieved by (1) offering major degree programs that are designed to introduce students to the full array of disciplines within each program; (2) offering degree concentrations that allow students to gain in-depth knowledge and experiential learning in particular disciplines; (3) offering courses which collectively provide training in theory, concepts, research skills, data collection, laboratory-based analyses, fieldwork, technical writing, and oral presentations; and (4) staffing all courses with highly-qualified instructional personnel. Bachelor degree programs are designed to prepare students for professional careers, graduate studies, and other professional programs. The majors are distinctive in that students are exposed to all principal disciplines within each program, while maintaining the flexibility to choose a concentration discipline that fulfills their career goals. The department provides a variety of general education courses that are intended to significantly broaden and enhance the knowledge and skills of all students who attend the university. Students in each program have opportunities to obtain field experience, prepare for postgraduate studies, and engage in scholarly and professional activities that promote regional, national, and international experience. The Fellows Research Program provides a structured avenue for qualified undergraduate students to enhance their undergraduate preparation for graduate or professional schools. The department offers an online Master of Science in Agriculture and Natural Resources (M.S.A.N.R.) degree program through Educational Outreach at The University of Tennessee at Martin. This M.S.A.N.R. degree is designed to provide working professionals expanded scientific knowledge and advanced managerial foundations for career advancement. The faculty and staff of the department support the university, the region and the greater academic community through public service and research
activities. Students are encouraged to participate in these endeavors. The department houses the Center of Excellence for Experiential Learning in the Agricultural Sciences that promotes student-mentor based applied research, public outreach, and pedagogy development as prominent mission goals.

## Expected Outcomes

The roles and objectives of the Department of Agriculture, Geosciences, and Natural Resources closely parallel those of The University of Tennessee at Martin. The statements of mission for the university and the College of Agriculture and Applied Sciences both emphasize undergraduate education as the core of instructional effort with applied research and public outreach complementing this endeavor. Goals and objectives of the department support the mission of the college and thereby complement the educational goals of the university.

Programs of study in the department lead to a Bachelor of Science (B.S.) degree in Agricultural Business, Agriculture, Geosciences, or Natural Resources Management, with multiple areas of concentration and options within each degree program. Three concentrations are currently offered in Agricultural Business: agribusiness, farm and ranch management, and veterinary technology management. Four concentrations are currently offered in Agriculture: agricultural engineering technology, agricultural science, animal science, and plant and soil science. Three concentrations are offered in Geosciences: geology, geosystems, and meteorology. Four concentrations are offered in Natural Resources Management: environmental management, park administration, soil and water conservation, and wildlife and fisheries biology. All curricula in the department have a broad general education base. This provides a foundation necessary for living a quality life in a rapidly changing modern society while providing a knowledge base for study that is specific to a major field. Students have the opportunity to study with highly qualified faculty who provide individualized educational opportunities with a high priority on experiential learning experiences to achieve the greatest personal potential.

## Majors

The Bachelor of Science degree programs in agricultural business, agriculture, geosciences and natural resources management include the following majors, areas of concentration and options. The professional education option within agricultural science is accredited by the National Council for the Accreditation of Educator Preparation Program.

Bachelor of Science in Agricultural Business (with a major in Agricultural Business)

## Concentrations

Agribusiness (1171)
Farm and Ranch Management (1172)
Veterinary Technology and Management (1173)
Bachelor of Science in Agriculture (with a major in General Agriculture)
Concentrations
Agricultural Engineering Technology (Agriculture Engineering Technology and Precision Agriculture Options) (1124-GEN, 1124-PAT)
Agricultural Science (Agricultural Production, Professional Education, and Agriculture Communications) (1112, 1113, 1120)
Animal Science (Animal Science; Veterinary Science; and Veterinary Health Technology Options) (1132, 1128 and 1129)
Plant and Soil Science (Crop and Soil Management, and Golf Course and Landscape Management Options) (1121, 1123)

## Bachelor of Science in Natural Resources Management (with a major in NRM)

## Concentrations

Environmental Management (1154)
Park Administration (1151)
Soil and Water Conservation (1152)
Wildlife and Fisheries Biology (Wildlife Science \& Fisheries Science Options) $(1156,1155)$
The bachelor of science in agricultural business and agriculture degrees include a set of general education requirements, common agricultural core requirements and concentration requirements for a major field. Students will meet general education requirements for biological and physical systems, communications, fine arts (aesthetics), humanities, mathematics and social and behavioral sciences. It requires completion of a minimum 120 semester hours of course work. Course requirements during the first two years are similar to those of other universities, a feature that facilitates transferring to or from other universities and community colleges. After completing basic courses in agriculture and supporting subjects, students may elect an area of concentration according to their interests. Each concentration provides a broad general education and excellent preparation for advanced study.

The bachelor of science in natural resources management also includes general education requirements, common natural resource management core requirements and concentration requirements for a major field. Each of the major field concentrations is designed to provide a broad general education in management of natural resources as well as specialization in the major field. Completion of any of these curricula with selection of proper electives provides an excellent foundation for graduate study.
All of the curricula available in agricultural business, agriculture or natural resources management include elective courses to allow flexibility in selection of courses according to interests of the individual student. Electives must be selected by the student with consultation and approval of his/her academic adviser. Many courses include field trips to, and work experiences with, leading agricultural businesses, farms and resource management agencies such as state and national parks and wildlife refuges. Thus, students have an opportunity to observe proper application of new concepts and information, technology and principles of management to real-life situations. The master of science in agriculture and natural resources degree is described in the graduate section of the catalog.

## Bachelor of Science (with a major in Geoscience)

## Concentrations

Geology Concentration (1162).
Meteorology Concentration (1163)
Geosystems Concentration (1164).

## Bachelor of Science in Agricultural Business

I. General Education Requirements (38-39 hours)Biological and Physical Systems.8Choose two courses from approved General Education listing. Communication. ..... 9-10
Communications 230; English 110 (4) or 111 (3), 112 Fine Arts (Aesthetics) ..... 3
Choose one course from approved General Education listing. Humanities. ..... 9Choose three courses from approved General Education listing.
Mathematics
Choose one course from Mathematics $110,140,160,185,210$, or 251Social and Behavioral Sciences.Choose two courses from approved General Education listing.
II. Concentration Requirements (82-85 hours)
(See respective concentrations on the following pages.)
Minimum hours required for B.S.A.B. degree
(must include 30 hours of upper-division courses) ..... 120-123
Agricultural Business Concentration (1171)

This curriculum is designed to prepare students for careers in the rapidly expanding agricultural business sector. Students receive instruction in the agricultural sciences, agricultural economics, accounting, finance, policy, marketing and management. Students learn how the economic system operates as well as the role agriculture plays in the U.S. and global economy. The program emphasizes training related to the management phases of agricultural industry and business. Excellent career opportunities are available in industries allied with agriculture, including those engaged in transportation, distribution, marketing and processing of farm products; agricultural banking and farm credit agencies; farm real estate and land appraisal services; insurance; agricultural supply businesses and cooperative management; agricultural policy at state and federal levels; market analysis and international agricultural trade.

## CONCENTRATION REQUIREMENTS* (88 Hours)

Accounting 201-202.................................................................................................................. 6
Agriculture Core courses: Agricultural Economics 110 and choose six hours from:
Animal Science 110, Plant Science 110, Agricultural Engineering Technology 110,
Agriculture 390, or Soil Science 210 .......................................................................... 9
Agriculture 230 or Agricultural Economics 444 .......................................................................... 3
Agribusiness Management Area: Agricultural Economics 271; Agricultural Economics 471; and
choose three hours from Agricultural Economics 371, 372, 475, or 480 ............................. 9
Agribusiness Marketing Area: Agricultural Economics 250; Agricultural Economics 364; Agricultural Economics 415; and choose three hours from Agricultural Economics 350, 385, or 386 ......... 12.
Agribusiness Quantitative Area: Agricultural Economics 311; Agricultural Economics 465; and
choose three hours from Agricultural Economics 370, 440, or 485...................................... 9
Agribusiness Policy Area: Agricultural Economics 325; and choose six hours from Agricultural
Economics 335, 375, 390, or 445 ..................................................................................... 9
Agriculture/Natural Resources Management Electives .................................................................. 6
Business Electives: choose 12 hours from Business Law 301, Finance 301 or 341, Economics 311 or 312, Management 300, 304, or 307, Marketing 301, 302 or 340 ............................................ 12
Mathematics General Education Requirement 160 or 210 ........................................................... 3
General Electives ....................................................................................................................... 4
Social and Behavioral Sciences Requirement: Economics 201, 202 .............................................. 6
*At least 30 hours of concentration requirements must be taken in upper-division courses.

## Farm and Ranch Management Concentration (1172)

This curriculum is designed to prepare students for careers in the rapidly expanding agricultural business sector, but in particular, for careers in farming and farm management. Students receive instruction in the agricultural sciences, agricultural economics, accounting, finance, policy, marketing and management.


#### Abstract

Students can add to their background in agribusiness courses their choice of courses in animal science, plant and soil science and agricultural engineering technology to prepare for managing a farm. The program emphasizes training related to the management phases of agricultural industry and business. Career opportunities in farm management are primarily available for those who are going to inherit or partner in an existing farm operation but farm management careers are also available in the banking, insurance and credit industries.


## CONCENTRATION REQUIREMENTS* (82 Hours)

$$
\text { Agricultural Economics } 250,271,311,325,335,364,370,371,372,415,465 \text {......................... } 31
$$

Agriculture Core courses: Agricultural Economics 110 and choose six hours from:
Animal Science 110, Plant Science 110, Agricultural Engineering Technology 110, Agriculture 390, or Soil Science 210 ..... 9
Agriculture/Natural Resources Management Electives** ..... 24
Economics 201, 202 ..... 6
General Electives ..... 12-18
*At least 30 hours of concentration requirements must be taken in upper-division courses.**A maximum of nine hours can be selected from among Special Problems, Practicum,Research Participation, Supervised Field Experience, or International Travel Study.
Veterinary Technology and Management Concentration (1173)
This curriculum is designed for students who have successfully completed an associate's degree from anAVMA CVTEA accredited veterinary technology program. The option will allow students to expand theirknowledge in the areas of animal science and agribusiness management as it relates to the veterinaryprofession. Emphasis will be placed on management training of veterinary technologists. Students receiveinstruction in agricultural science, agricultural economics, accounting, finance, policy, and marketing.This will help students with career advancement in veterinary practice management, veterinary technologyeducation, pharmaceutical sales, and laboratory medicine.
CONCENTRATION REQUIREMENTS* (60 Hours)
General electives ..... 27
Agricultural Economics 110, 405 ..... 6
Agricultural Economics upper division (300-400 level) electives ..... 12
Animal Science or Veterinary Technology upper division (300-400 level) electives ..... 9
Upper division general electives (300-400 level) ..... 6
*Complete required courses for which equivalent courses have not been received.
Note: Students can transfer no more than 9 upper division hours without special permission.
Bachelor of Science in Agriculture
I. General Education Requirements (38-39 hours)
Biological and Physical Systems. ..... 8
Choose two courses from approved General Education listing. Communication. ..... 9-10
Communications 230; English 110 (4) or 111 (3), 112 Fine Arts (Aesthetics) ..... 3
Choose one course from approved General Education listing. Humanities ..... 9
Choose three courses from approved General Education listing.
$\qquad$
Choose one course from Mathematics $110,140,160,185,210$, or 251
Social and Behavioral Sciences.
Choose two courses from approved General Education listing.
II. Concentration Requirements (82-85 hours)
(See respective concentrations on the following pages.)

Minimum hours required for B. S. Ag. degree
(must include 30 hours of upper-division courses)................................................. 120-123
Agricultural Technology Concentration
Agricultural Engineering Technology Option (1124-GEN)
The Agricultural Engineering Technology curriculum is designed for students seeking careers with industries and organizations utilizing applied engineering technologies. Careers in Agricultural Engineering Technology include: agricultural equipment manufacturers, agricultural/industrial equipment sales and service, fiber processing, food production/processing industries, biofuels production and processing, geospatial technologies and technological fields in government-related careers. The Agricultural Engineering Technology program leads to a Bachelor of Science degree in Agriculture. The curriculum is also structured to prepare students for admission to graduate school in Agricultural Engineering Technology, Agricultural Operations Management, Agricultural Systems Management, or Agricultural Mechanics.

## CONCENTRATION REQUIREMENTS (82 Hours)

Accounting 201 ............................................................................................................................... 3
Agriculture Core courses: Agricultural Economics 110; Agricultural Engineering Technology 110;
Plant Science 110; Soil Science 210; Agriculture 270 or Geography 270 .................................... 16
Agricultural Economics 311 ............................................................................................................. 3
Agricultural Engineering Technology.............................................................................................. 15
$220,350,382,420$, and 470
Agricultural Engineering Technology 480 or 482 ............................................................................... 3
Agricultural Engineering Technology Electives................................................................................... 6
Choose 6 hours from 354, 370, 450, or 460
Biological and Physical Systems..................................................................................................... 12
Physics 211-212 or 220-221; Chemistry 111 or 121
Engineering 101 .............................................................................................................................. 3
English 325 or Information Systems 351 ........................................................................................... 3
Mathematics 170 ............................................................................................................................. 3
Soil or Plant Science Elective............................................................................................................ 3
Choose from any 300 or 400 level Soil or Plant Science course
Agriculture and Natural Resource Management Electives.
Adviser approved courses from Agriculture and Natural Resources
eneral Electives ......................................................................................................................... 6
Adviser approved courses from Biology, Business, Chemistry, Engineering, Food Science, Geography, Geology, Mathematics, or Physics

## Precision Agriculture Technology Option (1124-PAT)

The precision agriculture technology option is designed for students interested in pursuing a career in precision agriculture as it relates to the sales, installation and troubleshooting of equipment to enhance production agriculture.
CONCENTRATION REQUIREMENTS (82 Hours)
Accounting 201 ..... 3
Agriculture core courses: Agricultural Economics 110; Agricultural Engineering Technology 110; Plant Science 110; Soil Science 210; Agriculture 270 or Geography 270 ..... 16
Agricultural Economics 271 and 311 ..... 6
Agricultural Engineering Technology ..... 18
$220,350,370,382,420$, and 470
Agricultural Engineering Technology 480 or 482 ..... 3
Biological and Physical Systems. ..... 12
Physics 211-212 or 220-221; Chemistry 111 or 121
Engineering 101 ..... 3
English 325 or Information Systems 351 ..... 3
Mathematics 170 ..... 3
Geography 310, 364, 410, 471 ..... 12
Plant Science 333, 433 ..... 6
Agriculture 240 or 295 ..... 3
Plant Science or Agricultural Engineering Technology Electives. ..... 3Choose from any 300 or 400 level course

## Agricultural Science Concentration

The program provides technical expertise that prepares students to assume a variety of agriculture-related positions in rural or urban communities. The curriculum is designed for those who desire to own or manage farms; become agricultural representatives for banking and financial institutions, cooperatives, chemical companies, the Agricultural Extension Service and other federal agencies and state agencies; or to engage in public relations, research and other aspects of industry related to agriculture and agribusiness.

## Communications Option (1120)

This agricultural science option is offered in cooperation with the College of Humanities and Fine Arts. Graduates are eligible for employment in communications, journalism and public relations related to the food and fiber industry.

## Agricultural Production Option (1112)

This agricultural production option is offered through the Department of Agriculture, Geosciences, and Natural Resources. This program of study provides a broad general education that includes courses from several subject matter disciplines in agriculture. More than 25 percent of the courses may be selected by students to give in-depth preparation in areas especially intriguing to them. This combination provides a good general education and broad overview of the agricultural industry, while allowing specialization according to individual interests.

## Professional Education Option (1113)

This agricultural science option is offered in cooperation with the College of Education, Health, and Behavioral Sciences and graduates meet certification requirements to teach high school agricultural education and agriscience. The option is designed especially to prepare students as professional agricultural educators. Graduates are prepared to assume leadership roles in other segments of the agricultural industry related to public relations, sales, communication, manufacturing and government service. It is possible to obtain add-on endorsements in the secondary education (7-12) areas such as biology and chemistry. Please see the

Office of Educator Preparation Program in the College of Education, Health, and Behavioral Sciences' section for admission guidelines and licensure information.

## Communications 0ption (82 hours)

Agriculture core courses: Agriculture 390, Agricultural Economics 110, Agricultural
Engineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210.................. 18
Agriculture 240, 450, 475* .............................................................................................................. 9
Agricultural Education 470.............................................................................................................. 1
Agricultural Economics choose 15 hours from 250, 271, 325, 364, 385, 386, or 390 ....................... 15
Advisor Approved Agriculture Courses.............................................................................................. 9
Communications 200 or $210,250,320,322$ and 15 hours of Communications courses
for which student has met the prerequisites ......................................................................... 27
English 325 ..................................................................................................................................... 3
*Capstone experience course must be taken no more than two semesters prior to degree completion.

## OR <br> Production Option (82 hours)

Science Elective ..... 4
(Biology 130 and 140, and Chemistry 111 or 121 are prerequisites for required courses in this concentration and can be taken to fulfill Biological and Physical Systems General Electives requirements and these science electives.)
Agriculture core courses ..... 9Choose 9 hours from Agriculture 390, Agricultural Economics 110, AgriculturalEngineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210
Agriculture 240 ..... 3
Agriculture 270 ..... 3
Agriculture 420, 441 ..... 6
Agricultural Engineering Technology 220 ..... 3
Upper Division Agricultural Engineering Technology Elective .....  3
Agriculture/Natural Resources Management Electives ..... 12
Animal Science 119, Plant Science 119 ..... 2
Upper Division Animal Science Electives ..... 9
Agricultural Economics, Agricultural Engineering Technology, Animal Science, Plant Science, or Soil Science upper-division Electives ..... 11
Chemistry 111 or $121 ; 112$. ..... 8
Mathematics 210 (if Math 210 was taken as part of the Gen. Ed. requirement, an additional Math from $110,130,140,160,185$, or 251 must be taken for the concentration requirement ..... 3
Upper Division Plant Science Electives ..... 6
Plant Science 310 or Zoology 325 ..... 4
OR
Professional Education Option (82 hours)
Agriculture core courses: Agriculture 390, Agricultural Economics 110, Agricultural Engineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210 ..... 18
Agricultural Education 310*, 430* 404*, 405*. ..... 18
Agricultural Education 470 .....  1
Animal Science 230, 240, 231, 119 and choice of 253, 260, 270, 320, 350, 440, or 471 ..... 11
Agricultural Engineering Technology 370, and choice of 210, 220, 250, 350, or 450 ..... 6
Agriculture 450 ..... 3
Food Science 200 ..... 3

Plant Science 242, 119, and choice of 205, 234, 250, 260, 321, 324, 341, 342, 345, 363, 365, 410, 422, 431, 433, 475 ............................................................................................................................. 7
Teacher Education 211*, 302*, 303*, 305* ...................................................................................... 9
Human Learning 325....................................................................................................................... 3
Special Education 300 ..................................................................................................................... 3
Admission to the Educator Preparation Program required. See section on "Requirements for Recommendation for Licensure."

## Animal Science Concentration

This curriculum introduces students to the many facets of the animal industry. Students then orient themselves toward a career in livestock, horse and companion animal management; animal science and industry; veterinary health technology; or veterinary medicine by selecting one of the three options available. Training is provided through classroom instruction and hands-on experience through the UT Martin Teaching Farm/Demonstration Complex, tours to commercial farms, ranches, businesses and marketing and processing facilities. Optional industry-oriented internships and cooperative education experiences allow students to strengthen their training and education in a specific area of animal science and develop contacts with potential employers. Beef, swine, sheep and goat, poultry, and equine units give students interested in animal science the opportunity to acquire skills associated with modern production practices.

## Animal Science Option (1132)

The animal science option is designed for students interested in earning a terminal Bachelor of Science degree as well as those wishing to pursue post-graduate education and training. Students have many opportunities to gain experience in areas such as animal nutrition, physiology, breeding, reproduction, management, animal health, behavior, and welfare. Numerous employment opportunities exist for graduates in both the public and private sectors.

## Veterinary Science Option (1128)

The veterinary science option is designed for students who wish to receive a Bachelor of Science degree in agriculture and meet the requirements for entrance into many veterinary and professional schools, and specifically, The University of Tennessee College of Veterinary Medicine. Students also meet the requirements to apply to most pharmacy and medical schools following completion of this option.

## Veterinary Health Technology Option (1129)

The objectives of the veterinary health technology option are to train students to perform essential tasks in veterinary facilities, such as clinics and hospitals (e.g., administer anesthesia, take and develop radiographs, assist with surgical procedures, provide client education, perform lab tests, and dispense medication) and allow students to obtain industry-recognized credentials that will allow them to obtain employment in veterinary facilities throughout the United States. The degree granted upon completion is a Bachelor of Science in Agriculture with a concentration in animal science and an option in veterinary health technology. The program is designed for students to complete in nine semesters.

The veterinary health technology option is accredited by the AVMA Committee on Veterinary Technician Education and Activities (CVTEA). Students graduating from an accredited program in veterinary technology must take and pass the Veterinary Technician National Exam and meet all national and state requirements to become a credentialed veterinary technologist.

A student must be admitted into the Veterinary Health Technology option in order to graduate from the University of Tennessee at Martin with a bachelor's degree in Agriculture and an option in Veterinary Health Technology.

In order to apply for the veterinary health technology program, the student must:
be enrolled as a student at The University of Tennessee at Martin
complete and return the Veterinary Health Technology application
have a minimum cumulative GPA of 2.8
have a minimum of 40 hours of observation time with a veterinarian or a licensed veterinary technologist
have a minimum of 45 hours of completed college course work
a " C " or higher in all animal science and veterinary health technology courses or courses that transfer as animal science or veterinary health technology
have a physical exam by their medical doctor
be up to date on tetanus and rabies vaccinations
Students will be selected yearly based on competitive applications including GPA, experience, and interviews. Upon acceptance into the program students must maintain a minimum GPA of 2.8 and a minimum of a " C " in all animal science and veterinary health technology courses or courses that transfer as animal science or veterinary health technology. Failure to do so will cause the student to be placed on probation. The student will have one year of probation to correct any deficiencies. If deficiencies are not corrected within one year, the student will be removed from the program. Students can reapply when outlined requirements are met. Students must follow all standards of ethical and professional behavior as outlined in this handbook. Failure as determined by the administrators of the veterinary health technology program can lead to dismissal from the program. The most up to date information on program accreditation status and program admission can be found at http://www.utm.edu/departments/agnr/VetTech.php

## CONCENTRATION REQUIREMENTS (81-82 Hours)

## Animal Science Concentration Core Courses (35-43 hours)

Animal Science 110, 119, 320, 350, 371, 372................................................................................. 17
Agricultural Economics 110 ............................................................................................................. 3
Biological and Physical Sciences ................................................................................................8-16
A biology sequence of Biology 110 and 120 or Biology 130 and 140 and a chemistry sequence of Chemistry 111 and 112 or Chemistry 121 and 122 are required for Animal
Science options although eight hours may have already been applied to the Biological and
Physical Sciences General Education requirement. The Animal Science (1132) and Veterinary
Science (1128) options require students to take Biology 130 and 140 (instead of Biology 110
and 120) and the Veterinary Science (1128) option requires Chemistry 121 and 122 (instead of Chemistry 111 and 112).
Mathematics 210 or Mathematics $110,140,160,185$, or 251 if Mathematics us used to satisfy general
education requirement............................................................................................................ 3
Microbiology 251 ............................................................................................................................ 4
PLUS
Animal Science Option (47 hours)
Agriculture 390, Plant Science 110, Soil Science 210 ........................................................................ 9
Animal Science 100-200 level electives ............................................................................................ 6
Animal Science 351, 360, 374, 405 ................................................................................................. 8
Animal Science 421 or 471 ............................................................................................................. 3
Choose any 100-200 level course from Agricultural Economics, Agricultural Engineering Technology, Agriculture, Animal Science, Geography, Geology, Natural Resources Management, Park
Administration, Plant Science, Soil Science, Veterinary Health Technology, Wildlife Biology ..... 3
High-Impact Educational Practice elective. ..... 3
Choose 3 hours from Agriculture 420, Animal Science 301, 302, 305, 306, 400, 401, 402, 444 orFellows Research Program 301, 401, 402
Upper-division Animal Science elective ..... 3
Upper-division electives ..... 12
OR
Veterinary Health Technology Option (47 hours)
Animal Science 210, 230 ..... 6
Animal Science 260 or 270 ..... 3
Choose 2 from Animal Science 211, 231, 351, 374 ..... 2
Veterinary Health Technology ..... 36
Veterinary Health Technology 200, 300, 310, 320, 330, 340, 350, 400, 410, 420, 480, 490
OR
Veterinary Science Option (47 hours)
Plant Science 110 ..... 3
Physics 211, 212 ..... 8
Biology 337 ..... 3
Chemistry Requirements ..... 12
Chemistry 341,342 ; Biochemistry (minimum of 4 hours, suggested Biochemistry 411, 412)
Veterinary Science Electives ..... 5
Choose 5 hours from Animal Science 210, 211, 230, 231, 240, 253, 260, 270, 351, or 374
Accounting 201, Veterinary Health Technology 200
Veterinary Science 300 -level ..... 5
Veterinary Health Technology 300, and either Animal Science 360 or Biology 336
Choose 3 hours from upper-division Animal Science, upper-division Veterinary Health Technology, or Agricultural Economics 405 ..... 3
Science Electives ..... 8Choose 8 hours: Upper division Agricultural Economics, Animal Science, Biology,Biochemistry, Chemistry, Fellows Research Program, Mathematics, Microbiology, PlantScience, Veterinary Health Technology, Wildlife Biology, Zoology*Taking Accounting 201 and Agricultural Economics 405 plus 9 hours of upper-division AgriculturalEconomics courses add a minor in Agricultural Business

## Plant and Soil Science Concentration

Students may choose from two options in this curriculum: Crop and Soil Management and Golf Course and Landscape Management.

## Crop and Soil Management Option (1121)

Special studies in many facets of crop production and soil science are emphasized in this curriculum. Studies include soil origin and management, soil resource utilization, plant reproduction including genetics and breeding, fertilizer formulation and use, pesticides, crop management and ornamental horticulture. Practical applications of basic principles are illustrated with field trips and visits to farms and industries. A student may emphasize technology (production), science, or business phases of the plant and soil sciences according to individual interests, but will meet requirements for certification as a Certified Crop Adviser (CCA) and with the addition of a course in Physics can meet certification requirements for Certified Professional Agronomist (CPAg).

Many career opportunities are available with various federal and state agencies, including the Agricultural Extension Service and Natural Resources Conservation Service. Other opportunities are available in various industries associated with agriculture, including feed, seed, fertilizer and chemical companies; agricultural supply and equipment companies; agricultural communications and public relations; conservation and recreation; and banking, credit appraisal, sales and production agriculture.

## Golf Course and Landscape Management Option (1123)

Although American culture is ever changing, Americans continue to focus leisure time on seeking lifelong recreational activities to fill their free time. These include such things as golf, camping, softball and other outdoor sports, which continues to demand better facilities to accommodate these needs. There are over 26 million golfers playing an estimated 16,000 golf courses throughout the country. Refurbishing, or renovating, historic and outdated golf courses continues to be a popular trend. As a result, the turfgrass and landscape industries continue to be expanding fields. There is over 50 million acres of turfgrass in the United States alone, representing a healthy segment of US agriculture. It brings to the American economy over $\$ 40$ billion annually.
CONCENTRATION REQUIREMENTS (82 Hours)
General Plant and Soil Science Requirements (69 hours)
Agriculture 270 (same as Geography 270) ..... 3
Agricultural Engineering Technology 110, Plant Science 110, Soil Science 210 ..... 10
Agricultural Engineering Technology 119, 220, 420 ..... 7
Biological and Physical Sciences ..... 16
Biology 110 and 120 or Biology $130^{*}$ and $140^{*}$, and a Chemistry sequence of 111 or
121 and 112 or 122 are required for all Plant and Soil Science options although 8 hoursmay have already been applied to the Biological and Physical Sciences General Educationrequirement.)
Plant Physiology or Plant Ecology Requirement ..... 3
Botany 421, 431, or Plant Science 442
English 325 or Communications 356 ..... 3
Mathematics 210 (If Match 210 was taken as part of the Gen. Ed. requirement, an additional Math from $110,130,140,160,185$, or 251 must be taken for the concentration requirement) ..... 3
Plant Science 119, 205, 322, 333, 420 ..... 14
Soil Science 412 ..... 3
Plant Science 310 or Zoology 325 ..... 4
General elective ..... 3
*Biology 130 and 140 (minimum grade of C ) are required for any upper division courses in biology.
PLUS
Crop and Soil Management Option (21 hours)
Agricultural Engineering Technology 382 ..... 3
Plant Science 422, 431, 433 ..... 9
Upper-division Science Electives. ..... 9
Choose three classes from Agriculture 441, Botany 303, Soil Science 315, 321, 401, 430, 440,Plant Science 341, 342, 401, 442 (if not taken to meet plant physiology or plant ecologyrequirement).
OR
Golf Course and Landscape Management Option (21 hours)Plant Science 234, 242, 321, 363, 462, 47118
Upper-division Science Elective. ..... 3
Choose from Agriculture 441, Botany 303, Plant Science 341, 342, 365, 431 or any Upper Division Soil Science or any Upper Division Biological Science
Bachelor of Science in
Natural Resources Management (1150)
I. General Education Requirements (38-39 hours)
Biological and Physical Systems. ..... 8
Biology 130 and 140
Communication. ..... 9-10
Communications 230; English 110 or 111, and 112 Fine Arts (Aesthetics) ..... 3
Choose from approved General Education listing Humanities. ..... 9
Choose from approved General Education listing
Mathematics 140,160 , or 185 ..... 3
Wildlife and Fisheries students must take Mathematics 160
Social and Behavioral Sciences. ..... 6
Choose from approved General Education listing
II. Natural Resources Management Common Course Requirements (26 hours)
Agricultural Engineering Technology 220 ..... 3
Agriculture 270 or Geography 270. ..... 3
Chemistry 111 or 121 ..... 4
Natural Resources Management 100, 210 ..... 6
Soil Science 210 ..... 4
Plant Elective ..... 3
Choose from Plant Science 333, 341, 410, or 422 (Park Administration andWildlife and Fisheries Biology Concentrations must take Plant Science 341)
Water Elective. ..... 3
Choose from Natural Resources Management 225, 315, Soil Science 315 or 430 ..... 430
III.Concentration Requirements (56 hours)(See respective concentrations.)
Minimum hours required for B.S.N.R.M. degree: ..... 120
Environmental Management Concentration (1154)
Of all living beings, humans are unique in their ability to manage the environment in which they live. However, modification of the environment to suit human needs often results in the degradation of environmental ecosystems. This curriculum is a science-oriented curriculum designed to provide a broad understanding of environmental quality. Students will develop a solid foundation in basic sciences, mathematics and communications skills. This foundation will then be applied in courses dealing with ecology and natural resources. Students will be strongly encouraged to pursue relevant work experience through supervised field study with an approved agency or firm.
Graduates of this program will find employment opportunities as technical, scientific, or support personnel with local, state, or federal agencies, or with private industry. Examples include positions with municipal waste treatment facilities; state and federal regulatory agencies; consulting firms involved in environmental
remediation and development of impact statements; various manufacturers; environmental and conservation support organizations; and other public and private employers in the environmental field. The curriculum will also prepare the student for graduate study in areas related to the environment and natural resources, including environmental law.

## CONCENTRATION REQUIREMENTS (56 Hours)

Agricultural Economics 445 ......................................................................................................... 3
Agricultural Engineering Technology 460 ...................................................................................... 3
Chemistry 112 ............................................................................................................................. 4
English 325 ................................................................................................................................ 3
Geography 472 ............................................................................................................................ 3
Geoscience 110 ........................................................................................................................... 4
Geology 365 or 445 or Soil Science 440....................................................................................... 3
Mathematics 160, 210................................................................................................................. 6
Microbiology 251........................................................................................................................ 4
Natural Resources Management 350 ............................................................................................ 3
Soil Science 315 or 430 ............................................................................................................... 3
Plant Science elective: Plant Science 110, 205, 234, 333, 341, or 422 ............................................ 3
Science Electives ....................................................................................................................... 14
Choose from upper-division courses in Departments of Agriculture, Geosciences, and Natural Resources; Biological Sciences; Chemistry and Physics; or Engineering (Natural Resources Management 420 recommended)

## Park Administration Concentration (1151)

This curriculum is designed to prepare students for the proper management of natural, cultural and recreational resources. Leadership positions in parks and other recreation settings require fundamental knowledge of basic principles from many disciplines which collectively emphasize the natural and cultural sciences as well as personnel and fiscal management, thus preparing students with leadership abilities and an applied understanding of the tools for park administration.

Flexibility is provided through restricted elective hours, allowing credit hours to be taken in a more specialized area of the park field. The curriculum includes supervised field experience with an approved park or recreational agency and applications are further illustrated by frequent trips to nearby national, state and municipal park settings and private and commercial recreation attractions.

Employment opportunities include positions with federal, state and municipal park agencies as well as a multitude of private, commercial and volunteer organizations.

## CONCENTRATION REQUIREMENTS (56 Hours)

Agricultural Economics 271; Accounting 201, 300; or Political Science 363 .................................... 3
Biology Electives.......................................................................................................................... 6
Choose from Botany 302, 303, 431; Zoology 319, 320, 321, 322, 325, 326, 441, or 443
Criminal Justice 200 or Wildlife Biology 340 .................................................................................. 3
Geoscience 120 ........................................................................................................................... 4
History and Geosciences Electives ................................................................................................ 6
Choose from any upper-division History, Geography, or Geology
Natural Resource Management 101, 200, 410, 440...................................................................... 12
Park Administration 110, 200, 300, 400, 410, 430 ...................................................................... 18
Plant Science 321 ........................................................................................................................ 3
Restricted Electives ..... 1

Selected with the assistance of the student's adviser based on the student's career goals.

## Soil and Water Conservation Concentration (1152)


#### Abstract

Urbanization, industrialization and population growth demand effective management of land and water resources for multiple uses. This curriculum prepares students for conservation and management of soil and water resources for the long-range benefit of society. Requirements include a strong background in physical and biological sciences, ecology and management to provide understanding of the physical, chemical and biological interrelationships of soil, water and plants. Elective courses provide an opportunity for emphasis in areas of particular interest such as ecology, communications, agriculture, economics, political science, and others.

Employment opportunities are available with federal agencies such as Natural Resources Conservation Service and Bureau of Land Management; governmental units including state, county and municipal agencies; planning and economic development districts; businesses in the agricultural industry, such as fertilizer and chemical companies; public utility companies; and private industry, including banks, financial institutions and real estate agencies.


## CONCENTRATION REQUIREMENTS (56 Hours)

Agriculture 441 ..... 3
Agricultural Economics 110 ..... 3
Agricultural Engineering Technology 460 ..... 3
Chemistry 112 ..... 4
English 325 ..... 3
Geoscience 110 ..... 4
Geology upper-division course ..... 3
Mathematics 210 ..... 3
Microbiology 251 ..... 4
Physics 101, 150 or 211 ..... 4
Plant Science 110, 333, 341, or 422 ..... 3
Soil Science 315, 321, 412, or 440 ..... 9
Soil Science Elective (Soil Science 250 recommended) ..... 2
Science Electives ..... 8
Upper-division courses in Departments of Agriculture, Geosciences, and Natural Resources; Biological Sciences; Chemistry and Physics; or Engineering (Natural Resources Management 420 recommended)

## Wildlife and Fisheries Biology Concentration (1156, 1155)

This curriculum emphasizes basic sciences, plant and animal biology and communications skills for effective performance as a wildlife or fisheries biologist. Students learn to view wildlife and fisheries and problems associated with their management from a broad perspective, while also being exposed to social, cultural and ethical issues.

Seminar courses and supervised experience in the field with an approved agency provide opportunities for learning management of wildlife populations. Nearby wildlife management areas maintained by state and federal agencies are utilized to illustrate principles
Graduates with the wildlife science option are eligible for certification by The Wildlife Society as Associate Wildlife Biologists and graduates with the fisheries science option are eligible for certification by the American

Fisheries Society as Associate Fisheries Professionals. Both options qualify graduates for employment by state wildlife resources agencies, the U.S. Fish and Wildlife Service and other governmental agencies, as well as private and commercial entities. However, students interested in the more technical phases of this field and in meeting standards for higher managerial positions should plan for graduate study.
CONCENTRATION REQUIREMENTS ( 56 Hours)
Wildlife and Fisheries Biology Concentration Core Courses (32 Hours)Animal Science 360 or Biology 3363
Biology 331 or Zoology 441 ..... 3
Chemistry 112 or 122 ..... 4
Communications 200, 311, 356, or English 325 ..... 3
Mathematics 210 ..... 3
Natural Resources Management 390, 430 ..... 4
Wildlife Biology 240, 250, 330, 450 ..... 12
PLUS
Wildlife Science Option (24 Hours)
Botany 301, 302, 305, 306, 421 or 431 ..... 3
Botany 303 ..... 3
Zoology 319, 320, 321, or 323, or 322 or 327 . ..... 9
General Science Elective ..... 3
Choose from Biology 391, 418, 444, Natural Resources Management 480, Plant Science410, mZoology 325, 326, 440 or 443
General Wildlife Elective ..... 6
Choose from Wildlife Biology 300, 311, 312, 340, 420, or 441
OR
Fisheries Science Option (24 Hours)
Biology 418 or Wildlife Biology 405 ..... 3
Botany 303, 305, 306 or 431 ..... 3
Geology 315 ..... 3
Wildlife Biology 300 ..... 3
Zoology 319, 321, 322, 323, 325, 326, 327 or 443 ..... 3
Zoology 320 ..... 3
General Science Elective ..... 3
Choose from Biology 391, 444, Wildlife Biology 311, 312, 340, 420 or 441General Elective3

## Bachelor of Science (with a major in Geoscience)

B.S. (1160) Curriculum. In addition to the general education requirements for a B.S. degree, a geoscience major must satisfy the requirements of one of the following concentrations. A minor is required for the concentrations in meteorology; a minor is optional for the geology and geosytems concentrations. The choice of a minor should be made in consultation with an adviser in the concentration. For the meteorology concentration, a minor in communications, computer science, mathematics, statistics, or physics is recommended.

## Geology Concentration (1162).

Geology is the study of the materials and processes which shape the earth's past, present and future. There are many subfields such as oil and gas exploration, environmental geology, paleontology, hydrogeology,
geochemistry and geophysics. Geology assumes an increasingly important role in our quest for energy and mineral resources and in our growing concern for the environment.
Geologists are typically employed by:

1. private industry such as energy, mining and construction companies;
2. federal government in such agencies as the U.S. Geological Survey, Bureau of Land Management, Bureau of Mines, NASA and the Environmental Protection Agency;
3. state and local governments in state geological surveys, regulatory bodies and regional planning commissions;
4. private consulting firms;
5. museums, public and private $\mathrm{K}-12$ education, and academia.

Geoscience 120 and Geoscience 130 are prerequisites to the concentration which consists of:
Geology Methods: Geology 210 and 220........................................................................................ 3
Geology Core: Choose four courses from:
Geology 320, 330, 350, 360, 400, 445 ..................................................................................... 16
Geology/Soil Science Electives: Choose at least eight hours from:
Geology 285, 315, $355,385,395$, 485, Soil Science 321............................................................ 8
Experiential Geoscience: Choose at least six hours from:
Geography 410 , Geology 275,365 , 401 or $402,415,465,475,495,499 \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 9
A minor is optional.

## Meteorology Concentration (1163).

The meteorology concentration is the only program of its kind in the state of Tennessee. It is designed to train students for a career in the atmospheric sciences and to supplement their training in the geosciences. Successful students will be well positioned to enter graduate school to complete their professional meteorology training or to follow careers in meteorology and in other areas of the geosciences in which foundational knowledge of weather and climate is required. Potential career fields include forecasters, broadcast meteorologists, research meteorologists and climatologists, and meteorologists in the armed forces. Employment opportunities exist in agriculture, aviation, energy, manufacturing, commodities markets, environmental planning, emergency preparedness, forensics, transportation, and teaching. Potential employers include private industry and consulting services, academia, and the federal government including NOAA, the FAA, the EPA, and the military.
Geoscience 110 and 140 or equivalent honors courses are prerequisites to the concentration which consists of: Geography 210, 270, 380, and 310 or 471; Meteorology 320, 330, 340, 350, 360, either 420 and 430 or 440 and 460, and 470; and 9 additional hours of upper-division Meteorology and/or Geography electives. A minor is required. A communication, computer science, math, statistics, or physics minor is recommended.

## Geosystems Concentration

## Geographic Information Systems Option (1164)

Geographic Information Systems in a suite of computer-based software and data that are used to capture, store, manipulate, map, and analyze spatial data. This curriculum is designed to prepare students for careers in the diverse and rapidly expanding professional fields that utilize Geographic Information Systems (GIS) technology. Professional areas that utilize GIS include, but are not limited to: advertising, cartography,
conservation, environmental and natural resource management, farm management, marketing, meteorology, military intelligence analysis, oil and gas exploration, political campaign management, STEM, transportation management and planning, and urban and regional planning. Students receive instruction in the use and applications off GIS software, the fundamentals of geoscience, and selected disciplines in which GIS is applied. This curriculum is also structured to prepare students for graduate-level studies. Students who complete this option also receive a Certification in GIS from the department.

## CONCENTRATION REQUIREMENTS (45 Hours)

Geoscience 110 and Geoscience 120, 130, or 140 ......................................................................... 8
Geography 151, 152, 202, 210, 310, 364, 410, 471.................................................................... 22
Geography 270 or Agriculture 270 ............................................................................................... 3
Upper-Division Electives in Geography, Geology, Meteorology, Agriculture Engineering Technology,
Computer Science, Engineering, or Statistics ......................................................................... 12
A minor is optional.

## Earth Science Option (1165)

This broad-based curriculum is designed to prepare students for careers in the many different scientific and applied professions that emphasize study of the earth and/or its atmosphere. Completion of this curriculum may lead students to careers in areas such as: climate science, environmental science, natural resource exploration, and private industry. Students receive instruction in the fundamentals of geoscience and a suite of targeted electives based on the individual's area of particular scholarly and career-related interests.

## CONCENTRATION REQUIREMENTS (45 Hours)

Geoscience 110 and Geoscience 120, 130, or 140 ......................................................................... 8
Geography 210 or Geology 210 .................................................................................................... 1
Geography 270 or Agriculture 270 ............................................................................................... 3
Geography 310........................................................................................................................... 3
Geology 220 ............................................................................................................................... 2
Geography 355 or Geology 355 ................................................................................................... 3
Upper-Division Electives in Geography, Geology, and/or Meteorology ........................................... 25
Upper-Division Electives in Agriculture Engineering Technology, Natural Resources Management, Park Administration, Soil Science, or Wildlife Biology ........................................................................ 3

A minor is optional.

## Agriculture, Geosciences, and Natural Resources Fellows Research (AGN-FRP) Program

The Agriculture, Geosciences, and Natural Resources Fellows Research Program (AGN-FRP) provides an opportunity for outstanding agriculture, geosciences, and natural resources students to gain organized experiences in research and scholarship through a mentored relationship with an agriculture, geosciences, or natural resources (AGN) faculty member. The primary goal of the AGN-FRP is to foster and enhance undergraduate research. The AGN-FRP is an excellent preparatory program for professional schools and graduate studies.

Entrance Requirements: Students with an overall 3.00* undergraduate GPA at the completion (spring semester) of their freshman year (minimum of 28 hours earned) and AGN-FRP Nomination are eligible to enter the AGN-FRP. Sophomores and transfer students with a 3.25* GPA and AGN-FRP Nomination are eligible
to enter the ANG-FRP. AGN-FRP Nomination is based on three letters of support from AGN faculty. (Transfer students may utilize two faculty letters of support from their transfer institution.)

Class Size: The AGN-FRP is a cohort-based program. Class size (cohort) of the AGN-FRP may be limited to align with staffing and physical constraints.

Continuation Requirements: AGN-FRP students must maintain a minimum GPA of 3.00* (as computed at the end of each respective school year, spring semester) and be in good standing (as determined by the AGN-FRP Committee) to remain in the program.

Completion Requirements: Students in the AGN-FRP will complete 9-12 hours of the following AGN-FRP approved coursework: Fellows Research Program 201, 202, 301 and a 4-6 hour sequence chosen from Agricultural Economics 401-402, Agricultural Engineering Technology 401-402, Agriculture 401-402, Animal Science 401-402, Fellows Research Program 401-402, Geography 401-402, Geology 401-402, Natural Resources Management 401-402, Plant Science 401-402, Park Administration 401-402, Soil Science 401402, or Wildlife Biology 401-402. AGN-FRP coursework may be utilized to satisfy undergraduate degree requirements, if applicable to the respective curriculum (per adviser approval).
*Students who earn a letter grade of C or lower on any course used to satisfy AGN-FRP requirements will be dismissed from the AGN-FRP, even if their overall GPA is greater than or equal to 3.00 ( 4.00 scale).

Certification of AGN-FRP completion will be issued to students who complete all aspects of the AGN-FRP.

## Geographic Information Systems (GIS) Certification Program

Geographic Information Systems (GIS) technology and applications are integral to many areas in agriculture, geosciences, and natural resources management. Students who systematically develop skill sets and experience in GIS may possess key advantages in professional advancement and graduate studies.

Certification of GIS completion will be issued to students who satisfy the following requirements:

1. successfully complete all requirements for the bachelor's degree in their respective major degree program;
2. successfully complete the following 15 hours of GIS coursework:
a. Agriculture 270 or Geography 270 Introduction to Geospatial Technology (3)
b. Geography 310 Principles of Geographic Information Systems (3)
c. Geography 364 Introduction to Remote Sensing (3)
d. Geography 410 Geographic Information Systems: Modeling and Applications (3) and
e. Geography 471 Cartography (3)
3. achieve a minimum final grade point average of 3.00 in all of the Agricultural Engineering Technology and Geography courses specified above that are used to satisfy GIS certification requirements; and
4. achieve a minimum final grade of C in all of the Agricultural Engineering Technology and Geography courses specified above that are used to satisfy GIS certification requirements.

## International Agriculture (IACP) Certification Program

The global agriculture economy is becoming increasingly more important to U.S. agribusinesses, producers and consumers. Today's graduates need to move beyond a base understanding of fundamental agricultural business practices to encompass an international view. Students who develop skills and experience in international issues will be better equipped to compete in a diverse climate in the U.S. or abroad.

Certification of IACP completion will be issued to students who satisfy the following requirements:

1. successful completion of all requirements for the bachelor's degree in their respective major degree program.
2. successful completion of the following:
a. Agriculture 295 International Food and Fiber Systems (3)
b. Agricultural Economics 335 International Agricultural Trade (3)
c. Agricultural Economics 350 Agricultural Trade Marketing in North America (3)
d. Agriculture 230 Travel Studies in Agriculture and Natural Resources (3)
3. successful completion of a university approved study abroad program with a minimum grade of B. Study abroad programs must be a minimum of four weeks in duration in the host country. The study abroad program must yield a minimum of 6 credit hours to be transferred to the University of Tennessee at Martin.
4. a minimum final letter grade of B for all agricultural economics and travel study courses specified above

## Land Surveying and Geomatics Certification (LSGC) Program

The Land Surveying and Geomatics Certification (LSGC) program defines a group of courses offered by the Department of Agriculture and Natural Resources and the Department of Engineering that are formulated to meet the Tennessee Board of Examiners for Land Surveyors (TBELS) requirements to apply for licensure as a Professional Land Surveyor (PLS).

Students completing B.S. degree requirements in a science-based undergraduate curriculum and taking 24 semester hours of surveying-specific course work are qualified to apply for licensure as a PLS by the TBELS under Category B (TCA 62-18-109). Completion of the licensure process requires passing all exams as specified by the TBELS along with having two years of work experience under a licensed surveyor.
The TBELS further defines course work meeting Category B criteria as 24 semester hours of acceptable courses relating directly to surveying. Courses are selected from a grouping of courses by the TBELS designated as List I, II, or III. A minimum of 18 hours must be equivalent to courses from List I and the remainder from List II or III. The TBELS maintains a list of pre-approved courses (List I, II and III) on its Website: (http://www.state.tn.us/commerce/boards/surveyors/).

The following courses, offered at The University of Tennessee at Martin, are formulated to meet the TBELS criteria for a Category B application process. A minimum grade of C is required for all List I and List II courses taken for Land Surveying and Geomatics Certification.
List I Courses (Minimum of 18 hours required)
Required
Engineering 350Agricultural Engineering Technology 354
Principles of Land Surveying and Geomatics ..... 3
Advanced Land Surveying and Geomatics. ..... 3
Agricultural Engineering Technology 454 Land Surveying with GPS ..... 3
Agricultural Engineering Technology 456 Boundary Control and Legal Principles. ..... 3
Agricultural Engineering Technology 458 Subdivision Site Planning and Development. ..... 3
Electives (Choose minimum of one)
Engineering 352 Transportation Engineering ..... 3
Engineering 490 Special Topics - Surveying Projects ..... 3
Geography 471 Cartography ..... 3
Agriculture 270 Introduction to Geospatial Technologies ..... 3
List II Courses (Minimum of six hours required)
Required
Agricultural Engineering Technology 220 Surveying and Soil and Water Engineering ..... 3

## Electives

Agricultural Engineering Technology 482
Engineering 353
Geography 310
Geography 364
Geography 410
Plant Science 341
(Choose minimum of one)
Precision Technologies for Agric \& Natural Resources ........ 3
Hydraulics and Hydrology ................................................. 3
Principles of Geographic Information Systems ..................... 3
Introduction to Remote Sensing ......................................... 3
Geographic Information Systems: Modeling \& Applications . 3
Dendrology and Forest Ecology ......................................... 3
Qualification: It is the applicant's responsibility to meet all TBELS requirements for licensure. License requirements are specified on the TBELS website (www.state.tn.us/commerce/boards/surveyors/index.shtml) and applicants are strongly encouraged to contact the TBELS Director at (615) 741-3611 to coordinate all aspects of the application process. The University of Tennessee at Martin does not warrant or guarantee that students completing the LSGC program will be granted permission to sit for the Fundamentals of Land Surveying examination. The TBELS has the sole authority to approve or disapprove an application for PLS licensure.

## Graduate Degrees

## Master of Science in Agriculture and Natural Resources

The department offers a Master of Science in Agriculture and Natural Resources (M.S.A.N.R.). The M.S.A.N.R. program is administered through UT Martin Online, facilitating a minimum tuition increase for non-resident students. The M.S.A.N.R. curriculum is comprised of 36 hours of graduate course work and is offered via the Internet. The program features three concentrations to meet the needs of place-bound professionals seeking a graduate education. Students in the M.S.A.N.R. program select a concentration in either: Agribusiness and Risk Management, Natural Resources Systems Management, or Systems Science in Agriculture. The Agribusiness and Risk Management concentration provides a range of agricultural economics course work developed specifically to address risk management issues associated with agribusiness enterprises. Students selecting the Natural Resources Systems Management concentration have access to a wide range of natural resources based graduate course work from The University of Tennessee at Martin as well as participating universities in the Natural Resources Distance Learning Consortium (NRDLC). The Systems Science in Agriculture concentration features course work in agricultural engineering technology, management science, and agricultural economics providing a well-rounded graduate education for professionals seeking careers in agricultural industries and government agencies.

## Master of Science in Education with a Major in Teaching and Concentration in Interdisciplinary: Geoscience Education

The department offers a cooperative degree program with the College of Education, Health, and Behavioral Sciences leading to a Master of Science in Education with Major in Teaching and Concentration in Interdisciplinary: Geoscience Education, available to individuals who obtained a bachelor's degree in education from an accredited college or university and who are professionally licensed to teach elementary or secondary education. The program is intended for teachers seeking advanced training in geoscience disciplines, such as geology, astronomy, meteorology, or general earth science. The degree program consists of advanced content courses and education courses that lead to both content competency and teaching competency in the geosciences. The program is specifically aimed as professional development for teachers moving into geoscience education from another science content area, adding earth science or geology courses, or seeking to teach AP or dual enrollment courses.

## Minors

Minors are available in agricultural business, agriculture, geosciences, and in park administration.
Agriculture, geosciences, and natural resources management students wishing to complete an optional minor in a second degree area are invited to do so. All requirements for the minor as set forth by the granting department must be met. Minors are available through a number of different departments on campus.

## Agricultural Business

The minor in agricultural business consists of Accounting 201, Agricultural Economics 110 and 12 hours of upper-division agricultural economics courses.

## Agriculture

The minor in agriculture consists of Agricultural Economics 110, Agricultural Engineering Technology 110, Animal Science 110, Plant Science 110 and 12 semester hours of study in agriculture-related courses numbered 300 or above (excluding courses designated as Natural Resources Management, Wildlife Biology, or Park Administration). Agriculture faculty will provide advice and counsel as requested by students or their academic advisers to assist in selecting courses that are appropriate to each student's goals and objectives.

## Geosciences

Geology (M-1162).
Geoscience 110 and 120 are prerequisites to a geology minor which consists of a minimum of 15 hours of upper- division geology.

## Meteorology (M-1163).

The minor in meteorology consists of Geoscience 110 or 110H, Geoscience 140 or 140H, Meteorology 320, Meteorology 340, Meteorology 470, and six credit hours in upper-division meteorology.

## Park Administration

The minor in park administration consists of Park Administration 110, 200, Natural Resources Management 200 and 12 hours of upper-division park administration courses selected from Park Administration 300, 400, 410, 430 and Natural Resources Management 440.

## Facilities

The UT Martin Agricultural and Natural Resources Field Teaching/Demonstration Complex, located adjacent to the campus, provides an experiential learning laboratory for Agriculture, Geosciences, and Natural Resources students. The 640 acre complex features beef cattle, horses, sheep, goats, swine, a fully functional companion animal (dog and cat) laboratory, indoor/outdoor aquacultural production units, and a veterinary surgery suite. Students have numerous opportunities to work with the animals in classes and laboratories throughout their undergraduate education. The University also maintains an Animal Diagnostic and Disease laboratory, which is used to perform necropsies and diagnostics for livestock producers of West Tennessee. The complex also has greenhouses, ornamental landscape gardens, wildlife areas, weather station, and field/ forage crop demonstration areas. The Rhodes Golf Complex provides a seven-acre outdoor teaching and experiential learning center consisting of a full length driving range with two USGA putting greens (featuring two popular hybrid Bermudagrass varieties), multiple bunkers, and tee boxer allowing the Rhodes Golf Complex to simulate multiple golf holes. A 3,000 square foot building features three indoor inclementweather driving bays allowing UT Martin Golf Team members year-round practice capability. The Field Teaching/Demonstration Complex provides a working laboratory to meet the broad objectives of the Center of Excellence in Experiential Learning for the Agricultural Sciences.

The organization outlined above enables students to become familiar with research conducted at the teaching farm, other experiment stations of the UT Institute of Agriculture, Agriculture and Natural Resources Field Teaching/Demonstration Complex, and other laboratories of the university. UT Martin, in this way, occupies a unique position that differentiates it from other institutions.
Geosciences instructional facilities also include: three fully equipped geology laboratories; a fully-functioning 15 seat geographical information systems/cartography computer lab with a 36 "x 48 " digitizer, a largeformat printer plotter and a flatbed scanner; a remote weather station and a study room. The department is a repository for U.S. Geological Survey maps and maintains a large collection of topographic maps, aerial photographs, rocks, minerals, fossils and visual aids. The department is included in the Tennessee Earthquake Network. Field trips to areas of geological and geographical interest form an integral part of the programs.

UT Martin also has the Ned McWherter Agricultural Complex (pavilion and stalling facility), an Equine Center and the Smith Livestock Center, with all of these hosting a variety of events throughout the year.

## Departmental Awards/Scholarships

Department scholarships are available to Agriculture, Geosciences, and Natural Resources students who meet specific eligibility criteria. Departmental scholarship application forms are submitted online via The University of Tennessee at Martin Scholarship Aviator and are due by the end of February for the following academic year. For more information and to access scholarship application forms visit the university website: https:// utm.academicworks.com/.

## Student Organizations

The Department of Agriculture, Geosciences, and Natural Resources students are active in several organizations which include the Student Mechanization Branch of the ASABE, Agronomy Club, Alpha Gamma Rho, UT Martin Student Chapter of the American Meteorological Society, Association of Women Geoscientists, Block and Bridle Club, Collegiate Farm Bureau, Collegiate FFA, Collegiate 4-H, Eta Alpha (UT Martin chapter of Sigma Gamma Epsilon, the Earth Sciences National Honor Society), GeoClub, Minorities in Agriculture, Natural Resources and Related Sciences (MANNRS), National Agribusiness Marketing Association (NAMA), The National Association for Interpretation (NAI) at The University of Tennessee at Martin, Equestrian Team (Athletics), Rodeo Team (Athletics), UT Martin chapter of the Wildlife Society, Student Cattlemen's Association, Turf Club, Sigma Alpha and UT Martin Veterinary Club. These student organizations provide opportunities for meeting established professionals in the field, enhancing leadership skills and participation in social activities.

## Internship Programs

Supervised field experience, or an internship, is available for academic credit. It is required of all students in park administration, agricultural business, agricultural science production and plant science programs, and strongly encouraged for students in all other agricultural, geosciences and natural resources management degree programs. Internships are designed to enable a student to obtain credit for completion of a prescribed program of work with an approved business or agency. Students have served as interns in a variety of agricultural management and marketing positions and as interns with a variety of city, state and federal agencies.
Supervision and evaluation are provided by faculty and on-the-job supervisors. An essential element of this program is that the work experience be designed so it contributes to a student's learning and level of competence in his/her chosen career area; routine summer jobs or seasonal employment that do not meet these criteria cannot be considered for internship credit. Students interested in the program should apply for
participation one semester in advance and they should have achieved senior standing at the time the work experience begins in the case of park administration - and junior standing in the case of other concentration areas.

## Judging Teams

Teams composed of students enrolled in agriculture or natural resources management annually participate in intercollegiate contests in livestock judging, crops judging, horse judging, NAMA Marketing Team, SAEA Quiz Bowl and soil judging. Instruction and coaching are provided by faculty members and membership on the team is based upon participation and competitive performance in practice exercises. The teams have received awards in regional and national competition. They provide excellent opportunities for interested students to sharpen their evaluation skills. Equestrian competition is also available to interested students through the UT Martin athletics program.

## Courses Offered by Department of Agriculture, Geosciences, and Natural Resources

Agricultural Economics 110 Introduction to Agricultural Business (F, Sp)<br>Agricultural Economics 250 Introduction to Agricultural Sales (F)<br>Agricultural Economics 271 Farm Management (F)<br>Agricultural Economics 301 Special Problems [topic title] (F)<br>Agricultural Economics 302 Special Problems [topic title] (Sp, Su)<br>Agricultural Economics 311 Spreadsheet Analysis in Agribusiness (F)<br>Agricultural Economics 312 Value Chain Management in Food and Agribusiness (as needed)<br>Agricultural Economics 313 Special Topics in Agribusiness (as needed)<br>Agricultural Economics 315 Scientific Writing and Communication for Agricultural Business (F, as needed)<br>Agricultural Economics 325 Agriculture and Natural Resource Policy (Sp)<br>Agricultural Economics 335 International Agricultural Trade (Sp)<br>Agricultural Economics 350 International Agricultural Marketing (as needed)<br>Agricultural Economics 364 Agricultural Marketing (F)<br>Agricultural Economics 370 Agricultural Price Analysis (Sp-odd)<br>Agricultural Economics 371 Advanced Farm and Ranch Management (Sp)<br>Agricultural Economics 372 Advanced Farm and Ranch Management Lab (Sp)<br>Agricultural Economics 375 Environmental and Agricultural Law (F)<br>Agricultural Economics 385 Agribusiness Market Planning (F)<br>Agricultural Economics 386 Advanced Agribusiness Market Planning (Sp)<br>Agricultural Economics 390 Rural Economics Development (F)<br>Agricultural Economics 395 Farm Real Estate Appraisal (Sp-odd)<br>Agricultural Economics 401 (601) Research Participation (F, Su)<br>Agricultural Economics 402 (602) Research Participation (Sp, Su)<br>Agricultural Economics 405 Veterinary Small Business Management (as needed)<br>Agricultural Economics 415 Agricultural Futures and Options (F)<br>Agricultural Economics 420 Current Issues in Agricultural Business (3) (as needed)<br>Agricultural Economics 440 Econometrics Applications in Agribusiness (Sp)<br>Agricultural Economics 444 Practicum in Agribusiness (as needed)<br>Agricultural Economics 445 (645) Natural Resources Economics (Sp)

Agricultural Economics 465 (665) Agricultural Finance (Sp)
Agricultural Economics 471 (671) Agribusiness Management (F)
Agricultural Economics 475 Managerial and Entrepreneurial Strategies for Agribusiness (Sp-odd)
Agricultural Economics 480 Agriculture and Applied Project Management (Sp)
Agricultural Economics 485 (685) Mathematical Economics for Agriculture (Sp)
Agricultural Economics 705 Advanced Agricultural Marketing (as needed)
Agricultural Economics 710 Commodity Futures and Option Markets (as needed)
Agricultural Economics 715 Advanced Farm Real Estate Appraisal (as needed)
Agricultural Economics 735 Seminar in International Agricultural Trade (as needed)
Agricultural Economics 740 Advanced Econometric Applications in Agribusiness (Sp)
Agricultural Economics 745 Agricultural Production Economics (as needed)
Agricultural Economics 750 Agricultural Risk Analysis and Decision Making (as needed)
Agricultural Economics 751 Strategic Management Issues in Agriculture (as needed)
Agricultural Economics 780 Project Management Issues in Agriculture (as needed)
Agricultural Economics 784 Applied Management Science in Agricultural Systems I (F)
Agricultural Economics 785 Applied Management Science in Agricultural Systems II (as needed)
Agricultural Education 310 FFA and SAE Program Planning and Management (F, Sp)
Agricultural Education 404 Student Teaching Grades 7-8 (F, Sp)
Agricultural Education 405 Student Teaching Grades 9-12 (F, Sp)
Agricultural Education 430 Methods of Teaching Agriculture Subjects (F)
Agricultural Education 450-460 (650-660) Problems in Agribusiness and Natural Resources
Education (F, Sp, Su)
Agricultural Education 470 (670) Problems in Agricultural Education [topic title] (F, Sp, Su)
Agricultural Education 730 Designing and Delivering Nonformal Education Programs (Su)
Agricultural Education 740 Seminar in Vocational Agriculture for First Year Teachers (as needed)
Agricultural Education 741 Supervision of Student Teaching in Agriculture (as needed)
Agricultural Education 750 Team and Organizational Leadership (Su)
Agricultural Education 770 Program Development for Agricultural Mechanics Instruction (as needed)
Agricultural Education 771 Program Development for Future Farmers of America Instruction (as needed)
Agricultural Engineering Technology 110 Introduction to Agricultural Engineering (F, Sp)
Agricultural Engineering Technology 119 Introduction to Agricultural Engineering Laboratory (as needed)
Agricultural Engineering Technology 210 Internal Combustion Engines (F-even)
Agricultural Engineering Technology 220 Surveying and Soil and Water Engineering (F)
Agricultural Engineering Technology 250 Renewable Energy Technology (F-odd)
Agricultural Engineering Technology 301 Special Problems [topic title] (as needed)
Agricultural Engineering Technology 302 Special Problems [topic title] (as needed)
Agricultural Engineering Technology 350 Agricultural Power and Machinery Management (F)
Agricultural Engineering Technology 354 Advanced Land Surveying and Geomatics (as needed)
Agricultural Engineering Technology 370 Agricultural Mechanics Shop (F)
Agricultural Engineering Technology 382 Precision Agriculture Technologies (Sp)
Agricultural Engineering Technology 401 (601) Research Participation (F, Su)
Agricultural Engineering Technology 402 (602) Research Participation (Sp, Su)
Agricultural Engineering Technology 420 Irrigation (Sp)
Agricultural Engineering Technology 450 (650) Agricultural Structures (Sp-even)
Agricultural Engineering Technology 454 Land Surveying with GPS (as needed)
Agricultural Engineering Technology 456 Boundary Control and Legal Principles (as needed)
Agricultural Engineering Technology 458 Subdivision Site Planning and Development (as needed)
Agricultural Engineering Technology 460 (660) Waste Management Technology (Sp-odd)

Agricultural Engineering Technology 470 Applied Pneumatics and Hydraulics in Agriculture (F)
Agricultural Engineering Technology 480 Supervised Field Experience (as needed)
Agricultural Engineering Technology 482 (682) Principles of GIS and GPS for Agricultural and Natural Resources Management (Sp-odd)
Agricultural Engineering Technology 492 Theoretical and Applied Computations in Geomatics (as needed)
Agricultural Engineering Technology 710 Safety and Ergonomic Sciences in Agriculture (as needed)
Agricultural Engineering Technology 720 Advanced Soil and Water Conservation Engineering (as needed)
Agricultural Engineering Technology 760 Comprehensive Nutrient Management Planning and System
Design (as needed)
Agricultural Engineering Technology 782 GIS for Agricultural and Natural Resources
Management (as needed)
Agricultural Engineering Technology 784 Applied Management Science in Agricultural Systems I (F)
Agricultural Engineering Technology 785 Applied Management Science in Agricultural Systems II (Sp)
Agriculture 120 Science and Technology of Agriculture and Natural Resources (as needed)
Agriculture 180 Topics in Agriculture [Topic title] (as needed)
Agriculture 230 Travel Studies in Agriculture and Natural Resources (as needed)
Agriculture 240 History of American Agriculture ( Sp )
Agriculture 250 Issues in Alternative Agriculture (Sp-odd)
Agriculture 270 Introduction to Geospatial Technologies (Sp)
Agriculture 295 International Food and Fiber Systems (F, Sp, Su)
Agriculture 390 Career Planning in Agriculture (F, Sp)
Agriculture 399 Special Topics in Agriculture (as needed)
Agriculture 401 Research Participation (as needed)
Agriculture 402 Research Participation (as needed)
Agriculture 411 Fundamentals of Cooperative Extension (as needed)
Agriculture 415 Special Topics in Agriculture (as needed)
Agriculture 420 Supervised Field Experience (F, Sp, Su)
Agriculture 441 Interpretation of Agricultural Research ( Sp )
Agriculture 450 (650) Dynamics and Development of Leadership in Agriculture (F)
Agriculture 460 (660) Agroecosystems Analysis Field School (as needed)
Agriculture 475 Agricultural Communications (Sp)
Agriculture 480 (680) Applications of Molecular Biotechnology (F-even)
Agriculture 701-702 Master's Thesis (F, Sp, Su)
Agriculture 732 International Travel Study (as needed)
Agriculture 741 Statistical Methods in Agriculture and Natural Resources (as needed)
Agriculture 77- Topics in Agriculture (Selected Area) (as needed)
Agriculture 790 Scientific Writing and Presentations (as needed)
Agriculture 791 Master's Research Project in Agriculture (F, Sp, Su)
Animal Science 110 Introduction to Animal Science (F, Sp)
Animal Science 119 Introduction to Animal Science Laboratory (F, Sp)
Animal Science 121 Western Horsemanship (F, Sp)
Animal Science 210 Introduction to Horse Science ( Sp )
Animal Science 211 Horse Science Laboratory (Sp)
Animal Science 230 Exotic and Companion Animal Management (F, Sp)
Animal Science 231 Companion Animal Laboratory (F, Sp)
Animal Science 240 Live Animal and Carcass Selection and Evaluation (F)
Animal Science 253 Small Scale Farm Animal Production (F)
Animal Science 260 Behavior of Farm and Companion Animals (F)

Animal Science 270 Animal Welfare and Ethics (F, Sp)
Animal Science 301 Special Problems [topic title] (F, Su)
Animal Science 302 Special Problems [topic title] (Sp, Su)
Animal Science 305 Practicum in Animal Science (F, Su)
Animal Science 306 Practicum in Animal Science (Sp, Su)
Animal Science 320 Farm Animal Health (F, Sp)
Animal Science 350 Animal Nutrition (F, Sp)
Animal Science 351 Animal Nutrition Laboratory (F)
Animal Science 360 Animal Genetics (Sp)
Animal Science 371 Anatomy and Physiology of Domestic Animals (F, Sp)
Animal Science 372 Applied Animal Reproduction (F, Sp)
Animal Science 374 Applied Animal Reproduction Laboratory (Sp)
Animal Science 400 International Studies in Animal Agriculture (as needed)
Animal Science 401 (601) Research Participation (F, Su)
Animal Science 402 (602) Research Participation (Sp, Su)
Animal Science 405 Current Issues in Animal Agriculture (as needed)
Animal Science 410 Beef Cow-Calf Production (F)
Animal Science 413 Stocker and Feedlot Cattle Production (Sp)
Animal Science 421 (621) Swine Science (Sp)
Animal Science 430 Stable Management (Sp)
Animal Science 440 (640) Sheep and Goat Production (as needed)
Animal Science 441 Advanced Meat Animal Evaluation and Livestock Selection (Sp)
Animal Science 442 Advanced Meat Animal Evaluation and Livestock Selection (F)
Animal Science 444 High-Impact Educational Practice in Animal Science (as needed)
Animal Science 451 Equine Selection and Evaluation (as needed)
Animal Science 471 Commercial Poultry Production (F)
Fellows Research Program 201 Fellows Research Seminar (F)
Fellows Research Program 202 Fellows Research Seminar (Sp)
Fellows Research Program 301 Fellows Research Methods (as needed)
Fellows Research Program 401 Research Participation (as needed)
Fellows Research Program 402 Research Participation (as needed)
Geography 151 Introduction to Regional Geography: North America, Europe and Russia (F, Sp)
Geography 152 Introduction to Regional Geography: Asia, Africa and Latin America (F, Sp)
Geography 180 Topics in Geography (as needed)
Geography 202 Introduction to Cultural Geography ( Sp )
Geography 210 Geoscience Literacy (F)
Geography 270 Introduction to Geospatial Technologies (F)
Geography 305 Principles of Meteorology (Sp)
Geography 310 Principles of Geographic Information Systems (Sp)
Geography 355 (555) Principles of Geomorphology (Sp-odd)
Geography 364 (564) Introduction to Remote Sensing (F)
Geography 365 (565) Tennessee's Geologic and Cultural Landscapes (F-odd)
Geography 380 (580) Geography of North America (as needed)
Geography 381 (581) Geography of Europe (as needed)
Geography 401-402 Research Participation (as needed)
Geography 410 Geographic Information Systems: Modeling and Applications (F)
Geography 441-442 (641-642) Travel Study (as needed)
Geography 444 Geography Internship (as needed)

Geography 461 (661) Economic Geography (as needed)
Geography 462 (662) Political Geography (as needed)
Geography 471 (671) Cartography (F)
Geography 472 (672) Climatology (as needed)
Geography 481 Research Practicum (F, Sp)
Geography 491-492 (691-692) Special Topics in Geography (as needed)
Geography 755 Global Climate and Climate Change (as needed)
Geology 210 Geoscience Literacy (F)
Geology 220 Methods in Field Geology (Sp)
Geology 275 Travel Studies in Geology (as needed)
Geology 285 Topics in Geology (as needed)
Geology 315 (515) Principles of Oceanography (F-odd)
Geology 320 (520) Mineralogy (F-odd)
Geology 330 (530) Igneous and Metamorphic Petrology (Sp-even)
Geology 345 (545) Natural Hazards (Sp-even)
Geology 350 (550) Principles of Paleontology (Sp-even)
Geology 355 (555) Principles of Geomorphology (Sp-odd)
Geology 360 (560) Sedimentology and Stratigraphy (F-even)
Geology 365 (565) Tennessee's Geologic and Cultural Landscapes (F-odd)
Geology 385 (585) Plate Tectonics (as needed)
Geology 395 (595) Economic Geology (as needed)
Geology 400 (600) Structural Geology (F-even)
Geology 401-402 Research Participation (as needed)
Geology 415 (615) Marine Geology (Su)
Geology 445 (645) Geohydrology (F-odd)
Geology 465 Geology Internship (as needed)
Geology 475 (675) Travel Studies in Geology: (Title) (as needed)
Geology 485 (685) Special Topics in Geology: (Title) (as needed)
Geology 495 Senior Research Project (as needed)
Geology 499 Senior Seminar (as needed)
Geoscience 110 Geoscience in Everyday Life (F)
Geoscience 110H Honors Geoscience in Everyday Life (F)
Geoscience 120 Earth Materials and Processes (F, Sp)
Geoscience 120H Honors Earth Materials and Processes (Sp)
Geoscience 130 Global Change and Earth History (Sp)
Geoscience 130H Honors Global Change and Earth History (Sp)
Geoscience 140 Weather and Climate (F, Sp)
Geoscience 140H Honors Weather and Climate (Sp)
Geoscience Education 700 Advanced Earth Systems Science (as needed)
Geoscience Education 705 Earth/Space Science and STEM Integration for Middle Grades 5-9
Teachers (as needed)
Geoscience Education 710 Advanced Physical Geology for Educators (as needed)
Geoscience Education 720 Oceanology for Educators (as needed)
Geoscience Education 730 Understanding Evolution (as needed)
Geoscience Education 740 Field Experience in Geoscience: [Title] (as needed)
Geoscience Education 750 Global Climate Change (as needed)
Geoscience Education 760 Astrophysics for Educators (as needed)
Meteorology 160 Weather and Agriculture ( Sp )

Meteorology 320 Physical Meteorology (F)
Meteorology 330 Mesoscale Meteorology (Sp-odd)
Meteorology 340 Synoptic Meteorology and Weather Analysis (Sp)
Meteorology 350 Weather Forecasting (Sp)
Meteorology 360 Satellite and Radar Meteorology (Sp)
Meteorology 401-402 Research Participation (F-Sp)
Meteorology 405 Aviation Weather (Sp-even)
Meteorology 415 GIS for Meteorology (as needed)
Meteorology 420 Applied Meteorology and Climatology (Sp-odd)
Meteorology 430 Statistical Analysis in Meteorology and Climatology (Sp-even)
Meteorology 435 Tropical Meteorology (F-even)
Meteorology 440 Thermodynamics (F-odd)
Meteorology 445 Weather for Agriculture and Natural Resources (as needed)
Meteorology 455 Field Experiences in Meteorology (as needed)
Meteorology 460 Dynamics (Sp-even)
Meteorology 465 Internship (as needed)
Meteorology 470 Climatology (Sp)
Meteorology 481 Research Practicum (as needed)
Meteorology 491-492 Special Topics in Meteorology (as needed)
Natural Resources Management 100 Introduction to Natural Resource Management (F, Sp)
Natural Resources Management 101 Wildlife, Conservation and Environmental Issues (F, Sp)
Natural Resources Management 180 Topics in Natural Resources Management [Topic title] (as needed)
Natural Resources Management 200 Natural Resource Interpretation Practicum (Sp)
Natural Resources Management 210 Human Dimensions in Natural Resources Management (F)
Natural Resources Management 225 Introduction to Aquatic Science (Sp)
Natural Resources Management 230 Travel Studies in Agriculture and Natural Resources (as needed)
Natural Resources Management 250 Global Perspectives in Natural Resource Based Recreation (as needed)
Natural Resources Management 301 Special Problems [topic title] (F, Su)
Natural Resources Management 302 Special Problems [topic title] (Sp, Su)
Natural Resources Management 315 Restoration of Freshwater Habitats (F-odd)
Natural Resources Management 330 Natural Resources Research (Sp)
Natural Resources Management 350 Environmental Regulation Sp-odd)
Natural Resources Management 355 Ethics and the Environment (as needed)
Natural Resources Management 375 Environmental and Agricultural Law (F)
Natural Resources Management 390 Career Planning in Natural Resources Management (F, Sp)
Natural Resources Management 401 (601) Research Participation (F, Su)
Natural Resources Management 402 (602) Research Participation (Sp, Su)
Natural Resources Management 410 (610) Silviculture (Sp)
Natural Resources Management 420 Supervised Field Experience (F, Sp, Su)
Natural Resources Management 440 (640) Regional Studies in Natural Resources Management (as needed)
Natural Resources Management 450 (650) Dynamics and Development of Leadership in Natural Resources Management (F, Sp)
Natural Resources Management 460 (660) Agroecosystems Analysis Field School (Su)
Natural Resources Management 461 Selected Topics in Natural Resources Management (as needed)
Natural Resources Management 480 (680) Applications of Molecular Biotechnology (F-even)
Natural Resources Management 701-702 Master's Thesis (F, Sp, Su)
Natural Resources Management 722 Production of Biorenewable Resources (as needed)
Natural Resources Management 724 Advanced Grazing Management Techniques (as needed)

Natural Resources Management 730 Advanced Natural Resources Economics (as needed) Natural Resources Management 740 Natural Resource Policy and Administration (as needed) Natural Resources Management 755 Global Climate and Climate Change (as needed)
Natural Resources Management 760 Management of Interpretive Resources (as needed) Natural Resources Management 765 Conservation and Preservation of Historic Structures (as needed) Natural Resources Management 770 Topics in Natural Resources Management [Title] (as needed) Natural Resources Management 790 Scientific Writing and Presentations (as needed) Natural Resources Management 791 Master's Research Project in Natural Resources Management (F, Sp, Su)
Park Administration 100 Fundamentals of Park and Recreation Administration (as needed) Park Administration 110 Introduction to Park Management (F-odd)
Park Administration 200 Recreation Leadership, Programming, and Interpretation (F-even)
Park Administration 220 Outdoor Recreation (as needed)
Park Administration 300 Technological Applications in PARK (Sp-even)
Park Administration 310 Recreation Area Design and Comprehensive Planning (as needed)
Park Administration 315 Special Event Management in PRA (as needed)
Park Administration 321 Landscape Management (as needed)
Park Administration 400 (600) Advanced Interpretation of Natural and Cultural Resources (Sp-odd)
Park Administration 401-402 Research Participation (as needed)
Park Administration 410 (610) Advanced Park Management (Sp-even)
Park Administration 430 Supervised Field Experience (F, Sp, Su)
Park Administration 760 Management of Interpretive Resources (as needed)
Park Administration 765 Conservation and Preservation of Historic Structures (as needed)
Park Administration 770 Topics in Park and Recreation Administration [Title] (as needed)
Plant Science 110 Introductory Plant and Soil Science (F, Sp)
Plant Science 119 Introductory Plant and Soil Science Laboratory (F, Sp)
Plant Science 205 Introduction to Pesticides (Sp)
Plant Science 234 Lawn and Turf Management (F)
Plant Science 242 Fundamentals of Horticulture (Sp)
Plant Science 250 Plant Evaluation (F, Sp)
Plant Science 260 Landscape Equipment and Technology (F)
Plant Science 301 Special Problems (F, Su)
Plant Science 302 Special Problems (Sp, Su)
Plant Science 310 Integrated Pest Management (F)
Plant Science 321 Landscape Management (Sp-odd)
Plant Science 322 Introductory Plant Pathology (F)
Plant Science 324 Landscape Construction Techniques (F)
Plant Science 333 (533) Weed Science (F)
Plant Science 341 Dendrology and Forest Ecology (F)
Plant Science 342 Fruit and Vegetable Production (Sp-even)
Plant Science 345 Fruit and Vegetable Products (as needed)
Plant Science 363 Plant Identification and Propagation (F-odd)
Plant Science 365 Greenhouse Crops and Management (F)
Plant Science 401 (601) Research Participation (F, Su)
Plant Science 402 (602) Research Participation (Sp, Su)
Plant Science 410 (610) Silviculture (as needed)
Plant Science 420 Supervised Field Experience in Plant Science (as needed)
Plant Science 422 (622) Forage Crops (Sp)
Plant Science 431 (631) Principles of Plant Breeding (Sp-odd)

Plant Science 433 (633) Field Crop Production (F)
Plant Science 442 (642) Crop Adaptation and Ecology (Sp)
Plant Science 445 Plants, Environment and Design (Sp)
Plant Science 462 Environmental Landscape Design (Sp-odd)
Plant Science 471 Golf Course Management (Sp-even)
Plant Science 475 (675) Grazing Management Techniques (F)
Plant Science 722 Production of Biorenewable Resources (as needed)
Plant Science 724 Advanced Grazing Management Techniques (as needed)
Soil Science 210 Soil Science (F, Sp)
Soil Science 250 Soil and Landscape Evaluation (F, Sp, as needed)
Soil Science 301 Special Problems [topic title] (F, Su)
Soil Science 302 Special Problems [topic title] (Sp, Su)
Soil Science 315 Soil and Water Conservation (F-odd)
Soil Science 321 Soil Genesis, Morphology and Classification (F-even)
Soil Science 401 Research Participation (F, Su)
Soil Science 402 Research Participation (Sp, Su)
Soil Science 412 (612) Soil Chemistry and Fertility (Sp)
Soil Science 420 Soil Microbiology and Biochemistry (as needed)
Soil Science 421 Soil Microbiology and Biochemistry Laboratory (as needed)
Soil Science 430 (630) Wetland Science (Sp, Su)
Soil Science 440 (640) Soil Physics (as needed)
Sustainability Studies 200 Introduction to Sustainability (F, Sp)
Sustainability Studies 380 Special Topics in Sustainability (as needed)
Sustainability Studies 450 Sustainability Travel Studies (as needed)
Veterinary Health Technology 200 Introduction to Veterinary Technology (F, Sp)
Veterinary Health Technology 300 Veterinary Technology Medical Terminology (F, Sp)
Veterinary Health Technology 310 Veterinary Technology Advanced Lab Sciences (F, Sp)
Veterinary Health Technology 320 Veterinary Technology Lab Animals, Exotics, and Pocket Pets (F, Sp)
Veterinary Health Technology 330 Veterinary Technology Diagnostic Imaging (F, Sp)
Veterinary Health Technology 340 Veterinary Technology Animal Nursing (F, Sp)
Veterinary Health Technology 350 Veterinary Technology Parasitology (F, Sp)
Veterinary Health Technology 360 Small Animal Clinical Nutrition in Veterinary Medicine (F)
Veterinary Health Technology 400 Veterinary Technology Pharmacology (F, Sp)
Veterinary Health Technology 410 Veterinary Technology Hematology and Clinical Chemistry (F, Sp)
Veterinary Health Technology 420 Veterinary Technology Surgery, Anesthesia, and Dentistry (F, Sp)
Veterinary Health Technology 480 Capstone in Veterinary Technology (F, Sp)
Veterinary Health Technology 490 Internship in Animal Technology (as needed)
Wildlife Biology 240 Fish and Wildlife Management Techniques (F)
Wildlife Biology 250 Principles of Wildlife Management (Sp)
Wildlife Biology 300 Principles of Fisheries Management (Sp)
Wildlife Biology 301 Special Problems [topic title] (as needed)
Wildlife Biology 311 Game Ecology and Management [Topics Title] (as needed)
Wildlife Biology 312 North American Game Management (Sp-even)
Wildlife Biology 320 White-tailed Deer (as needed)
Wildlife Biology 330 Wildlife Biopolitics (Sp)
Wildlife Biology 340 Wildlife Law Enforcement and Public Relations (Sp)
Wildlife Biology 375 Human Dimensions of Wildlife (Sp-odd)
Wildlife Biology 401-402 Research Participation (as needed)

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# Department of Family and Consumer Sciences 

Dr. W. Keith Dooley, Chair<br>340B Gooch Hall<br>731-881-7100<br>fax 731-881-7106

## Faculty

Brian D. Carroll, W. Keith Dooley, Lisa C. LeBleu, Lori H. Littleton, Amy L. Richards

## Mission

The mission of the Department of Family and Consumer Sciences at The University of Tennessee at Martin is to prepare professionals who help promote a better quality of life for individuals and families, enhancing the interrelationships of people and communities in diverse social, economic and physical environments. For graduates who wish further specialization, the curriculum prepares them for advanced training or degrees such as UT Martin's Master of Science degree in Family and Consumer Sciences.

A complementary mission of the department is to provide service courses for individual and curricular needs of students outside the major, as well as professional and non-professional persons in the region. The Dietetics and Child and Family Studies concentrations improve the quality of life for individuals and families in the region through public service and research.

## Expected Outcomes

Upon completion of curriculum requirements for the degree in Family and Consumer Sciences, students will be able to:

1. Use technology that is appropriate for professionals in family and consumer sciences.
2. Use professional skills for effective communication, team building and decision making consistent with standards of ethical practice.
3. Exhibit appropriate interpersonal skills and professional attitude in professional and community settings.
4. Engage in professional networking in their area of specialization.
5. Identify relevant issues and participate in the legislative process as it relates to family and consumer sciences.
6. Interact effectively with individuals and families, taking into consideration social, economic, psychological and cultural differences.
7. Apply physical/biological and social sciences foundations in family and consumer sciences.
8. Apply knowledge gained from the student's speciality area in family and consumer sciences careers.
9. Apply critical thinking skills for analysis of social, economic and political issues.

## Major

The undergraduate program is accredited by the Council for Accreditation of the American Association of Family and Consumer Sciences ( 400 North Columbus Street, Suite 202, Alexandria, VA 22314, telephone 703-706-4600). The undergraduate curriculum prepares students for the degree, Bachelor of Science in Family and Consumer Sciences. The major is called Family and Consumer Sciences and offers seven concentrations. The student will select one of the following concentrations:

Child and Family Studies (1212)
Dietetics (1217)
Family and Consumer Sciences Education (1213)
Fashion Merchandising (1219)
Food and Nutrition (1211)
Gerontology (1215)
Hospitality and Food Service Management (1220)
Family and consumer sciences majors must earn a minimum grade of C in all family and consumer sciences subject-matter courses. Students who choose to complete upper division electives in lieu of field experience, or in combination with field experience, must earn a minimum grade of C in those courses, regardless of subject matter. A student can complete the minimum number of 120 semester hours in four academic years (two semester terms per year) if the student schedules a regular course load of 16 to 18 hours each term. If a student needs to carry more than 20 hours at one time, special permission of the dean of the college is required. Family and Consumer Sciences majors taking a minor can count up to two courses that are common to both the major and the minor.

Study and internships beyond the baccalaureate degree are necessary to attain credentials from certain professional organizations such as the Academy of Nutrition and Dietetics (AND). Advanced degrees are required for leadership and specialist positions, for college teaching and for many career promotions. The master's degree is described in the graduate section of the catalog.

## Minors

## Family and Consumer Sciences

A minor in family and consumer sciences (1210) is available to non-majors by taking 18 hours of family and consumer sciences courses. The minor incorporates nine semester hours of family and consumer sciences core courses which provide a basis for nine semester hours of upper-division electives. The minor consists of the following courses: Child and Family Studies 100 or Consumer Resource Management 205 (3), Nutrition 100 or Food Science 200 (3), Fashion Merchandising 102 (3), and selected courses for nine semester hours at the upper-division. The electives should be approved by an adviser in the Department of Family and Consumer Sciences. Three of the nine hours intended for electives may be at the lower-division if a prerequisite is being satisfied for the remaining upper-division courses.

## Fashion Merchandising

The fashion merchandising minor (1219) consists of Fashion Merchandising 102, Fashion Merchandising 200 and twelve additional hours of upper-division Fashion Merchandising (FASH) courses.

## Gerontology

The minor in gerontology (1215) consists of:
Gerontology 200 (3),

One course from either Child and Family Studies 100 or 421 or Psychology 313 (3), Gerontology 314 (3), and nine additional hours selected from:
Consumer Resource Management 413 (3), Gerontology 311 (3), Gerontology 312 (3), Health 427 (3), Health and Human Performance 325 (3), one course from either Health and Human Performance 351 or Psychology 360 (3), one course from either Health and Human Performance 353 or Social Work 425 (when the topic is Love, Sex, and Relationships) (3), Health and Human Performance 360 (3), Health and Human Performance 406 (3), Psychology 325 (3), Psychology 365 (when the topic is Psychology of Aging) (3), Social Work 220 (cross-listed as Women's Studies 220) (3), Social Work 320 (for Social Work majors only) (3), Social Work 330 (for Social Work majors only) (3), and one course from either Social Work 355 or Sociology 320 (3).

## Nutrition

A minor in nutrition (1216) consists of the following courses: Child and Family Studies 100 (3), Health 111 (3), Nutrition 100 (3), Nutrition 322 (3), one course from either Health 427 (3) or Health 406 (3), and one course from Nutrition 422 (3), Nutrition 433 (4), or Nutrition 443 (3).

Students majoring in Family and Consumer Sciences are not required to complete a minor in a supporting academic discipline. However, family and consumer sciences students have the option and may elect to do so. The option for completing a minor is especially well suited to the concentration in fashion merchandising. The choice to complete a minor means that the student must comply with the stated guidelines for the selected minor. Additional hours may be needed in pursuing a minor.

## Concentrations in the Family and Consumer Sciences Major

Common to all Family and Consumer Sciences concentrations is a core component consisting of the following courses:
Core Component Courses Hours
Child and Family Studies 100 ..... 3
Family and Consumer Sciences 100, 400 ..... 4
Nutrition 100 ..... 3
Fashion Merchandising 300 ..... 3
Total Hours ..... 13

The additional degree requirements for each concentration are identified on the following pages.

## Child and Family Studies Concentration (1212)

The concentration is designed to provide a broad-based education in child development and family relationships while allowing flexibility in course work to meet individual career goals. Students in the concentration prepare for career opportunities such as: child care provider, parent educator, child development specialist, family services director, community services worker, and early intervention teacher. Observations of young children and hands-on experiences at the Margaret N. Perry Children's Center, with child and family grant programs, and community programs in addition to course work, provide the means for the student to gain the knowledge and skills needed in the field.

## Degree Requirements

I. Family and Consumer Sciences Core Component 13 hours
(see earlier page)
5-46 hours
Chemistry 111-112 or Chemistry 121-122 or Biology 110-120 (4, 4)
Communications 230 (3)
Child and Family Studies 311 or Computer Science 201 (3)
Economics 201 or 202 (3)

English 105 or 111, and $112(3,3)$
Mathematics 110 or 140 (3-4)
Microbiology 251 or Zoology 201 (4)
Psychology 101 or Sociology 201 (3)
Fine Arts Elective selected from approved general education listing (3)
History Elective selected from History 121, 122, 201, or 202 (3)
Humanities Electives selected from approved general education listing (6)
III. Family and Consumer Sciences Component ..... 22 hoursChild and Family Studies 303 and $411(3,4)$
Food Science 200 or 313 (3)
Consumer Resource Management 302 (3)
Child and Family Studies 402 (3)
Nutrition 422 (3)
Fashion Merchandising 303 (3)
IV. Professional Development Component. ..... 40 hours
Child and Family Studies 211 (3)
Electives in Child and Family Studies (Courses selected to meet student's own interest inspecialization for career) (12 hours)Electives Unspecified (Courses to be selected to meet student's own interest inspecialization for career) (13 hours)
Select Alternative A or B to develop specialization.
A. Supervised Field Experience: Family and Consumer Sciences 460, 481, $491(2,5,5)$
B. Approved Electives 300-400 (12 hours)
Minimum hours required for a B.S.F.C.S. degree ..... 120A minimum of 36 hours is required in upper-division courses.
Family and Consumer Sciences Education
Concentration (1213)

The Family and Consumer Sciences Education concentration is designed to provide a broad-based education in Family and Consumer Sciences. Students in the concentration prepare for career opportunities such as: family and consumer sciences teacher, 4-H agent, and other jobs related to the field. Observations and community service in various locations, and student teaching, in addition to course work, provide the means for the student to gain the knowledge and skills needed in the field.

Family and Consumer Sciences Education graduates meet the requirements for secondary licensure (grades $7-12$ ) to teach vocational Family and Consumer Sciences in Tennessee. The certificate is also valid in states which grant reciprocity in licensure to graduates of institutions accredited by CAEP (Council for the Accreditation of Educator Preparation) or which participate in reciprocity agreement developed by NASDTEC (National Association of State Directors of Teacher Education and Certification). The program is offered in cooperation with the College of Education, Health, and Behavioral Sciences which governs admission requirements to teacher education and exit requirements for the Praxis Series specialty area exams and for the recommendation for certification. Students must file an application and be admitted to the teacher education program for eligibility to enroll in professional education courses (refer to Admission to the Educator Preparation Program section for the criteria for admission). Continuation in the program and recommendations for licensure are dependent upon fulfilling the requirements stipulated. Those graduates recommended for certification apply for endorsement in Vocational Family and Consumer Sciences, an, if eligible, for additional endorsements in one or more occupational family and consumer sciences areas. To qualify for added endorsements in occupational family and consumer sciences, students are required to complete 4-15 semester hours in each subject matter area related to the endorsement.

## Degree Requirements

I. Family and Consumer Sciences Core Component ..... 13 hours
(see earlier page)
II. General Education Component ..... 45-46 hours
Chemistry 111-112 or Chemistry 121-122 or Biology 110-120 (4, 4)
Communications 230 (3)
Human Learning 311 (3)
Economics 201 or 202 (3)
English 105 or 111, 112 (3-4, 3)
Mathematics 110 or 140 (3-4)
Microbiology 251 or Zoology 201 (4)
Psychology 101 or Sociology 201 (3)
Fine Arts Elective selected from approved general education listing (3)
History Elective selected from History 121, 122, 201, or 202 (3)
Humanities Electives selected from approved general education listing (6)
III. Family and Consumer Sciences Component ..... 25 hours
Child and Family Studies 303, 411 (3, 4)
Food Science 200 or 313 (3)
Consumer Resource Management 302 (3)
Child and Family Studies 402 (3)
Nutrition 422 (3)
Fashion Merchandising 303 (3)
Fashion Merchandising 103 or Fashion Merchandising 415 (3)
IV. Professional Education Development Component ..... 37 hoursFamily and Consumer Sciences Education $300^{*}, 330^{*}, 340^{*}, 400,404^{*}, 405^{*}(1,2,3,3,6,6)$
Child and Family Studies 211 (3)
Communication 311 (3)
Special Education 300 (3)
Teacher Education 211, 302, 303* $(1,3,3)$
*Admission to the Educator Preparation Program required for courses marked with an asterisk.

Minimum hours required for a B.S.F.C.S. degree
A minimum of 36 hours is required in upper-division courses.

## Dietetics Concentration (1217)

The Dietetics Concentration (1217) in the Department of Family and Consumer Sciences is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, 312-899-5400, eatrightpro.org/acend. The mission of the didactic program in dietetics is to prepare graduates for their dietetic internships, the Registration Examination for Dietitians, and career practice in a dietetics-related field. Grounded in adult education theory, the science-based curriculum emphasizes critical thinking, team work, and authentic application of information. Graduates will acquire the skills necessary for both dietetics-related professional practice and lifelong learning. The philosophy of the program is that the graduates of the dietetic program should contribute to an improved quality of life for the people of their communities while functioning effectively as individuals, family members, citizens, family and consumer scientists and dietetic professionals. Major program goals and student goals are listed in the DPD Student Handbook that is distributed to all students admitted to the dietetics program.

Students who successfully complete the DPD will receive verification statements. They are then qualified to complete an accredited dietetic internship. Upon successful completion of a dietetic internship, the individual is eligible to take the Registration Examination for Dietitians to become a Registered Dietitian Nutritionist (RDN). Detailed information is available from the dietetics program director about special costs and requirements of students in the program. Graduates from the dietetics concentration also may seek direct employment in such areas as school food service, extended-care facilities and commercial or industrial food services.

## ADMISSION TO THE DIDACTIC PROGRAM in DIETETICS (DPD)

Students seeking to be admitted to the didactic program in dietetics (DPD) will be required to meet the following requirements before applying:

1. be enrolled in the food and nutrition concentration
2. have cumulative GPA of 3.0 or better
3. receive a grade of C or better in each of the following courses: Biology 140; Chemistry 121, 122; Food Science 200; Food Systems Management 312; Nutrition 100
4. complete application packet which includes DPD admission application and current transcripts from University of Tennessee at Martin and/or any other relevant universities or colleges attended
5. complete interview with dietetics faculty.

## DISCIPLINARY/TERMINATION PROCEDURES

Students falling below the 3.0 cumulative GPA once being admitted to the DPD will be sent a letter and individually advised that their GPA is below the minimum requirement for retention and they are on probation for one semester. Students on probation will be allowed that semester to raise their curriculum GPA to 3.0 or above. If, by the end of the semester, their GPA is not at 3.0 or above, they will be dismissed from the DPD program and be placed in another curriculum of study. Students may re-apply to the DPD program one time following a dismissal.

## Degree Requirements

[^3]II. General Education Component ..... 57-58 hours
Biology 140 (4)
Chemistry $121,122,341(4,4,4)$
Communications 230 (3)
Economics 201 or 202 (3)
English 105 or 111, $112(3,3)$
Mathematics 110 or 140, $210(3-4,3)$
Microbiology 251 (4)
Psychology 101 (3)
Zoology 201 (4)
Fine Arts Elective selected from approved general education listing (3)
Humanities Electives selected from approved general education listing (9)
III. Family and Consumer Sciences Component ..... 32 hours
Food Science 200 (3)
Food Systems Management 312, 410 (3, 3)
Nutrition 322, 422, 433, 443, 455, 475 (3, 3, 4, 3, 3, 5)
FSVC 301 (2)
IV. Business Component. ..... 9 hours
Accounting 201 (3)
Management $300,350(3,3)$
V. Professional Development Courses 9 hours
Supervised Field Experience: Family and Consumer Sciences 487, 497; Nutrition 400, 415, 450 (2, 3, $1,2,1$ )
Minimum hours required for a B.S.F.C.S. degree ..... 120
A minimum of 36 hours is required in upper-division courses.
Fashion Merchandising Concentration (1219)

In the Fashion Merchandising concentration (1219) a student has the choice of selecting unspecified electives or a minor in a supporting discipline. Minors in marketing, business administration, communications, sociology, psychology, art, and others are useful selections for complementing the major. An important component of the curriculum which contributes to professional development is supervised field experience. The experience offers each student additional means for individual specialization. Enrollment in supervised field experience courses requires a minimum 2.50 cumulative grade point average achieved two semesters preceding the semester of field experience and maintained until the semester of field experience. As an alternative to the supervised field experience, students can earn credits in approved, upper-division electives.
Careers in both traditional and non-traditional settings are open to graduates. Entry-level positions of recent graduates include department manager for a major retail store, wholesale representative and a buyer for a retail store. Many contemporary issues of society-at-large call for the services of the family and consumer sciences graduate who seeks to affect the lives of individuals and families in positive ways.

## Degree Requirements

[^4]
## II. General Education Component

Chemistry 111-112 or 121-122 or Biology 110-120 plus one additional Biological and Physical Systems course from the approved general education listing (4, 4, 4)
Communications 230 (3)
Economics 201 or 202 (3)
English 105 or 111 and $112(3,3)$
Mathematics 110 or 140 (3-4)
Psychology 101 or Sociology 201 (3)
Fine Arts Elective from approved general education listing (3)
Humanities Electives from approved general education listing (9)
III. Family and Consumer Sciences Component ..... 18 hours
Fashion Merchandising 102 (3)
Fashion Merchandising 200 (3)
Fashion Merchandising 206 (3)
Fashion Merchandising 303 (3)
Consumer Resource Management 302 (3)
IV. Professional Development Component ..... 33 hours
Communications 311 or 356 (3)
Marketing 301 (3)
Choose 15 hours from the following courses:
Fashion Merchandising 103 (3)
Fashion Merchandising 307 (3)
Fashion Merchandising 308 (3)
Fashion Merchandising 309 (1-3)
Fashion Merchandising 405 ..... (3)
Fashion Merchandising 416 (3)
Select option A or B to develop specialization.A. Supervised Field Experience: Family and Consumer Sciences 460, 485, 495 (12 hours)$(2,5,5)$
B. Approved Electives: 300-400 (12 hours)
V. Electives Component: Unspecified ..... 14 hours
Courses selected may be used for a declared minor in a supporting discipline.
Minimum hours required for a B.S.F.C.S. degree ..... 120A minimum of 36 hours is required in upper-division courses.
Food and Nutrition Concentration (1211)

The Food and Nutrition concentration (1211) is designed to provide a broad education in the food and nutrition sciences, with a supporting background in the physical and biological sciences. The Food and Nutrition concentration prepares graduates for careers in food science, food technology, child nutrition services (formerly school food services), college and university food management, commercial enterprises, institutional food management, and supervisory functions in various congregate feeding settings.

Students must complete either a supervised field experience or 12 hours of upper-division restricted
electives. Both options allow students the opportunity to align their academic program with their career goals.

## Degree Requirements

I. Family and Consumer Sciences Core Component 13 hours
(see earlier page)
II. General Education Component ..... 53-54 hours
Biology 140(4)
Chemistry 111-112 (4, 4)
Communications 230 (3)
Economics 201 or 202 (3)
English 105 or 111 and $112(3,3)$
Mathematics 110 or $140,210(3-4,3)$
Microbiology 251 (4)
Psychology 101 (3)
Zoology 201 (4)
Fine Arts Elective from approved general education listing (3)
Humanities Electives from approved general education listing (9)
III. Family and Consumer Sciences Component ..... 25 hours
Family and Consumer Science 487 (2)
Food Science 200, $313(3,3)$
Food Systems Management 312, 410 (3, 3)
Nutrition 322, 422, 443 (3, 3, 3)
Food Service 301 (2)
IV. Business Component.................................................................................................. 15 hours
Accounting 201 (3)
Management 300, $350(3,3)$
Marketing 301 (3)
Communications 311 or 356 (3)
V. Restricted Electives or Supervised Field Experience. 12 hours
Restricted Electives
Choose 12 hours from: Exercise Science 430; Health and Human Performance 330, 351, 410; Human Performance 432, 435; Nutrition 414; Microbiology 401, 410
Supervised Field Experience: Family and Consumer Sciences 460, 482, 492, (2.5.5)
VI. Elective Unspecified ..... 2 hours
Minimum hours required for a B.S.F.C.S. degree ..... 120A minimum of 36 hours is required in upper-division courses.
Gerontology Concentration (1215)The Gerontology concentration is designed to provide a broad-based education in adult development andfamily relationships while allowing flexibility in course work to meet individual career goals. Students in theconcentration prepare for career opportunities such as: senior services coordinator, family life educator,adult care administrator, and related jobs in the field. Observations and community service in various
locations, in addition to course work, provide the means for the student to gain the knowledge and skills needed in the field.
I. Family and Consumer Sciences Core Component 13 hours
(see earlier page)
II. General Education Component ..... 45-46 hours
Chemistry 111-112 or 121-122 or Biology 110-120 (4, 4)
Communications 230 (3)
Communications 311 or 356 (3)
Economics 201 or 202 (3)
English 105 or 111 and $112(3,3)$
Mathematics 110 or 140 (3-4)
Microbiology 251 or Zoology 201 (4)
Psychology 101 or Sociology 201 (3)
Fine Arts Elective selected from approved general education listing (3)History Elective selected from History 121, 122, 201, or 202 (3)
Humanities Electives selected from approved general education listing (6)
III. Family and Consumer Sciences Component ..... 21 hours
Child and Family Studies 303 (3)
Health 220 (3)
Food Science 200 or 313 (3)Consumer Resource Management 302 (3)Child and Family Studies 402 (3)
Nutrition 422 (3)
Fashion Merchandising 303 (3)
IV. Professional Development Component. ..... 39 hours
Child and Family Studies 421 or Psychology 313 (3)
Gerontology 200 (3)
Gerontology 311 (3)
Gerontology 314 (3)
Social Work 220 (3)Electives - 12 hours selected from: Consumer Resource Management 413, Gerontology 312, Health427, Health and Human Performance 325, one course from either Health and Human Performance351 or Psychology 360 , one course from either Health and Human Performance 353 or Social Work425 (when the topic is Love, Sex, and Relationships), Health and Human Performance 360, Healthand Human Performance 406, Psychology 325, Psychology 365 (when the topic is Psychology andAging, and one course from either Social Work 355 or Sociology 320
Select Alternative A or B to develop specialization.
A. Supervised Field Experience: Family and Consumer Sciences 460, 488, 498 (2,5,5)B. Approved Electives 300-400 (12 hours)
V. Electives Unspecified ..... 2 hours
Minimum hours required for a B.S.F.C.S. degree. ..... 120
A minimum of 36 hours is required in upper-division courses.

## Hospitality and Food Service Management Concentration (1220)

The Hospitality and Food Service Management Concentration (1220) is designed to prepare students for management careers in the hospitality industry and related sectors. The degree program provides the opportunity for students to acquire those skills that are necessary to operate and manage a multitude of food service operations. The curriculum enables students to develop their managerial, functional, operational, and analytical capabilities to maximize their success in hospitality and food service management industry. An important component of the curriculum which contributes to professional development is supervised field experience. This experience offers students a means of gaining valuable hands-on experience that further prepares them for a dynamic career in the industry. Enrollment in supervised field experience course requires a minimum 2.50 cumulative grade point average achieved two semesters preceding the semester of field experience and maintained until the semester of field experience. As an alternative to the supervised field experience, students can earn credits in approved, upper-division electives.
Career opportunities are excellent for students in this concentration. Graduates of this program will be prepared to work in entry-level management positions of the hospitality industry. Areas of employment include restaurants, hospitals, hotels, resorts, and universities, catering, event planning, and commercial food service.

## Degree Requirements

I. Family and Consumer Sciences Core Component ..... 13 hours
(see earlier page)
II. General Education Component ..... 41-42 hours
Biology 140 (4)
Communications 230 (3)
Economics 201 or 202 (3)
English 105 or 111 and $112(3,3)$
Math 110 or 140 and 210 (6-7)
Psychology 101 (3)
Zoology 201 (4)
Fine Arts Elective selected from approved general education listing (3)
Humanities Electives selected from approved general education listing (9)
III. Family and Consumer Sciences Component ..... 18 hours
Food Science 200, 313 (6)
Food Service Management 300, $301(2,2)$
Food Systems Management 312, 410 (3,3)
Hospitality Management 101 (2)
IV. Business Component. 18 hours
Accounting 201, 202, $321(3,3,3)$
Management 300, $350(3,3)$
Communications 311 or 356 (3)
V. Restricted Electives ..... 18 hours
Choose 18 hours from the following list of courses:

Business Law 201 (3)
Hospitality Management 301, $302(3,3)$
Management $307,412,430,450,470(3,3,3,3,3)$
Marketing 301, 330, 340, 350, 375, 377 (3, 3, 3, 3, 1, 3)
Nutrition 414, $422(3,3)$

VI. Professional Development Component.
12 hours

Select option A or B to develop specialization
A. Supervised Field Experience: Family and Consumer Sciences 460, 489, 499 (2,5,5)
B. Approved Electives: 300-400 (12 hours)

Minimum hours required for a B.S.F.C.S. degree ................................................................ 120
A minimum of 36 hours is required in upper-division courses.

## Facilities

Modern classroom and lab facilities are housed in Gooch Hall for almost all family and consumer sciences courses. Separate facilities exist that may serve as laboratories for courses in child and family studies. The Margaret N. Perry Children's Center provides services designed for the social and educational enrichment of young children, including a kindergarten readiness curriculum and after-school care for school-aged children.

The Child and Family Grant Programs include the Infant Stimulation Program, which provides services to infants and toddlers who are developmentally delayed and their families; Healthy Start, which provides parent education for first-time parents in the region; and Healthier Beginnings, which serves expecting, first-time, and/or teen mothers and their infants. Students interested in careers in this field may volunteer or perform internships with these programs.

## Student Organizations

UT Martin Family and Consumer Sciences students are active in the Student Group of the American Association of Family and Consumer Sciences, the Fashion Merchandising Association, the Student Dietetic Association, West Tennessee Association for Children's Early Education, and Phi Upsilon Omicron. These organizations provide opportunities for students to interact socially and professionally.

## Supervised Field Experience and Upper Division Electives

A supervised field experience may be selected by the student with the intent of developing specialization in one's preferred career. A student must have a minimum 2.50 cumulative grade point average in order to enroll in field experience. Students who wish to complete the field experience for the ACEND accredited didactic program must have a 3.0 cumulative grade point average. The required grade point average for all field experiences must be achieved two semesters preceding the semester of field experience and maintained until the semester of field experience.

Students who choose to complete upper division electives in lieu of a supervised field experience or in combination with a field experience must select electives in consultation with the adviser. Once the upper division electives have been approved by the adviser, the student may make changes only with prior consultation and approval of the adviser.

For students enrolled in Family and Consumer Sciences Education, the supervised field experience is supervised student teaching. These students must meet the criteria for the teacher education program as outlined by the College of Education, Health, and Behavioral Sciences.

## Courses Offered by Department of Family and Consumer Sciences

Child and Family Studies 100 Lifespan Human Development (F, Sp)<br>Child and Family Studies 200 Early Childhood Curriculum (as needed)<br>Child and Family Studies 205 Safe, Healthy Learning Environment (as needed)<br>Child and Family Studies 210 Family Dynamics and Community Involvement (as needed)<br>Child and Family Studies 211 Child Growth and Development (F)<br>Child and Family Studies 215 Initial Practicum (as needed)<br>Child and Family Studies 303 Family Relationships (Sp)<br>Child and Family Studies 311 Developmentally Appropriate Activities (as needed)<br>Child and Family Studies 312 Parenting Fathers, Mothers and Children (as needed)<br>Child and Family Studies 313 Child Guidance and Discipline (as needed)<br>Child and Family Studies 400 (600) The Hospitalized Child (as needed)<br>Child and Family Studies 402 (602) Housing Across the Lifespan (Sp)<br>Child and Family Studies 411 Preschool Laboratory Practicum (F, Sp)<br>Child and Family Studies 412 Early Childhood Program Administration (as needed)<br>Child and Family Studies 421 (621) Adult Development (as needed)<br>Child and Family Studies 442 (642) Developmental Disabilities in Children (as needed)<br>Child and Family Studies 443 (643) Community Care and Curriculum Planning for Developmentally<br>Disabled Preschool Children (as needed)<br>Child and Family Studies 740 Ecology of Human Development (as needed)<br>Child and Family Studies 742 Administration of Programs for Children (as needed)<br>Child and Family Studies 744 Theories in Child and Family Studies (as needed)<br>Child and Family Studies 751 Resources in Family Life Education (as needed)<br>Child and Family Studies 753 Assessment in Child and Family Studies (as needed)<br>Child and Family Studies 755 Advanced Laboratory Practicum in Child Development (as needed)<br>Consumer Resource Management 202 Consumers and the Market (as needed)<br>Consumer Resource Management 205 Cultural Etiquette (as needed)<br>Consumer Resource Management 210 Leadership Roles in Resident Settings (Sp)<br>Consumer Resource Management 302 Personal and Family Finance (F)<br>Consumer Resource Management 403 (603) Housing and Home Equipment (Sp)<br>Consumer Resource Management 413 (613) Resource Management for Special Groups (as needed)<br>Consumer Resource Management 711 Consumption and Standards of Living (as needed)<br>Consumer Resource Management 712 Housing Programs and Policies (as needed)<br>Consumer Resource Management 713 Environmental Design (as needed)<br>Consumer Resource Management 722 Management and Family Resources (as needed)<br>Consumer Resource Management 723 Consumer Economics (as needed)<br>Family and Consumer Sciences 100 Family and Consumer Sciences Perspectives (F)

Family and Consumer Sciences 200 Food Preparation Methodology (as needed)
Family and Consumer Sciences 28- Preprofessional Practice (as needed)
Family and Consumer Sciences 400 Senior Seminar (F)
Family and Consumer Sciences 411 Fundamentals of Cooperative Extension (as needed)
Family and Consumer Sciences 460 Orientation to Field Experience (Sp, Su)
Family and Consumer Sciences 47- (67-) Topics: [Selected Area] [topic title] (as needed)
Family and Consumer Sciences 48-, 49- Supervised Field Experience (as needed)
Family and Consumer Sciences 700 Non-Thesis Graduation Completion (as needed)
Family and Consumer Sciences 701-702 Master's Thesis (F, Sp)
Family and Consumer Sciences 705 Strategic Planning and Communication in the Workplace (as needed)
Family and Consumer Sciences 760 Perspectives in Family and Consumer Sciences (as needed)
Family and Consumer Sciences 765 Strategies for Leadership and Teambuilding in Family and Consumer Sciences (as needed)
Family and Consumer Sciences 77- Trends in Family and Consumer Sciences [Selected Area] (as needed)
Family and Consumer Sciences 791 Research Methods in Family and Consumer Sciences (Sp)
Family and Consumer Sciences 792 Research Seminar in Family and Consumer Sciences (as needed)
Family and Consumer Sciences Education 300 Managing Family and Consumer Sciences Classrooms (as needed)
Family and Consumer Sciences Education 330 Introduction to Vocational Family \& Consumer Sciences Education (as needed)
Family and Consumer Sciences Education 340 Methods of Teaching Family \& Consumer Sciences (as needed)
Family and Consumer Sciences Education 400 Practicum in Family and Consumer Sciences Education (as needed)
Family and Consumer Sciences Education 404-405 Student Teaching in Family and Consumer Sciences (as needed)
Family and Consumer Sciences Education 713 Human Relationships in the Classroom (as needed)
Family and Consumer Sciences Education 722 Evaluation in Family and Consumer Sciences Education (as needed)
Fashion Merchandising 102 Fashion Selection and Personal Image (F)
Fashion Merchandising 103 Clothing Construction and Evaluation (Sp)
Fashion Merchandising 200 Introduction to Fashion Merchandising (Sp-odd)
Fashion Merchandising 206 Visual Merchandising and Presentation (Sp-even)
Fashion Merchandising 300 Clothing/Adornment and World Cultures (F)
Fashion Merchandising 303 Textiles ( Sp )
Fashion Merchandising 305 Fashion Industry Processes (Sp-even)
Fashion Merchandising 307 Fashion Promotion (F-odd)
Fashion Merchandising 308 Buying Functions in Merchandising (F-even)
Fashion Merchandising 309 Fashion Merchandising Tour (as needed)
Fashion Merchandising 405 Fashion History (F-odd)
Fashion Merchandising 412 (612) Environmental Textiles (as needed)
Fashion Merchandising 415 (615) Fashion Design (as needed)
Fashion Merchandising 416 Fashion Law and Media (as needed)
Fashion Merchandising 702 The Textiles and Clothing Consumer (as needed)
Fashion Merchandising 703 Textile and Apparel Industry Issues (as needed)
Fashion Merchandising 704 Social, Psychological and Aesthetic Analysis of Apparel (as needed)
Food Science 200 Food Science (F)
Food Science 313 Food Management (Sp)
Food Science 332 Nature of Food (as needed)

Food Science 403 (603) Experimental Study of Food (as needed)
Food Science 701 Advanced Food Science (as needed)
Food Science 704 Developments in Food Science (as needed)
Food Service Management 300 Food and Beverage Management (F)
Food Service Management 301 Sanitation (Sp)
Food Systems Management 203 Orientation to Food Service Systems (as needed)
Food Systems Management 312 Quantity Food Management (F)
Food Systems Management 410 Food Service Systems (Sp)
Food Systems Management 413 (613) Food Systems Design (as needed)
Food Systems Management 415 Standards of Professional Practice (Sp)
Food Systems Management 711 Administration of Food and Nutrition Services (as needed)
Food Systems Management 713 Financial Management of Food Systems (as needed)
Food Systems Management 714 Preprofessional Practice I (F)
Food Systems Management 716 Experimental Quantity Food Study (as needed)
Gerontology 200 Introduction to Gerontology (as needed)
Gerontology 311 Developmentally Appropriate Activities for Older Adults (as needed)
Gerontology 312 Caregiving in Late Life (as needed)
Gerontology 314 Death, Dying, and Bereavement (Sp)
Gerontology 740 Perspectives on Death and Dying (as needed)
Gerontology 744 Theories of Adulthood and Aging (as needed)
Hospitality Management 101 Introduction to the Service Industry (F)
Hospitality Management 300 International Culture, Diet, and Cuisine (as needed)
Hospitality Management 301 Culinary Arts Techniques I (as needed)
Hospitality Management 302 Culinary Arts Techniques II (as needed)
Nutrition 100 Introductory Nutrition (F)
Nutrition 322 Advanced Nutrition (F)
Nutrition 400 Preparation for the Registration Examination for Dietitians (Sp)
Nutrition 414 Sports Nutrition (as needed)
Nutrition 415 Professional Development (Sp)
Nutrition 422 (622) Lifespan Nutrition (F, Sp)
Nutrition 433 (633) Nutrition in Disease (F)
Nutrition 443 (643) Community Nutrition (F)
Nutrition 450 Seminar (F)
Nutrition 455 (655) Nutrition Assessment and Counseling (F)
Nutrition 475 Medical Nutrition Therapy (Sp)
Nutrition 700 Vitamins: Fundamental Aspects in Nutrition (as needed)
Nutrition 705 Maternal and Child Nutrition (as needed)
Nutrition 706 Advanced Nutrition Principles in Renal Disease (as needed)
Nutrition 720 Human Nutrition (as needed)
Nutrition 723 Advanced Nutrition (as needed)
Nutrition 724 Preprofessional Practice II (Sp)
Nutrition 726 World Food Supply and Human Need (as needed)
Nutrition 733 Advanced Clinical Nutrition (as needed)
Nutrition 734 Preprofessional Practice III (F)
Nutrition 754 Preprofessional Practice V (Sp)
Nutrition 755 Nutrition in Mental Retardation and Developmental Disorders (as needed)
Nutrition 764 Preprofessional Practice VI (Sp)

# Department of Military Science and Leadership 

Lieutenant Colonel Rodric M. McClain, Professor of Military Science<br>109 ROTC Building<br>731-881-7153<br>fax 731-881-7161

## Faculty

Lieutenant Colonel Rodric M. McClain, Major Abmad Matthews, Captain Matthew Gocke, Master Sergeant Conrad Begaye, Sergeant First Class William Johnson

## Mission

Recruit, retain, motivate, develop, lead, educate and commission a sufficient number of scholar athlete leaders (SAL) to mark the University of Tennessee at Martin's Army Reserve Officers' Training Corps programs as one of the top officer commissioning sources in the region.

## Expected Outcomes

Graduates who are commissioned Army officers at the University of Tennessee at Martin are expected to possess the values, judgment, leadership skills and physical stamina indicative of leaders of character committed to service to the Army and the Nation. Student Learning Outcomes are as follows

- The Army Profession: Live honorably and build trust.
- Professional Competence: Demonstrate intellectual, military and physical competence.
- Adaptability: Think critically and creatively, make sound and timely decisions.
- Teamwork:
- Develop, lead, inspire.
- Communicate and interact effectively.
- Lifelong Leaning and Comprehensive Fitness: Pursue excellence and continue to grow.
- Comprehensive Fitness: Seek balance, be resilient and demonstrate a strong and winning spirit.


## Minor

## Military Science and Leadership (1310)

The Department of Military Science and Leadership offers a minor in military science and leadership (1310). The requirements for a minor include the successful completion of the Advanced Course (as described under Enrollment and Continuation Requirements) and the military science elective Military Science and Leadership 491.

## Army Reserve Officers' Training Corps (ROTC)

Army ROTC (Reserve Officers' Training Corps) is a program which combines college electives in military science and leadership with summer leadership internships to develop future Army leaders. Upon successful completion of the program of instruction and graduation, the President of the United States may appoint qualified graduates as second lieutenants in either the U.S. Army, the Army National Guard or the U.S. Army Reserve.

## History

The ROTC program (the basic course) began at the University of Tennessee at Martin in September 1952. The Army awarded the University "senior" ROTC status (the advanced course) in 1964. ROTC is a leadership development program and as such prides itself as one of the best leader development programs in the United States. ROTC incorporates the latest adult learning methods and pedagogy to facilitate the leader development of its cadets by examining leadership fundamentals (during class) and the practical application of leadership fundamentals during laboratories and other off-campus exercises. Since ROTC is an officer producing source students are also exposed to the Army as a profession from the viewpoint of a junior officer. Small unit, tactical "team building" exercises serve as a vehicle to afford students an opportunity to practice and hone their leadership skills.

## Program Design

The Army ROTC Program at the University of Tennessee at Martin is based upon a four-year model divided into two parts called the Basic Course (taken during the freshman and sophomore years) and the Advanced Course (taken during the junior and senior years). Students taking electives in the Basic Course are under no military obligation (unless the student is under contract as an ROTC scholarship winner). Students who meet the prerequisites and want to take a Basic Course elective (or complete the entire Basic Course) may choose from among the electives listed below.

The Advanced Course is only open to qualified students who agree to contract with the U.S. Army to accept a commission, if offered, upon completion of their degree requirements. Students contracted into the Advanced Course are also required to attend the four-week long Advanced Camp at Fort Knox, Kentucky, during the summer between their junior and senior years or between their first and second year of graduate school.

The Army ROTC Program is flexible enough that students may pursue and earn commissions as Army officers in four, three, or two years. The Army even has a one year program (highly selective) for undergraduate or graduate students with one full year remaining on campus. In addition, veterans may apply their military experience as credit toward the ROTC Basic Course. If the Professor of Military Science awards a veteran constructive credit for the Basic Course he/she may skip to and enroll in the Advanced Course at the beginning of his/her junior year or first year of graduate school. A scholar athlete leader (who wants to become an Army officer but never took a Basic Course elective) can qualify for the Advanced Course by attending the four-week Basic Camp at Fort Knox, Kentucky, during the summer before the beginning of his/her junior year. There are many ways for qualified students to earn commissions as Army officers (scholarship or non-scholarship participation) while attending UT Martin. For more information call the Department of Military Science and Leadership or stop by and visit the department at Graham Stadium.

## University Credits

The University of Tennessee at Martin grants general elective credit for Military Science and Leadership courses.
Basic Camp. 6 semester hours

Nurse Summer Training Program Course .6 semester hours

## The Simultaneous Membership Program (SMP)

SMP is a program whereby members of the Army National Guard or the U.S. Army Reserve can participate in Army ROTC and continue training with their guard or reserve units at the same time. The SMP program is worthwhile because SMP students qualify for additional financial aid and can earn commissions while building additional leadership skills as officer candidates in the units they are assigned to. The SMP program is only open to Advanced Course students.

## Army ROTC Scholarships/Financial Assistance

See the Scholarship section for a detailed description.

## Enrollment and Continuation Requirements

1. Students desiring to participate in the Basic Course must:
a. have an ACT score of 19 or higher.
b. be a United States citizen or be able to obtain citizenship by graduation.
c. be enrolled as a full-time student ( 12 credit hours minimum).
d. be physically fit (demonstrated athleticism).
e. not have any disabilities that require accommodations.
f. have a high school GPA of at least 2.5 on a 4.0 scale for entering freshmen (MSL 101).
g. maintain a university cumulative GPA of at least 2.0.
h. have no prior civil convictions.
i. not be older than 30 years of age prior to graduation.
j. demonstrate a propensity toward leadership and service to others.
k. complete a physical exam (student health center).
2. Students desiring to participate in the Advanced Course must:
a. have successfully completed basic course curriculum or have been granted credit for same.
b. have a minimum cumulative grade point average of 2.00 . Scholarship students must have a minimum cumulative grade point average of 2.00 and 3.00 in ROTC.
c. sign a written agreement with the federal government to complete the advanced course; to complete Advanced Camp; and to accept a commission as an Army officer, if offered.
d. be able to complete the advanced course program before reaching 30 years of age.
e. be accepted by the Professor of Military Science after completing any general survey or physical exams as may be prescribed.
f. successfully complete Military Science 301, 302, 401, 402 and Advanced Camp, to include passing the Army Physical Fitness Test and meeting prescribed medical and weight standards at the time of commissioning.
g. prior to graduation, complete one course in written communications, one course in human behavior, one course in military history, one course in math reasoning and one course in computer literacy. One course in management and one in national security studies are also highly recommended. A list of specific courses which meet those requirements is available from the Department of Military Science and Leadership.
3. The two-year program is offered to college students who transfer to UT Martin with two years remaining prior to graduation or students who did not finish the basic course during their first two years at UT Martin. Applicants must successfully complete a four-week summer Leader's Training Course. Additionally, the applicant must satisfy the other general requirements noted above for advanced-course enrollment.
4. Students with prior ROTC training, either high school or college, students with prior active military service, or students currently serving in National Guard or Army Reserve units may qualify for advanced standing upon approval of the Professor of Military Science.

## Student Entitlements

The Department of Military Science and Leadership furnishes all Basic Course students necessary texts, equipment, uniforms, meals, transportation, lodging and supplies for all ROTC related activities. In addition, students under scholarship (or otherwise contracted in ROTC) earn a subsistence allowance of $\$ 420$ per month for up to 10 months of each school year.

## Sponsored Activities

The Department of Military Science and Leadership sponsors the following activities:

1. Cadet Professional Development Training (CPDT) - Annually, the Department of Military Science and Leadership coordinates training opportunities for Cadets to attend Airborne, Air Assault, or Mountain Warfare School. Given the difficulty and physical rigor associated with these Army schools, opportunities are limited to Cadets who are physically fit and capable of executing all course tasks. Course graduates obtain a training diploma and are eligible to wear the associated skill badge on their uniform. For more information, please refer to the ROTC webpage.
2. Cadet Troop Leadership Training (CTLT) - CTLT is an internship program that attaches individual Cadets to an active Army unit for a period of up to three weeks. In addition to exposing Cadets to the Army, they also become familiar with the duties and responsibilities of junior officers. Cadets must complete the CLC at Fort Knox, Kentucky as a prerequisite to this internship.
3. ROTC Color Guard - The Color Guard presents the National colors, state flag and university flag at intercollegiate athletic, university and community events.
4. UT Martin Ranger Challenge - The Ranger Challenge Team is a highly trained and motivated group of Cadets under the direction of advanced-course ROTC students and supervised by the Department of Military Science and Leadership. Ranger Challenge is open to men and women. Each university can field one Ranger Challenge team with ten members on the team. Ranger Challenge training begins each fall semester and culminates in a regional competition usually held in early November at Fort Knox, Kentucky. Ranger Challenge is a "military-stakes" pentathlon that includes eight individual and team events spread over an intense 48 hour period. Trophies and individual awards are presented to the best teams/individuals in each event and overall team champions. Membership on the Ranger Challenge team is limited to students enrolled in Military Science and Leadership. Members must also meet the same medical standards as contracted cadets. Ranger Challenge events include small unit tactics, a 10 km foot march under load, an Army Physical Fitness test, stream crossing with a single rope bridge, weapons marksmanship, weapons assembly and disassembly, a hand grenade assault course and cross country orienteering. Range Challenge is designed for those MSL students interested in a challenging outdoor team competition similar to a "survivor game."

## Military Obligation

Basic Course: No military obligation.

Advanced Course: Varies depending upon personal preference. For details contact the Department of Military Science and Leadership.

## Courses Offered by Department of Military Science and Leadership

Military Science and Leadership 101 Foundations of Officership (F)
Military Science and Leadership 102 Basic Leadership (Sp)
Military Science and Leadership 201 Individual Leadership Studies (F)
Military Science and Leadership 202 Leadership and Teamwork (Sp)
Military Science and Leadership 291 Basic Camp (F, Sp)
Military Science and Leadership 301 Leadership and Problem Solving (F)
Military Science and Leadership 302 Leadership and Ethics (Sp)
Military Science and Leadership 310 American Military History (Sp)
Military Science and Leadership 401 Leadership and Management (F)
Military Science and Leadership 402 Officership (Sp)
Military Science and Leadership 421 Contemporary Developments in the U.S. Army (F, Sp)
Military Science and Leadership 442 Nurse Summer Training Program (Su)
Military Science and Leadership 491 Advanced Camp (F, Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

## College of

## Business and Global Affairs



The University of Tennessee at Martin

# College of Business and Global Affairs 

Dr. Ahmad Tootoonchi, Dean

100 Business Administration Building
731-881-7306
fax 731-881-7241

- Mutually beneficial relationships with businesses, communities and government


## Organization

The College of Business and Global Affairs houses two academic departments, two centers and two chairs of excellence. The two departments are: Accounting, Finance, Economics, and Political Science; and Management, Marketing, and Information Systems. Centers include the Dortch Oldham Center for Entrepreneurship, and the Regional Entrepreneurship and Economic Development (REED) Center. Chairs of Excellence are the Horace and Sara Dunagan Chair of Excellence in Banking and the Tom E. Hendrix Chair of Excellence in Free Enterprise. The College also houses the Center for International Education, which includes Travel Study and Study Abroad Programs.

## Expected Outcomes

I. Provide quality educational opportunities which:

1. equip graduates for successful careers in the public and private sectors;
2. prepare students for appropriate professional certifications;
3. develop critical thinking skills and competencies in the areas of teamwork, communication, leadership and technology;
4. expose students to international and multicultural educational experiences;
5. support a decision-based, interactive and integrative learning environment for both the accumulation of knowledge and the ethical application of judgment;
6. effectively use technology and innovative delivery systems to enhance instruction and serve student needs;
7. prepare students for graduate and professional studies;
8. foster multidisciplinary, business and community alliances that provide diversified developmental experiences for students and faculty;
9. engage the support and participation of stakeholders in the continual improvement of the curricula and the enhancement of the reputation of the College and the University.
II. Promote intellectual contributions by the faculty which:
10. include learning and pedagogical research, contributions to practice, and discipline-based research;
11. emphasize peer-reviewed and application-oriented scholarly works;
12. provide opportunities for dissemination of relevant findings at professional conferences, academic meetings and seminars.
III. Provide service to individuals and organizations in the public and private sectors of the region which:
13. enhance the quality of life and facilitate economic growth;
14. build partnerships among stakeholders through student internships, community service programs and professional organizations;
15. promote professional development and provide continuing education opportunities through the academic departments, chairs of excellence and university and community partners;
16. emphasize initiatives that focus on regional business, leadership, government affairs, and technology.

## Admission, Retention, and Academic Requirements

## Pre-business Classification of Students

Students pursuing a major in the Bachelor of Science in Business Administration (B.S.B.A.) degree program with less than 45 semester hours credit, including students enrolled on campus or in the online B.S.B.A. program, will be classified as Pre-business. Pre-business students may enroll in a maximum of 9 hours in upper division business courses prior to admission as a B.S.B.A. student.
Exception: Students with less than 45 cumulative hours and an ACT composite score of 25 or above will automatically be admitted to the B.S.B.A. degree program in the major of their choice or business undecided.

## Business Major (Accounting, Economics, Finance, Information Systems, Management, Marketing) Classifications and Business Undecided Classification of Students

To be admitted to the College of Business and Global Affairs as B.S.B.A. majors or as business undecided, students must:

1. be academically eligible;
2. have earned a minimum of 45 hours credit; and
3. completed Accounting 201; Economics 201, 202; and English 112 with minimum grades of C in each course.
Exception: Students with less than 45 cumulative hours and an ACT composite score of 25 or above will automatically be admitted to the B.S.B.A. degree program in the major of their choice or business undecided.

Once admitted into the College of Business and Global Affairs as a B.S.B.A. major, students are also permitted to double major and to complete any one minor offered by The University of Tennessee at Martin except for the Minor in Business Administration.

## Other Majors

Students not pursuing a major in the B.S.B.A. program may enroll in upper-division business courses provided the students meet the prerequisites of the course(s).

Students not admitted to the B.S.B.A. program may be permitted to complete one minor from business fields. These currently include accounting, business administration, entrepreneurship, finance, management, management information systems, marketing, business communication information systems, and sport business. However, students not admitted to the B.S.B.A. may earn no more than 29 semester hours of credit in courses from the following disciplines: accounting, business administration, business law, upper-division economics, finance, information systems, management, marketing, and sport management.

Students must achieve sophomore standing before enrolling in Accounting 201 and a grade of C or better in MATH 110 or 140 or 160 or 185 or 210 or 251 . At least a grade of C must be earned in prerequisite
accounting and business law courses before taking the course that requires the prerequisite. For example, a student may not take Accounting 301 until the student has earned a grade of at least a C in Accounting 202. Specific courses can have higher requirements for grades of prerequisite courses; student should consult the catalog course descriptions.

## Majors and Minors

The College of Business and Global Affairs offers the Bachelor of Science in Business Administration and majors in support of the Bachelor of Arts and Bachelor of Science degrees. The major in support of the Bachelor of Science degree is Political Science. The majors in support of the Bachelor of Arts degree are International Studies and Political Science. Students earning the B.S. in Business Administration may major in accounting, economics, finance, information systems, management or marketing. Those majors and their concentrations are outlined on the following pages. The B.S. in Business Administration degree is accredited by the Association to Advance Collegiate Schools of Business, AACSB International (777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602-5730, telephone 813-769-6500).

## Bachelor of Arts

International Studies (4180)
Business and Economic Development (4181-BA)
Strategic Studies (4182-BA)
Political Science
General Political Science (4171-BA)
International Security Studies (4175-BA)
Public Administration (4172-BA)

## Bachelor of Science

Political Science
General Political Science (4171-BS)
International Security Studies (4175-BS)
Public Administration (4172-BS)
Bachelor of Science in Business Administration
Accounting (4110)
Economics
Economics (4140)
General Business (4143)
International Business (4142)
Finance (4160)
Information Systems
Business Communication Information Systems (4631)
Management Information Systems (4632)
Management (4610) Management (4611)
Sport Business (4618)
Marketing (4620)

## Minors

The minor in accounting (M-4110) consists of the following courses: Accounting 201-202, Accounting 301-302 and two of the following: Accounting 321, Accounting 401, Accounting 431, Accounting 441 and Accounting 451. Six additional hours would be necessary to meet the minimum number of credit hours in accounting needed to sit for the CPA exam in Tennessee.

The minor in business administration (M-4010) consists of the following courses: Accounting 300 or Accounting 201, Business Law 201 or Business Law 301, Economics 201 or 202, Finance 301, Management 300 and Marketing 301.

The minor in business communication information systems (M-4631) consists of the following courses: Information Systems 255; Information Systems 330; Information Systems 336; Information Systems 460 or Information Systems 465*; and Information Systems 485**.
*Management 461 may substitute for INFS 465.
**Non-business majors must also take Information Systems 351 as this class serves as a prerequisite to INFS 485.

The minor in economics (M-4140) requires 18 hours consisting of the following courses: Economics 201, Economics 202, Economics 311, Economics 312, and six additional hours of upper division economics electives.

The minor in entrepreneurship (M-4612) is designed to give non-business students exposure to entrepreneurial ideas within business and to integrate this exposure with their studies. The minor requires 15 credit hours consisting of the following courses: Management 305; Management 425; three hours chosen from Management 304 or Agricultural Economics 475; three hours chosen from Marketing 302 or Agricultural Economics 250; and three hours from Management 307 or Marketing 460.

The minor in finance (M-4160) requires 18 hours consisting of the following courses: Accounting 201 or 300, Economics 201 or 202, Finance 301, Finance 311, Finance 341 and one of the following: Finance 302, Finance 313, Finance 332, Finance 351, Finance 370, or Finance 411. The minor will provide non-finance majors with knowledge of financial theory and practice that will complement and enhance their education within their majors.

The minor in international studies (M-4180) requires 18 hours of multi-disciplinary courses. To complete the minor, all students must take INST 200: Introduction to International Studies (3 credits). Students must choose one course for each of the four following areas ( 12 credits) and one additional upperdivision class ( 3 credits) from any of the areas.

Special topics classes or other relevant classes, including up to 3 hours of Travel Study or International Studies Internship, approved by the International Studies adviser, may also be counted
A) Culture and Society ( 3 credits)

ARTH 330 Visual Traditions of Non-Western Cultures
ARTH 340 Art of the Classical World and Western Traditions
CRMG 205 Cultural Etiquette
FASH 300 Clothing/Adornment and World Culture
MUS 261 Music of the World
PHIL/RLST 301 Major Religions of the World
PHIL 430 Science and Human Values
SOC 386 Technology and Society
B) Economics, Resources, and the Environment (3 credits)

AGEC 325 Agriculture and Natural Resource Policy
AGEC 375 Environmental and Agricultural Law
AGEC 445 Natural Resources Economics
ECON 321 International Economics
ECON 322 Economic Development
ECON 333 International Business

GEOG 461 Economic Geography
SOC 333 Society and Environment
C) Political Science (3 credits)

GEOG 462 Political Geography
POSC 230 Introduction to World Politics
POSC 321 International Relations
POSC 322 American Foreign Policy
POSC 341 Survey of Comparative Politics
POSC 423 International Organizations and Law
POSC 482 Introduction to International Security Studies
POSC 491 Dimensions of Globalism
D) History ( 3 credits)

HIST 304 Women in World History
HIST 324 The Modern Middle East
HIST 343 Europe, 1945 - Present
HIST 441 History of Latin America
HIST 459 The Twenty-First Century World
HIST U.S. Foreign Relations to 1920
HIST 464 U.S. Foreign Relations since 1920
HIST 484 History of Africa 1400 to Present
The minor in leadership (M-4615) consists of 15 hours of the following selection of courses: 1) three hours chosen from Management 300 (not available to business majors), Management 303, or Political Science 333 or $361 ; 2)$ three hours chosen from Management 405, Leadership 321, Military Science 201, Communication 311 or Psychology 310; 3) three hours chosen from Leadership 322, Military Science 302, Agricultural Economics 325, History 310 or Military Science 310; 4) three hours chosen from Management 490, Leadership 323, Military Science 401, Agricultural Economics 475, Psychology 340 or Communications 356; and 5) three hours from Leadership 410, Agriculture 450, or Natural Sciences 450.

The minor in legal studies (M-4176) is designed to give university students an understanding of (1) the structure and processes of the American legal system and (2) how these processes affect society as a whole. As part of an overall degree program, the minor provides strong preparation for law school or a career as a legal assistant. The minor consists of 18 hours. Students should take two of the following courses outside their major: Political Science 210, 220; Business Law 201; Criminal Justice 200, 220; and 12 hours from the following upper-division classes, with no more than six (6) hours coming from a single discipline* (students are responsible for satisfying any necessary prerequisites): Agricultural Economics 375; Business Law 301, 302, 311, 401; Communications 491; Criminal Justice 320**, 370**, 400**, 420**; Philosophy 410/Political Science 401; Political Science 353, 390, 391, 392, 393, 431, 432, 451; Social Work 345.
*Students planning to pursue professional paralegal licensure may take the following courses: Political Science 210, 220, 390, 391, 392, 393, and 451.
**Criminal Justice courses may not be used to complete both the Criminal Justice major and the Legal Studies minor.

The minor in management (M-4611) consists of the following courses: Management 300, Management 350, Management 461; and 9 additional hours of upper-division management electives.

The minor in management information systems ( M -4632) consists of one course chosen from Computer Science 211, Computer Science 220, Computer Science 221, or Computer Science 250; Information Systems 310; and twelve hours at least six of which must be upper-division selected from

Information Systems 205, Information Systems 315, Information Systems 361, Information Systems 371, Information Systems 410, Information Systems 420, Information Systems 491 or Computer Science 335.

The minor in marketing (M-4620) consists of Economics 201 or 202, Marketing 301 and twelve additional credit hours in Marketing. The minor will provide non-business majors knowledge of marketing thought and practices and enhance their education within their respective majors.

The minor in political science (M-4170) consists of either Political Science 210-220 or 220-230, and 12 hours of upper-division Political Science courses, only six hours of which can be from Political Science 400, 410, 420, or 467.

The minor in sport business (M-4618) consists of Marketing 301, 450; Management 304; Sport Management 300, 413; and three additional upper-division Sport Management hours (excluding Sport Management 290). The minor is designed to complement a degree in business management or marketing.

## Curricular Requirements for B.S.B.A. Majors

All students enrolled in the College of Business and Global Affairs are expected to complete the General Education Curricular Requirement, the Degree Common Courses Requirement and the requirements of a major selected with the assistance of a College of Business and Global Affairs faculty adviser. The format for the B.S.B.A. program of study shown in the following table indicates specific course requirements. Courses numbered in the 100 and 200 series are normally taken during the first two years of study. Courses in the 300 and 400 series are upper-division courses.
In addition to the General Education requirements for a bachelor's degree listed in the front of this catalog, the following specific curricular requirements for a B.S.B.A. in one of the majors in the College of Business and Global Affairs must be satisfied.

Moreover, students should be aware of the following requirements.

1. A minimum of $50 \%$ of the business courses required for graduation must be taken at UT Martin.
2. To graduate with a B.S.B.A. degree, students must have at least a 2.00 cumulative grade point average and no more than two (2) grades of D in Business Administration Common Course Requirements.
3. To graduate with a B.S.B.A. degree, students must have a three-hour international course chosen from one of the following: any international travel study course; any French, Spanish, German, Japanese or Portuguese course; Accounting 471; Economics 321 or 333; Finance 332; Geography 151, 152, or 202; Interdisciplinary Studies 250; Management 461; Marketing 410; or Political Science 230, 321, 322, 341,343 , or 423 . See your adviser to determine how the appropriate choice of a course can fulfill the requirements and allow graduation with a minimum of 120 hours.
4. A student wishing to graduate with honors must earn at least 60 semester hours from UT Martin.
5. Unless otherwise specified below, courses may be chosen from university lists for General Education categories.
6. With prior approval from their department chair or dean, students may transfer up to nine (9) hours of upper division business coursework from another university. Management 490 must be taken at UT Martin.
I. General Education Courses (53 hours)Biological and Physical Systems8
Communications ..... 9-10
Fine Arts (Aesthetics) ..... 3
Humanities ..... 9
Mathematics ..... 3-6
Mathematics 210, or Mathematics 140 and 210
Social and Behavioral Sciences ..... 6
Other requirements:
Computer Science 201. ..... 3
(Accounting 305 is required for Accounting majors in lieu of Computer Science 201)(Marketing 205 is required for Marketing majors in lieu of Computer Science 201)(Information Systems 205 is required for Management and Information Systems majors in lieuof Computer Science 201)
(Finance majors may choose from Computer Science 201, Information Systems 205, or Accounting 305.)
(Economics majors may choose from Computer Science 201 or Information Systems 205) Political Science 220 or 230 ..... 3
Electives - sufficient hours so that the total General Education hours equal 53.
II. Business Common Course Requirements (37 hours)6
Business Administration 490 Senior Seminar ..... 1
Business Law 301 Business Law I ..... 3
Economics 201-202 Principles of Macroeconomics, Microeconomics ..... 6
Note: One or more economics courses may be used in Social \& Behavioral Sciences depending on the student's major.
Finance 301 Managerial Finance ..... 3
Information Systems 310 Management Information Systems or Accounting 461 Accounting Information Systems ..... 3
Note: Accounting Majors must take Accounting 461 Accounting Information Systems. Note: Marketing Majors may substitute Communications 322 Desktop Publishing or Communications 323 Basic Web Design in place of Information Systems 310 Management Information Systems or Accounting 461 Accounting Information Systems. Information Systems 351 Business Communication ..... 3
Management 300 Management and Behavior or Sport Management 300 Advanced Sport Management and Administration (Sport Business concentration only), Management 310 Operations Management, Management 490 Business Policy ..... 9
Marketing 301 Principles of Marketing ..... 3
III. Major Requirements (30 hours)
(See your respective major requirement)
Minimum hours required for B.S.B.A degree ..... 120

## General Information

## Academic Requirements

Students must achieve sophomore standing before enrolling in Accounting 201. At least a grade of C must be earned in prerequisite accounting and business law courses before advancing to the following accounting or business law course.

## Transfer Credit

If a student transfers credit in courses which are classified as upper-division courses at this university but were taken as lower-division credit or taken at a two-year institution, these courses may be validated by examination. Unsuccessful validation requires the student to take the upper-division course. A minimum of $50 \%$ of the business courses required for a Bachelor of Science in Business Administration must be taken at UT Martin.

## Required Achievement Examinations

Students graduating from the College of Business and Global Affairs are required to participate in comprehensive tests in their majors as specified by the university.

## Student Organizations

Students enrolled in the College of Business and Global Affairs participate in the following student organizations: Alpha Kappa Psi, Beta Gamma Sigma, Financial Management Association, International Club, Korean Student \& Culture Club, Phi Beta Lambda, Phi Chi Theta, Tennessee Intercollegiate State Legislature. Membership in these organizations provides opportunities for leadership and interaction with faculty and fellow students. Some of these organizations are service oriented and provide assistance to the faculty and to other students. Others are honor societies for which a minimum GPA must be maintained.

## Awards

Dean's Scholar. Outstanding student recognized by the dean for leadership, academic success and service.
Faculty Scholars. Outstanding students recognized by individual faculty for leadership, academic success and service.

Horace and Sara Dunagan Rising Leadership Award. Given to student selected as demonstrating the likelihood of becoming an outstanding leader in business and/or the community.

Information Systems Award. Given to a student selected as the outstanding senior in information systems. This student is chosen by the faculty.

Outstanding Departmental Students. Chosen by departmental faculty as outstanding students in the departmental disciplines.
Outstanding College-Wide Students. Chosen by faculty of the College of Business and Global Affairs as college-wide outstanding students.

John Burgess Award. Certificate given by the Tennessee Political Science Association to an outstanding political science major at UT Martin.

Richard D. Chesteen, Sr. Award. A cash award of $\$ 100$ made by the political science faculty to the graduating senior political science major with the highest overall grade point average.
Sam C. Nailling, Sr., Law Student Award. Copy of Black's Law Dictionary donated to outstanding senior who intends to attend law school and meets other criteria.

## Cooperative Education, Internships and Travel-Study Opportunities

Academic credit is available for supervised work experience on a one-term basis as an intern. Previous students have interned with a variety of private industry and public agencies. Students interested in an internship should discuss the possibility with their advisers.
The college faculty offers, through several credit courses, opportunities for students to apply their knowledge to practical work, travel or research experiences in their field of study. These courses have special prerequisites which must be met and can only be taken with faculty approval.

A variety of travel-study and study-abroad opportunities are available for students through The Center for International Education. Students are encouraged to participate in these programs which broaden their understanding of the global nature of business. Academic credit and limited financial aid is available.

# Department of Accounting, Finance, Economics, and Political Science 

Dr. Chris M. Baxter, Chair<br>111 Business Administration Building<br>731-881-7226<br>fax 731-881-7541

## Faculty

Darlene A. Adkins, Patrick Baker, Cbristopher M. Baxter, Shirley Borden, Yu-Ho Chi, William L. Davis, Mark Farley, Mary F. Geddie, Richard B. Griffin, Nell S. Gullett, Mabmoud M. Haddad, Carrie Humphreys, Malcolm G. Koch, Hio Loi, Paula H. Moore, Patricia Norton, Anderson M. Starling, Glenna L. Sumner, Brian Towell

## Mission

The academic programs of the department prepare students for employment or graduate study in accounting, finance, economics, political science, or international studies. With its primary focus on teaching, the department provides outstanding instruction at the undergraduate and graduate levels. Educational programs promote the development of technical skills and an understanding of the social, political and economic forces shaping the global environment. Faculty members perform research and service consistent with the teaching emphasis of the department and the mission of the College of Business and Global Affairs.

## Expected Outcomes

Students graduating with majors in Business Administration will:

1. demonstrate an understanding of the global aspects of business.
2. demonstrate an understanding of the ethical aspects of business.
3. demonstrate effective critical and analytical thinking skills.
4. demonstrate effective verbal and written communication skills.
5. demonstrate an understanding of the business core.
6. demonstrate competence in their major.

Students graduating with a major in International Studies will:

1. demonstrate the ability to examine an issue from multiple perspectives, to draw connections and patterns among issues and to predict changes as innovation occurs.
2. be able to explain the interaction among international actors, public and private, and demonstrate problem-solving skills in inter-agency simulations.
3. attain technical, analytical, research, writing and presentation skills that reflect a broad theoretical and practical background to be competitive in career and internship markets.
4. gain a growing appreciation and sensitivity to different cultures through active engagement in travel study, service and study abroad programs.
Students graduating with a major in Political Science will:
5. develop an understanding of political structures and processes, including those relating to elections, policy making, and policy implementation.
6. develop an understanding of global political dynamics, encompassing an appreciation for the interconnectedness of international political, economic, and social activity.
7. develop problem solving and analytical skills through an understanding of contemporary methods of political science research and analysis.
8. develop verbal, written, and interpersonal communication skills.

## B.S.B.A. Accounting Major

The accounting major (4110) is designed to prepare students for positions in public, private, or governmental accounting and is an excellent pre-law major. The major also provides an educational background for the CIA, CMA and CPA examinations. Students should be aware that 150 semester hours are required to sit for the CPA examination in Tennessee. In order for the credit to count toward graduation with a major in accounting, students must earn at least a $C$ in each accounting course.
Course Requirements for Major
Hours
Accounting 301-302 Intermediate Accounting I, II ..... 6
Accounting 321 Cost/Management Accounting ..... 3
Accounting 401 Auditing and Assurance Services .....  3
Accounting 431 Individual Taxation ..... 3
Accounting 441 Advanced Financial Accounting ..... 3
Accounting 451 Governmental and Nonprofit Accounting ..... 3
Accounting Elective* ..... 3
Business Electives** ..... 3
Upper-division Business Electives** ..... 3
Total Hours ..... 30****
*Accounting Internship will not count towards the accounting elective requirement.**Information Systems 211, 221 and 231 may not be used as Business Electives.***Accounting majors are required to take Accounting 461 and Business Law 301 as part of thecommon business core.
B.S.B.A. Economics Major

The economics major (4140) prepares students for careers in industry or government, for graduate work and for admission to schools of law. A concentration within the major will be selected from economics, general business, or international business to facilitate the career objectives of individual students. The general business concentration provides students with the flexibility to choose from electives in accounting, finance, marketing, management or information systems that best fit their chosen career paths. International business students will learn about the global aspects of economics, finance and marketing in preparation for careers in the global, as well as the domestic, operations of private companies and government agencies.

## Economics Concentration (4140)

Courses Hours
Economics 311 Intermediate Microeconomic Theory ..... 3
Economics 312 Macroeconomic Theory ..... 3
Economics 321 International Economics ..... 3
Economics 411 Managerial Economics ..... 3
Upper-division Economics and/or Finance Electives ..... 6
Business Electives ..... 12
Total Hours ..... 30
General Business Concentration (4143)
Courses Hours
Economics 311 Intermediate Microeconomic Theory ..... 3
Economics 312 Macroeconomic Theory ..... 3
Economics 321 International Economics ..... 3
Economics 411 Managerial Economics ..... 3
Business Electives ..... 9
Upper-division Business Electives ..... 9
Total Hours ..... 30
International Business Concentration (4142)
Courses Hours
Economics 311 Intermediate Microeconomic Theory ..... 3
Economics 312 Macroeconomic Theory ..... 3
Economics 321 International Economics ..... 3
Economics 322 Economic Development. ..... 3
Economics 411 Managerial Economics ..... 3
Finance 332 International Finance ..... 3
Marketing 410 International Marketing ..... 3
Economics or Finance Elective ..... 3
Foreign Language 115 or two of the following courses AGEC 335, AGRI 295, INST 200, GEOG 461, POSC 423, POSC 491 ..... 6
Total Hours ..... 30
*If Foreign Language 115 is taken, then student may take 2 hours of Business Electives

## B.S.B.A. Finance Major

The finance major (4160) is designed to prepare students for careers in financial management, investments, banking, and financial services. Graduates are employed by domestic and multinational companies, commercial banks, securities firms, insurance companies, government organizations, consulting firms, and small businesses. Learning takes place in an interactive classroom environment and through practical experiences including internships, professional conferences and presentations, and management of an actual stock portfolio. The program provides students with an opportunity to specialize by combining finance
courses with those in other business disciplines including accounting and economics. For credit to count toward graduation with a major in finance, students must earn at least a C in each upper division finance, accounting, and economics course.
Course Requirements for Major Hours
Economics 311 Intermediate Microeconomic Theory or 312 Intermediate Macroeconomic Theory ..... 3
Finance 302 Intermediate Managerial Finance ..... 3
Finance 311 Investment Analysis ..... 3
Finance 332 International Finance ..... 3
Finance 341 Financial Markets and Institutions ..... 3
Accounting 301 Intermediate Accounting I or 321 Cost/Management Accounting or 431 Individual Taxation ..... 3
Upper-division Finance, Accounting and/or Economics Electives ..... 9
Suggested Specializations: Commercial Banking (Finance 313, 351)or Investments (Finance 313, 411)
Business Elective ..... 3
Total Hours ..... 30

## B.A. or B.S. Political Science Major

The general education requirements for the B.A. and B.S. degrees are outlined in an earlier section of the catalog. From these general education requirements, Political Science students must take Mathematics 210. The Political Science major (4170) is offered in support of those general requirements. Political Science students are required to take the Educational Testing Service Political Science Major Field Examination to complete the major.
Course Requirements for Major Hours
PrerequisitesPolitical Science 220 American Political Institutions and Policy,and either Political Science 210 American Government and Politicsor Political Science 230 Introduction to World Politics*6
Political Science 303 Scope and Methods of Political Science. ..... 3
Political Science 341 Comparative Politics ..... 3
Political Science 321 International Relations ..... 3Concentration Requirements (see below)
*Majors who intend to take a majority of their upper-division electives in American politics and/or publicadministration are encouraged to take Political Science 210-220; those who intend to take a majority of theirupper-division electives in international relations, international security, and/or comparative politics areencouraged to take Political Science 220-230.
General Political Science Concentration (4171).
Concentration Requirements
Hours
Upper-division (300-400) Political Science courses ..... 18
Note: Paralegal courses Political Science 391, 392 and 393 cannot be used for themajor hours requirement.
A minor is required for B.S. as well as B.A. degree.

## International Security Studies Concentration (4175).

## Concentration Requirements <br> Hours

Political Science 423, 481, 482, 491
One course from Political Science 343, 462, or 481 (different topic from above)
Six (6) additional hours of elective upper-division Political Science courses recommended electives include Political Science 322 American Foreign Policy, Political Science 410 Political Science Internship, Political Science 467 Travel-Study)
Total hours .21
A minor is required for both the B.A. and B.S. degree.

## Legal Studies 3+3 Concentration (4177)

Concentration Requirements Hours
Political Science 303, 321, 341
Three (3) additional hours of upper-division Political Science
Total hours....................................................................................... 12
A minor in legal studies (M-4176) is required.
A student accepted into UT Law School prior to completing the requirements for a BA in Political Science may receive the BA in Political Science from UT Martin if the following requirements are met:

- The first year of study at UT Law School is satisfactorily completed.
- A minimum of 90 hours of college course work is completed, exclusive of those taken at the Law School.
- A minimum of 60 hours of course work is completed at an accredited four-year institution, exclusive of those taken at the Law School. At least $25 \%$ of the semester hours must be completed at UT Martin.
- All general education requirements for the B.A. degree are met.
- Completion of the minor is met.



## International Studies Major (4180)

International Studies is an interdisciplinary major designed to prepare students for today's more globalized world. Whether you plan to work in Tennessee, Washington DC or abroad, understanding our complex world is a crucial skill. By becoming proficient in another language and being exposed to a variety of active
engagement via international travel, international academic settings, experiential learning opportunities, and/ or internships, students gain confidence and an appreciation of other cultures. Students, through the three concentrations, prepare for eventual careers with US government agencies, international organizations, nonprofits/humanitarian organizations, international businesses, the hospitality/tourism industry, and teaching English as a foreign language. In sum the International Studies program trains students to think critically, communicate effectively and work together to meet global challenges.
B.A. Curriculum. The major consists of a minimum of 42 hours, plus an additional 12 hours for the required foreign language minor. The general education requirements for the B.A. degree must be met. Students must complete the following four requirements for the major: 1) Core classes; 2) Concentration classes; 3) Travel study, study abroad, internship, and/or experiential learning projects; and 4) a foreign language minor.

## 1) Core Courses (18 credits)

All students must take:
International Studies 200 Introduction to International Studies (3 credits)
International Studies 485 International Studies Senior Capstone (3 credits)
Students must choose one course from each of the four following areas (12 credits):
A) Culture and Society (3 credits)

ARTH 330 Visual Traditions of Non-Western Cultures
ARTH 340 Art of the Classical World and Western Traditions
CRMG 205 Cultural Etiquette
FASH 300 Clothing/Adornment and World Culture
GEOG 202 Introduction to Cultural Geography
MUS 261 Music of the World
PHIL/RLST 301 Major Religions of the World
PHIL 430 Science and Human Values
SOC 101 Introduction to Anthropology
SOC 386 Technology and Society
B) Economics, Resources, and the Environment (3 credits)

AGEC 325 Agriculture and Natural Resource Policy
AGEC 375 Environmental and Agricultural Law
AGEC 445 Natural Resources Economics
ECON 321 International Economics
ECON 322 Economic Development
ECON 333 International Business
GEOG 461 Economic Geography
SOC 333 Society and Environment
C) Political Science (3 credits)

GEOG 462 Political Geography
POSC 230 Introduction to World Politics
POSC 321 International Relations
POSC 341 Survey of Comparative Politics
POSC 423 International Organizations and Law
POSC 482 Introduction to International Security Studies
POSC 491 Dimensions of Globalism
D) History (3 credits)

HIST 304 Women in World History
HIST 324 The Modern Middle East
HIST 343 Europe, 1945 - Present
HIST 441 History of Latin America
HIST 459 The Twenty-First Century World
HIST 484 History of Africa 1400 to Present
2) Concentration (18-21 credits) - Choose one of the three following concentrations:

## A) International Business and Development

This concentration prepares students for eventual careers with business industries, international organizations, non-profits/humanitarian organizations, the Peace Corps, USAID and other aid agencies, and the hospitality/tourism industry. Special topics classes (across the disciplines listed for the minor) or other relevant classes approved by the International Studies adviser may also be counted.

Note: Some courses must be taken as pairs or sequences and are designated as such.
i) International Business Foundations ( 9 credits):

Accounting
ACCT 201 Accounting Information for Decision Making
Communications
COMM 334 International Public Relations
COMM 356 Communication in Professional Environments
Economics
ECON 321 International Economics
ECON 322 Economic Development
ECON 333 International Business
Hospitality Management
HPMG 101 Introduction to the Service Industry
Finance
FIN 332 International Finance and FIN 301 Managerial Finance (must take both)

## Management

MGT 461 International Management and MGT 300 Management and Behavior (must take both)

## Marketing

MKTG 375 Travel and Tourism Marketing and MKTG 301 Principles of Marketing (must take both)
MKTG 410 International Marketing and MKTG 301 Principles of Marketing (must take both) Sports Business
SPMG 461 International Sports Business and SPMG 290 Introduction to Sports Business and SPMG 300 Advanced Sports Business and Administration (must take all three)
ii) Development Issues (9 credits)

AGEC 325 Agriculture and Natural Resource Policy
AGEC 335 International Agricultural Trade and AGEC 110 Intro to Agricultural Business (must take both)
AGEC 375 Environmental and Agricultural Law
AGEC 390 Rural Economic Development and AGEC 110 Intro to Agricultural Business (must take both)

AGEC 445 Natural Resources Economics
AGET 250 Renewable Energy Technology
AGRI 250 Issues in Alternative Agriculture
AGRI 295 International Food and Fiber Systems
CFS 100 Lifespan Human Development
ENGR 100 Society and Technology
GEOG 305 Principles of Meteorology
GEOG 472 Climatology
HHP 111 Principles and Concepts in Personal Health
HHP 330 Introduction to Epidemiology
IDST 450 Energy Studies
INTD 303 Human Needs in Housing
NRM 101 Wildlife, Conservation and Environmental Issues
NRM 250 Global Perspectives in Natural Resource Based Recreation
NUTR 443 Community Nutrition and NUTR 100 Introductory Nutrition (must take both)
PLSC 342 Fruit and Vegetable Production
SOC 333 Society and Environment
SOC 386 Technology and Society
SOC 431 Urban and Community Sociology and SOC 201 or 202 (must take both)
WBIO 250 Principles of Wildlife Management

## B) International Diplomacy and Strategy

This concentration prepares students for eventual careers with the State Department and embassies, other government agencies like the CIA, the military, private contractor, international organizations, and research institutes.

Students must take 18 credits, but no more than 6 credits can come from each area below. Special topics classes (across the disciplines listed for the minor) or other relevant classes approved by the International Studies adviser may also be counted.
Note: Some courses must be taken as pairs or sequences and are designated as such.

## Political Science

POSC 321 International Relations
POSC 322 American Foreign Policy
POSC 333 The President and Congress
POSC 341 Survey of Comparative Politics
POSC 361 Introduction to Public Administration
POSC 362 Introduction to Public Policy
POSC 423 International Organizations and Law
POSC 482 Introduction to International Security Studies
POSC 491 Dimensions of Globalism
Geography
GEOG 270 Introduction to Geospatial Technology
GEOG 310 Principles of Geographic Informational Systems
GEOG 364 Introduction to Remote Sensing and GEOG 201 Introduction to Physical Geography (must take both)
GEOG 380 Geography of North America
GEOG 381Geography of Europe
GEOG 410 Geographic Informational Systems: Modeling and Applications

GEOG 461 Economic Geography
GEOG 462 Political Geography
GEOG 471 Cartography

## History

HIST 310 American Military History
HIST 324 The Modern Middle East
HIST 343 Europe, 1945 - Present
HIST 441 History of Latin America
HIST 442 History of Mexico
HIST 445 China since 1600
HIST 446 Japan since 1600
HIST 448 Russia since 1552
HIST 459 The Twenty-First Century World
HIST 463 U.S. Foreign Relations to 1920
HIST 464 U.S. Foreign Relations since 1920
HIST 484 History of Africa 1400 to Present
Communications
COMM 334 International Public Relations
COMM 356 Communication in Professional Environments
COMM 491 Communication Law and Ethics
Research \& Statistics
MATH 210 Elementary Statistics and Probability
POSC 303 Scopes and Methods of Political Science
CJ 303 Research Methods
SOC 318 Social Research Methods
Military Science and Leadership
MSL 421 Contemporary Developments in the US Army
Sociology
SOC 386 Technology and Society
SOC 390 Social Movements
SOC 431 Urban and Community Sociology and SOC 201 or 202 (must take both)

## C) International Diversity and Multiculturalism

This concentration prepares students for eventual careers teaching English as a foreign language (TEFL), the tourism/hospitality industry, translator services, international organizations, the Peace Corps, and non-profits/humanitarian organizations.

Students must take 18 credits, but no more than 6 credits can come from each area below. Special topics classes (across the disciplines listed for the minor) or other relevant classes approved by the International Studies adviser may also be counted.

Note: Some courses must be taken as pairs or sequences and are designated as such.

## Facets of Culture

FASH 300 Clothing/Adornment and World Culture
FASH 405 Fashion History
MUS 261 Music of the World
ARTH 330 Visual Traditions of Non-Western Cultures
ARTH 340 Art of the Classical World and Western Traditions
GEOG 202 Introduction to Cultural Geography
PHIL/RLST 301 Major Religions of the World

PHIL 430 Science and Human Values
CRMG 205 Cultural Etiquette
Cultures \& Peoples Today
FREN 250 France Today: The French People and Their Culture
ENGL 350 Women Writers: Gender, Race, and Class
GERM 250 Germany Today: The German People and Their Culture
JAPN 250 Japan Today: The People and Culture of Japan
IDST/WMST 201 Introduction to Women's Studies
SOC 375 Sociology of Popular Culture and SOC 201 General Sociology (must take both)
SPAN 250 Latin America Today: The Peoples and Culture of Latin America
Cultures \& Peoples Historically
HIST 304 Women in World History
HIST 305 Women in European History
HIST 306 Women in East Asia
HIST 403 Social and Cultural History of the United States
HIST 441 History of Latin America
HIST 442 History of Mexico
HIST 445 China since 1600
HIST 446 Japan since 1600
HIST 448 Russia since 1552
HIST 459 The Twenty-First Century World
HIST 484 History of Africa 1400 to Present
Social Dimensions
CFS 210 Family Dynamics and Community Involvement
EDST 445 Parenting Across Cultures
ENGR 100 Society and Technology
PHIL 430 Science and Human Values
PSYC 312 Social Psychology
PSYC 370 Psychology of Women
PSYC 400 Psychology of Marriage
SWRK 220 Understanding Human Diversity and Oppressed Populations
SWRK 355 or SOC 320 Social Gerontology
SOC 202 Social Problems
SOC 300 Cultural Anthropology and SOC 201 General Sociology (must take both)
SOC 304 Race and Ethnic Relations
SOC 386 Technology and Society
Education, Learning \& Communication
CFS 205 Safe, Healthy Learning Environment
COMM 311 Interpersonal Communication
COMM 356 Communication in Professional Environments
EDST 460 Education in a Pluralistic Society
ENGL 320 Introduction to Linguistics
ENGL 420 History of the English Language
HPMG 101 Introduction to the Service Industry
TCED 211 Introduction to Teaching (only 1 credit)
TCED 301 Foundations of Education (only 2 credits)
3) Foreign Language Minor (12 upper-division hours)

Students must minor in French, Spanish, Japanese or German and resident aliens for whom it is determined that English is a second language may minor in English.
4) Travel-Study, Study Abroad, Internship, and/or Experiential Learning Project Credit (6 hours minimum-12 hours maximum)
Students must participate in at least one (3 hour) travel study or study abroad program in a foreign country, but the remaining 3 hours can also be earned from a U.S. based travel study, a relevant internship, or experiential learning project for credit (Model UN, Model National Congress, Global Action Summit, etc.).

## Notes

1) Travel study trips or study abroad opportunities that last one month or longer in duration could potential earn students 6 credits, but often an extra project will be required. See the International Studies advisor for more information.
2) Eligible International Studies students can apply for both SGA travel funds and CBGA's Sandra Koch Travel Award once an academic year in order to help lower the costs of international travels.

## Courses Offered by Department of Accounting, Finance, Economics, and Political Science

Accounting 201 Accounting Information for Decision Making I (F, Sp, Su)
Accounting 202 Accounting Information for Decision Making II (F, Sp, Su)
Accounting 300 Accounting for Non-Business Students (as needed)
Accounting 301 Intermediate Accounting I (F, Sp, Su)
Accounting 302 Intermediate Accounting II (F, Sp)
Accounting 305 Accounting Computer Applications (F, Sp)
Accounting 313 Analysis of Financial Statements (as needed)
Accounting 321 Cost/Management Accounting (F, Su)
Accounting 401 Auditing and Assurance Services (Sp)
Accounting 402 Financial Statement Auditing (as needed)
Accounting 421 Advanced Cost/Management Accounting (as needed)
Accounting 431 Individual Taxation (F, Sp)
Accounting 432 Advanced Topics and Research in Tax (Sp)
Accounting 441 Advanced Financial Accounting (Sp, Su)
Accounting 451 Governmental and Nonprofit Accounting (F, Su)
Accounting 461 Accounting Information Systems (F, Sp)
Accounting 471 Research in International Accounting Theory (as needed)
Accounting 480 Internship in Accounting (as needed)
Accounting 490 Independent Study in Accounting (as needed)
Accounting 491 Research in Accounting Theory (as needed)
Accounting 701 Advanced Topics in Auditing (as needed)
Accounting 710 Business Analysis Using Financial Statements (as needed)
Accounting 711 Accounting for Managerial Decisions (F)
Accounting 721 Advanced Topics in Cost Accounting (as needed)
Accounting 731 Advanced Topics in Tax (as needed)
Accounting 741 Advanced Topics in Accounting (as needed)
Accounting 751 Accounting for Nonprofit Entities (as needed)

Accounting 790 Accounting Strategic Management and Business Policy (as needed)
Accounting 791 Accounting Theory (as needed)
Accounting 799 Individual Readings and Research in Accounting (as needed)
Business Administration 444 Practicum in Business (as needed)
Business Administration 480 Internship in Business Administration (F, Sp, Su)
Business Administration 495 Executive Seminar (as needed)
Business Administration 701 Research Methods and Communications (Sp)
Business Administration 705 Sales and Marketing Research for the Financial Services Industry (as needed)
Business Administration 710 International Study (as needed)
Business Administration 721 Critical Thinking (F)
Business Administration 722 Leadership, Group Dynamics and Teamwork (Sp)
Business Administration 723 Creativity, Innovation and Design (Su)
Business Administration 790-798 Special Topics in Business [Topic title] (as needed)
Business Administration 799 Independent Study in Business Administration [Topic title] (as needed)
Business Law 201 Legal Environment of Business (F, Sp, Su)
Business Law 301 Business Law I (F, Sp, Su)
Business Law 302 Business Law II (Sp)
Business Law 311 Employment and Labor Law (as needed)
Business Law 401 Real Estate Law I (F)
Business Law 471-479 Topics in Business Law [topic title] (as needed)
Business Law 701 Advanced Business Law (as needed)
Business Law 711 Legal and Ethical Environment of Business (Su)
Economics 100 American Enterprise System(F)
Economics 201 Principles of Macroeconomics (F, Sp, Su)
Economics 202 Principles of Microeconomics (F, Sp, Su)
Economics 311 Intermediate Microeconomic Theory (F, Su)
Economics 312 Macroeconomic Theory (Sp, Su)
Economics 321 International Economics (F)
Economics 322 Economic Development (Sp)
Economics 331 Money and Banking (Sp)
Economics 333 International Business (Sp-odd)
Economics 335 Public Finance (Sp-even)
Economics 351 Business Forecasting (Sp-odd)
Economics 411 Managerial Economics (F)
Economics 416 Development of Economic Thought (F-odd)
Economics 417 Market Structures (F-even)
Economics 471-479 Topics in Economics [topic title] (as needed)
Economics 480 Internships in Economics (as needed)
Economics 491-492 Independent Study in Economics (F, Sp)
Economics 710 Managerial Economics (F)
Economics 711 Economics for Secondary Teachers (as needed)
Economics 712 Economics for Elementary Teachers (as needed)
Economics 713 Selected Topics in Economics [topic title] (as needed)
Economics 720 International Business and Economics (as needed)
Finance 160 Financial Planning (F, Sp)
Finance 301 Managerial Finance (F, Sp, Su)
Finance 302 Intermediate Managerial Finance (F, Su)
Finance 311 Investment Analysis (F, Su)

Finance 313 Analysis of Financial Statements (F)
Finance 332 International Finance (Sp)
Finance 341 Financial Markets and Institutions (F)
Finance 351 Commercial Banking (Sp)
Finance 370 Principles of Real Estate (F)
Finance 411 Portfolio Management (F, Sp)
Finance 471-479 Topics in Finance [topic title] (F, Sp)
Finance 480 Internships in Finance (as needed)
Finance 491-492 Independent Study in Finance (F, Sp)
Finance 493 Financial Policy Analysis (F)
Finance 710 Corporate Financial Management (Sp)
Finance 711 Investment and Portfolio Management (F)
Finance 721 Banking and Financial Services (as needed)
Finance 732 International Corporate Finance (as needed)
International Studies 200 Introduction to International Studies (F)
International Studies 410 International Studies Internship (as needed)
International Studies 485 International Studies Senior Capstone (F)
Political Science 210 American Government and Politics (F, Sp, Su)
Political Science 220 American Political Institutions and Policy (F, Sp, Su)
Political Science 230 Introduction to World Politics (F, Sp)
Political Science 303 Scope and Methods of Political Science (Sp-even)
Political Science 312 Politics and Government of Tennessee (Sp)
Political Science 314 Intergovernmental Relations (Sp-odd)
Political Science 321 International Relations (F)
Political Science 322 American Foreign Policy (Sp)
Political Science 333 The President and Congress (as needed)
Political Science 341 Survey of Comparative Politics (Sp-odd)
Political Science 343 Politics, Economy and Society in Contemporary China (as needed)
Political Science 353 Administrative Law (F)
Political Science 361 Introduction to Public Administration (Sp)
Political Science 362 Introduction to Public Policy (F)
Political Science 363 Public Budgeting and Personnel Management (Sp even)
Political Science 381 American Political Behavior (F-odd)
Political Science 382 Political Parties and Interest Groups (Sp-even)
Political Science 390 Paralegal Studies: Jurisprudence (Sp)
Political Science 391 Paralegal Studies: Legal Terminology and Writing (Sp)
Political Science 392 Paralegal Studies: Legal Research (F)
Political Science 393 Paralegal Studies: Internship in Paralegalism (as needed)
Political Science 400 (600) Independent Study (F, Sp, Su)
Political Science 401 Political Philosophy (as needed)
Political Science 410 Political Science Internship (as needed)
Political Science 420 Public Administration Internship (as needed)
Political Science 425 Political Simulations and Experiential Learning (as needed)
Political Science 423 International Organizations and Law (as needed)
Political Science 430 Constitutional Law - Governmental Structure (as needed)
Political Science 431 American Constitutional Law (F-odd)
Political Science 432 American Constitutional Law (Sp-even)
Political Science 451 (651) The Judicial Process (as needed)

Political Science 467 (667) Travel-Study [Selected Topics] (as needed)
Political Science 480 (680) Topics in U.S. Political Science: [Topic Title] (as needed)
Political Science 481 Topics in International Security Studies [Topic Title] (as needed)
Political Science 482 Introduction to International Security Studies (as needed)
Political Science 490 (690) Topics in Comparative Politics and International Relations: [Topic Title] (as needed)
Political Science 491 Dimensions of Globalism (Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Management, Marketing, and Information Systems 

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## Faculty

Christian Bushardt, Tommy A. Cates, Hui-Chuan (Christie) Chen, Dexter J. Davis, Lajuan V. Davis, Derek Ezell, Samuel C. Faught, C. Bryan Foltz, Kevin L. Hammond, Cooper Johnson, Taeuk (Will) Kang, Ashley J. Kilburn, Brandon R. Kilburn, Jamye Long, P. Michael McCullough, Hyung-Jin (Michael) Park, Clint Taylor, Sean C. Walker, Denise P. Williams

## Mission

The mission for Management and Marketing disciplines supports the missions of The University of Tennessee at Martin and of the College of Business and Global Affairs. With a primary focus on teaching, our mission is to provide outstanding teaching at the undergraduate and graduate levels. The educational programs of the department are to be delivered in an academic environment that promotes the development of professional skills and an understanding of global, social, political, technological and economic forces affecting society. The faculty are to perform research and service consistent with the teaching emphasis of the disciplines and the mission of the College of Business and Global Affairs.

The Information Systems mission is to prepare students for employment or graduate study in information systems. With a primary focus on teaching, the department emphasizes quality undergraduate and graduate instruction. The educational programs are delivered in an environment that promotes the development of technical skills and encourages a broad understanding of the forces shaping global, social, political and economic change. The faculty performs scholarly activities and services consistent with the teaching emphasis of the disciplines and the mission of the College of Business and Global Affairs.

## Expected Outcomes

Students graduating with majors in Business Administration will:

1. demonstrate an understanding of the global aspects of business.
2. demonstrate an understanding of the ethical aspects of business.
3. demonstrate effective critical and analytical thinking skills.
4. demonstrate effective verbal and written communication skills.
5. demonstrate an understanding of the business core.
6. demonstrate competence in their major.

## B.S.B.A. Information Systems Major

The Information Systems major (4630) is designed to prepare the student for careers working with today's and tomorrow's computer-based information systems. Students interested in designing and developing information systems should select the Management Information Systems Concentration, while students interested in applying written and oral communication skills that will facilitate the flow of organizational information should select the Business Communication Information Systems Concentration. Both concentrations build upon a foundation of computer literacy which emphasizes hands-on skills. These skills are practiced and polished in a network environment that encourages the collaborative problem-solving approaches being used in modern organizations.

## Business Communication Information Systems Concentration (4631)

The Business Communication Information Systems concentration stresses the integration of people, communication, and cutting-edge technology currently used in business and industry to facilitate the efficient flow of information in the business environment. Emphasis is placed on developing written and oral communication skills, computer application skills, and technology management strategies with a theme of professionalism in the workplace. Typical employment p4ositions for graduates include documentation specialist, software support specialist, records manager, training specialist, business manager, office systems analyst, social media specialist, and executive or administrative support personnel.
Concentration Requirements Hours
Information Systems 255 Digital Writing with Business Grammar ..... 3
Information Systems 315 Introduction to Internet Programming for E-business ..... 3
Information Systems 330 Employability Skills and Business Presentation ..... 3
Information Systems 336 Microsoft Office Suite Applications. ..... 3
Information Systems 361 Network Administration .....  3
Information Systems 460 Issues in Business Communication ..... 3
Information Systems 465 Professional Presence and International Protocol or Management 461 International Management ..... 3
Information Systems 485 Advanced Business Communication ..... 3
Management 303 Organizational Behavior and Theory ..... 3
Management 350 Human Resource Management ..... 3
Total Hours ..... 30

## Management Information Systems Concentration (4632)

The Management Information Systems Concentration is designed to prepare the student for organizational roles involving the design, development and administration of information systems. Typical positions for graduates include systems analyst, programmer, network administrator, computer consultant and computer applications support specialist.
Concentration Requirements
Hours6 hours to be taken from
Computer Science 220 Introduction to Computer Science ..... 3
Computer Science 221 Programming Concepts and Problem Solving I ..... 3
Computer Science 222 Programming Concepts and Problem Solving II ..... 3
Information Systems 315 Introduction to Internet Programming for E-business ..... 3
Information Systems 361 Network Administration ..... 3
Information Systems 371 Object-Oriented System Analysis and Design. ..... 3
Information Systems 410 Database Management Systems ..... 3
Information Systems 420 Information Systems Security ..... 3
Information Systems 491 Current Issues in Management Information Systems ..... 3
Computer Science or Information Systems 415, 480 or Information Systems 490 classes taught by MIS faculty ..... 7
Total Hours ..... 31

## B.S.B.A. Management Major

The management major (4610) curriculum is designed to prepare graduates to assume entry-level management positions and progress in the management profession. Students interested in developing knowledge to prepare themselves with a general knowledge of management should choose the Management concentration. These students may also use the electives to develop a narrow focus of study within management or to study a broader scope of the management discipline. Through the Sport Business concentration (4618) students can pursue positions in recreation, sports administration, information, merchandising, sales or various other venues. The Sport Business concentration is not available for online students. For credit to count toward graduation for a major in management, a student must earn at least a C in each management course. Sport Management courses may not be taken for Management concentration Upper Division Management electives, but may be taken as Upper Division Business electives credit.
Course Requirements for Major Hours
Management 303 Organizational Behavior and Theory. ..... 3
Management 320 Data Analysis for Managerial Decision Making. ..... 3
Management 350 Human Resource Management .....  3
Management 461 International Management ..... 3
Total Hours ..... 12
Management Concentration (4611)
Concentration Requirements Hours
Upper-division Management Electives ..... 12
Upper-division Business Electives ..... 6
Total Hours ..... 18
Sport Business Concentration (4618)
Concentration Requirements Hours
Sport Management 290 Introduction to Sport Management and Administration ..... 3
Sport Management 310 Contemporary Issues in Sport ..... 3
Sport Management 311 Sport Ethics ..... 3
Sport Management 413 Facilities Planning ..... 3
Sport Management 480 Internship in Sport Management** or Sport Management 481 Sport Management Practicum ..... 6
Marketing 372 Sports Marketing I ..... 3
Total Hours ..... 21Note(s): Sport Business students must take Business Law 301 as part of the common business core.**For the Sport Business student, the 10 credit hour internship is in a setting such as sport sales,sport administration, sport organizations, public recreation or professional athletic programs.Application must be made one semester in advance of the internship placement. All internshipsrequire 450 hours of work experience. No other course work may be taken during the internshipwithout faculty supervisor approval, and should not exceed four hours. Student may or may notreceive compensation as a result of this experience.

## B.S.B.A. Marketing Major

The goal of the marketing curriculum (4620) is to provide students the skills and knowledge to create, communicate, deliver, and exchange offerings that are valued by customers and other stakeholders.

Marketing majors may pursue careers in advertising and promotions management, business-to-business sales and sales management, marketing research, retail management, product development and brand management, fundraising, and strategic marketing management. Through a variety of electives, such as event planning, social media marketing, sports marketing, e-commerce, services marketing, and travel and tourism marketing, majors can customize their curriculum to uniquely position themselves for the job market or business ownership, or design their degree toward areas such as banking, healthcare marketing, sports marketing, event planning, and e-marketing.

The focus on communication, interpersonal skills, technology, and research methods also makes the marketing degree excellent preparation for graduate work in law, business, and other disciplines.
Course Requirements for Major HoursMarketing 105 Introduction to Marketing*
Marketing 320 Consumer Behavior ..... 3 1
Marketing 330 Advertising and Promotion Management.
Marketing 360 Research Methods ..... 3
Marketing 465 Marketing Management ..... 3
Marketing 302 Personal Selling ORMarketing 340 Logistics Supply Chain ManagementOR Marketing 450 Business to Business Marketing3
Upper-division Marketing Electives ..... 9
Upper-division Business Electives ..... 5
Total Hours ..... 30
*Students cannot take Marketing 105 for credit after having had Marketing 301. Students who havecompleted Marketing 301 may substitute 1 credit hour of upper-division business elective forMarketing 105.

# Courses Offered by Department of Management, Marketing, and Information Systems 

Business Administration 444 Practicum in Business (as needed)<br>Business Administration 480 Internship in Business Administration (F, Sp, Su)<br>Business Administration 495 Executive Seminar (as needed)<br>Business Administration 701 Research Methods and Communications (Sp)<br>Business Administration 705 Sales and Marketing Research for the Financial Services Industry (as needed)<br>Business Administration 710 International Study (as needed)<br>Business Administration 724 Administrative Affairs, Critical Thinking, Leadership, Teamwork, Innovation and<br>Design (F, Sp, Su)<br>Business Administration 790-798 Special Topics in Business [Topic title] (as needed)<br>Business Administration 799 Independent Study in Business Administration [Topic title] (as needed)<br>Information Systems 205 Introduction to Productivity Applications (F, Sp, Su)<br>Information Systems 235 Advanced Productivity Applications (as needed)<br>Information Systems 255 Digital Writing with Business Grammar (F)<br>Information Systems 290 Topics in Information Systems: [Topic title] (1-3)<br>Information Systems 310 Management Information Systems (F, Sp)<br>Information Systems 315 Introduction to Internet Programming for E-business (F)<br>Information Systems 330 Employability Skills and Business Presentation (F)<br>Information Systems 336 Microsoft Office Suite Applications (Sp)<br>Information Systems 351 Business Communication (F, Sp, Su)<br>Information Systems 361 Network Administration (F)<br>Information Systems 371 Object-Oriented Systems Analysis and Design (as needed)<br>Information Systems 410 Data Base Management Systems (as needed)<br>Information Systems 415 Internet Programming for E-business 2 (as needed)<br>Information Systems 420 Information Systems Security (as needed)<br>Information Systems 460 Issues in Business Communication (F)<br>Information Systems 465 Professional Presence and International Protocol (Sp)<br>Information Systems 480 Internship in Management Information Systems (as needed)<br>Information Systems 485 Advanced Business Communication (Sp)<br>Information Systems 490 Advanced Topics in Information Systems: [Topic title] (as needed)<br>Information Systems 491 Current Issues in Management Information Systems (Sp)<br>Information Systems 761 Information Systems (Sp)<br>Leadership 321 People, Power, and Change (F)<br>Leadership 322 Leadership: Theory, Innovation and Policy (Sp)<br>Leadership 323 Leadership: Global and Local (F, Sp)<br>Leadership 410 Leadership Applications (as needed)<br>Management 300 Management and Behavior (F, Sp, Su)<br>Management 301 Organization and Management (as needed)<br>Management 303 Organizational Behavior and Theory (F, Sp, Su)<br>Management 304 Introduction to Entrepreneurship (F)<br>Management 305 Creativity and Innovation (as needed)<br>Management 307 Small and Family Operated Businesses (as needed)<br>Management 310 Operations Management (F, Sp, Su)<br>Management 312 Introduction to Management Science (F)<br>Management 320 Data Analysis for Managerial Decision Making (F, Su)

Management 330 Process Control and Improvement (Sp)
Management 340 Labor Relations Management (F)
Management 350 Human Resource Management (F, Sp, Su)
Management 405 Leadership (as needed)
Management 412 Service Operations Management (Sp)
Management 425 Intrepreneurship (as needed)
Management 430 Quality Management in Business (as needed)
Management 440 Staffing and Performance Appraisal (as needed)
Management 450 Compensation Management (as needed)
Management 461 International Management (F, Sp, Su)
Management 462 Sustainable Management Practices (as needed)
Management 470 Training and Development (Sp)
Management 471-479 Topics in Management [topic title] (as needed)
Management 480 Internship in Sport Management (as needed)
Management 481-482 Independent Study in Management (as needed)
Management 485 Internship in Management (as needed)
Management 490 Business Policy (F, Sp, Su)
Management 491 Current Issues in Human Resource Management (Sp)
Management 710 Organizational Theory and Design (Sp)
Management 720 Statistical Tools in Quantitative Analysis (as needed)
Management 730 Operations Management (as needed)
Management 740 Management of Innovation and Technology (as needed)
Management 750 Human Resource Management (as needed)
Management 790 Strategic Management and Business Policy (F, Sp, Su)
Marketing 105 Introduction to Marketing (F, Sp)
Marketing 205 Business Tools and Technologies in Marketing (F, Su)
Marketing 301 Principles of Marketing (F, Sp, Su)
Marketing 302 Personal Selling (F-odd, Sp, Su-even)
Marketing 310 Retailing (Sp, Su)
Marketing 320 Consumer Behavior (F, Sp, Su)
Marketing 330 Advertising and Promotion Management (F, Su)
Marketing 340 Logistics Supply Chain Management (Sp, Su)
Marketing 350 Service Marketing (Su-even)
Marketing 360 Marketing Research (F, Sp, Su)
Marketing 370 Marketing International Travel Study (as needed)
Marketing 371 Forensic Marketing (F, Sp)
Marketing 372 Sports Marketing I (F, Sp)
Marketing 374 Marketing and Society (as needed)
Marketing 375 Travel and Tourism Marketing (as needed)
Marketing 376 Executive in Residence Seminar (Sp)
Marketing 377 Events Planning (F)
Marketing 410 International Marketing (F, Sp, Su)
Marketing 430 E-Commerce Marketing (Sp)
Marketing 440 Marketing, Business and Environmental Ethics (F)
Marketing 450 Business to Business Marketing (F)
Marketing 460 Social Media and Digital Marketing (as needed)
Marketing 465 Marketing Management (F, Sp)
Marketing 470 Marketing Channels (as needed)

Marketing 471-476 Current Topics in Marketing (as needed) Marketing 480 Internship in Marketing (as needed)
Marketing 481-482 Independent Study in Marketing (as needed)
Marketing 710 Marketing Strategy (F)
Marketing 720 Services Marketing Management (as needed)
Marketing 730 Channel Strategy and Business Market Management (as needed)
Sport Management 290 Introduction to Sport Management and Administration (F, Sp)
Sport Management 300 Advanced Sport Management and Administration (Sp)
Sport Management 310 Contemporary Issues in Sport (F, Su)
Sport Management 311 Sport Ethics (F)
Sport Management 35-Topics: [Selected Areas] (F, Sp, Su)
Sport Management 400 Legal Aspects of Sport (as needed)
Sport Management 413 Event and Facility Planning (F)
Sport Management 461 International Sport Management (Sp)
Sport Management 480 Internship in Sport Management (F, Sp, Su)
Sport Management 481 Sport Management Practicum (as needed)
Sport Management 485 Workshop in Sport Management: [Title of Workshop] (F, Sp, Su)
Complete course descriptions can be found in the Course Description section of the catalog.

## International Education

Travel-Study/Study Abroad Programs<br>Lorrie Jackson, Coordinator<br>124 Gooch Hall<br>731-881-3582

UT Martin values the internationalization of its students, faculty and programs as a means to providing for the discussion of global issues and student and faculty experiences abroad. The university admits and welcomes international students from all over the world to enrich the diversity of our campus. The Office of Travel Study /Study Abroad provides advising to students interested in such opportunities and maintains close working relationships with a network of overseas partner institutions, including the Nile University in Cairo (Egypt), University of Orléans (France), the Technical University of Braunschweig (Germany), Hirosaki University (Japan), Hiroshima Jogakuin University (Japan), Takasaki City University of Economics (Japan) and Hansung University (South Korea), Myongii University (South Korea), and Dante Alighieri Society of Siena and the University of Siena (Siena). The Travel Study/Travel Abroad Office houses a university travel agent who helps all members of the university community meet their professional travel needs.

Every year, this office additionally distributes various scholarships to students planning to travel and study abroad, including over one hundred awards funded by the Student Government Association's designated fee.

The university faculty offer opportunities for students to apply their knowledge while traveling as part of a university group or during an immersion experience in their field of study. These programs offer college credit at UT Martin (directly or indirectly) for coursework taken. Programs generally range from ten days to a full semester in length and often include an immersion experience in the host country's language.

These courses have special prerequisites which must be met and can only be taken with faculty approval. Contact your academic adviser/department for information regarding the availability of additional travel opportunities.

## The College of Education, Health, and Behavioral Sciences



The University of Tennessee at Martin

# The College of Education, Health, and Behavioral Sciences 

Cynthia H. West, Dean

237 Gooch Hall
731-881-7125
fax 731-881-7975

## Mission

The College of Education, Health, and Behavioral Sciences' primary mission is to prepare our students to be well-informed citizens through engagement in public service, scholarship, and high-impact learning practices positively impacting our global community.

## Organization

The College of Education, Health, and Behavioral Sciences is composed of five departments: 1. Behavioral Sciences, which includes the Criminal Justice, Social Work and Sociology Programs; 2. Educational Studies; 3. Health and Human Performance; 4. Nursing, and 5. Psychology. The College is also home to the Bachelor of Interdisciplinary Studies and the Educator Preparation Program with each servicing the University as a whole, and the College of Education, Health, and Behavioral Sciences Graduate Program, which services all graduate programs within the college.

## Degrees

Undergraduate courses of study are offered by the College of Education, Health, and Behavioral Sciences leading to the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Criminal Justice, Bachelor of Science in Education, Bachelor of Science in Health and Human Performance, Bachelor of Science in Nursing, Bachelor of Science in Social Work and Bachelor of Interdisciplinary Studies.

Graduates of the degrees in Education and the Physical Education and Health and Wellness K-12 degrees in Health and Human Performance are eligible for teacher licensure in Tennessee and in other states which grant reciprocity in licensure to graduates of institutions accredited by CAEP (Council for the Accreditation of Educator Preparation) or which participate in the reciprocity agreement developed by NASDTEC (National Association of State Directors of Teacher Education and Certification).

The College of Education, Health, and Behavioral Sciences also offers programs leading to the Master of Science degree in Education with majors in teaching, counseling and instructional leadership. Detailed information about these programs may be found in the graduate section of this catalog.
All teacher preparation programs are approved by the Tennessee State Board of Education and accredited by the Council for the Accreditation of Educator Preparation (1140 19th Street NW, Suite 400, Washington, DC 20036, telephone 202-223-0077).

The College of Education, Health, and Behavioral Sciences is required to follow the directives of the State Department of Education, which has the authority to make changes in licensure standards. Students should keep in contact with the appropriate departments in order to keep abreast of these changes as they develop.

The Social Work program is accredited by the Council of Social Work Education (1701 Duke Street, Suite 200, Alexandria, VA 22314, telephone 703-683-8080).

The Department of Nursing offers a program leading to a bachelor of science in nursing degree. This degree program has full approval of the Tennessee Board of Nursing and full accreditation from the Accreditation Commission for Education in Nursing (ACEN). Graduates with the B.S.N. degree are eligible to take the National Council Licensure Examination for licensure as a registered professional nurse. For complete information about the B.S.N. degree, refer to the nursing departmental pages.

## Majors and Teaching Licenses

Undergraduate majors and degrees are offered as follows:
Major
Criminal Justice
Health and Human Performance
Integrated Studies
Nursing
Psychology
Secondary Education (various concentrations)
Sociology
Social Work
Special Education
Interdisciplinary Studies

## Degree

B.S.C.J.
B.S.H.H.P.
B.S.Ed.
B.S.N.
B.A. or B.S.
B.S.Ed.
B.A. or B.S.
B.S.S.W.
B.S.Ed.
B.I.S.

Students planning to teach vocational agriculture or vocational or occupational family and consumer sciences should enroll and plan their programs through the College of Agriculture and Applied Sciences. See the Professional Education Option section in the Department of Agriculture, Geosciences, and Natural Resources or the Child, Family and Consumer Sciences and Education Concentration section in the Department of Family and Consumer Sciences. Students planning to teach music, art, or dance should enroll and plan their programs through the College of Humanities and Fine Arts. See the appropriate section in the Department of Visual and Theatre Arts or the Department of Music.

Students may qualify for a Tennessee teacher's license with licensure in one or more areas by completing the appropriate program(s) outlined in this catalog.

## Minors

The minor in Athletic Coaching (5240) consists of the following courses: Athletic Training 200, Exercise Science 305, Health and Physical Education 300, 390, Human Performance 327, Sport Management 290 and three hours selected from Health and Physical Education 460, 465, 470, 475, or Human Performance 435.

The minor in Criminal Justice (5830) consists of the following courses: Criminal Justice 200, 211, and 12 additional hours selected from upper-division criminal justice courses.

The minor in Forensic Science (5835) consists of the following courses: Chemistry 201 and 202; Criminal Justice 310; and nine additional hours selected from Biology 462 (Special Topics: Medical Entomology), Criminal Justice 330, 420, 435; Wildlife Biology 441 or Zoology 325. Students are responsible for satisfying any necessary prerequisites. Students pursuing the BSCJ degree are not allowed to minor in Forensic Science.

The minor in Neuroscience (5890) consists of at least 18 credit hours of the following courses: NEUR 200; NEUR 480; three hours Basic Neuroscience (biological, chemical, physical) courses selected from BIOL 337, BIOL 451, 452 , 453 or 454 , BIOL 464 or 465 , CHEM 350 , PHYS 212, or Z00L 251 or 462 ; three hours Applied Neuroscience (cognitive, behavioral, functional) courses selected from ENGL 320, HIST 466, HPER 350, NURS 342, PSYC 320, PSYC 324 or NEUR 324, PSYC 360, PSYC 410 or NEUR 410, PSYC 460 or NEUR 460, or PSYC 470, SPED 300; and a minimum of eight additional hours from the Basic Neuroscience and Applied

Neuroscience courses above or NEUR electives. The courses in the last section must be selected from at least three different disciplines. A grade of C or better is required for all minor courses. No more than two courses can be counted for the major, concentration, and the minor.

The minor in Psychology (5860) consists of the following courses: Psychology 101 and 15 additional hours of upper-division psychology courses.

The minor in Public Health (5219) consists of the following courses: Health and Human Performance 330, Health 111, 427 and 428; and six additional hours selected from Child and Family Studies 100, Communications 240, Health and Human Performance 325, 351, 353, 360, Microbiology 311, Nutrition 100, Philsophy 350, Sociology 320 or Social Work 355, 365, 425.

The minor in Sociology (5810) consists of the following courses: Sociology 201, 202, and 12 additional hours of upper-division sociology courses.

## Student Load

Full-time students may enroll for a maximum of 20 hours with adviser approval. Approval for enrollment in excess of this amount must be secured from the chair of the appropriate department and then the Dean of the College of Education, Health, and Behavioral Sciences in advance of formal registration. Students employed full-time in teaching or other positions are encouraged not to enroll for more than six semester hours credit per semester. One course may be taken with student teaching with permission from director of field placements and the Dean.

## Correspondence Courses

Most courses offered in the College of Education, Health, and Behavioral Sciences cannot be taken by correspondence for credit in meeting degree requirements at UT Martin. Teaching methodology courses cannot be taken by correspondence. Questions should be directed to the appropriate departmental chair before registering for such correspondence courses. Decisions regarding approval will be made by the Dean of the College of Education, Health, and Behavioral Sciences.

## Liability Insurance Coverage

The student must provide proof of liability insurance coverage to the College of Education, Health, and Behavioral Sciences while enrolled in courses and/or practica which will necessitate interaction between the nursing, social work, or teacher education candidate and clientele in K-12 schools or other assigned settings.

## Office of Educator Preparation Program

Director, Donna Neblett, M.Ed.

205 Gooch Hall
731-881-7203
fax 731-881-7204

## Mission

The mission of the Educator Preparation Program (EPP) at the University of Tennessee at Martin is to prepare educators in initial and advanced programs as facilitators of active learning for P-12 learners in diverse and inclusive communities. This mission encompasses excellence in a variety of learning and field placement settings, fosters an innovative and student-focused learning community through coursework that is rigorous and standards-based, and integrates evidence-based educational practices in teaching and learning.

## Vision

The vision of the Educator Preparation Program at the University of Tennessee at Martin is to prepare highly competent and socially responsible educators who are knowledgeable, ethical, and caring decision-makers for a diverse and changing world. This vision includes fostering community partnerships as well as creating a culture of learning that will advance knowledge, value diversity, and promote social justice.

UT Martin's Educator Preparation Program is approved by the Tennessee State Board and accredited by the Council for the Accreditation of Educator Preparation (CAEP).

## Admission Requirements for the Educator Preparation Program

1. Students must have an ACT score of 22 or higher. If a student's highest composite ACT score is 21 , please see the appeals process below.
2. Students must establish and maintain a cumulative GPA of 2.75 .
3. Students must demonstrate an acceptable level of written and oral communication skills during an interview process and prepare a one-page document for the interview stating Why I Want to be a Teacher.
4. Students must submit to and successfully pass a criminal background check and sign the release form.

- Students with an ACT below 22 must first take the residual or national ACT.
- If the student is unable to score a 22 or higher on the ACT, he or she must take the Praxis Core exam and pass all three parts (reading, math, writing,) to enter the program.


## Appeal Process

## If a student has a GPA of $\mathbf{2 . 7 5}$ or higher and an ACT score of 21:

1. Students should retake the ACT (either residual or national test) to demonstrate an attempt to achieve a score of 22 or higher. Achieving an ACT score of 22 or higher with all other requirements met will allow a student to be admitted to the EPP.
2. If a student's highest ACT composite score remains at 21 after retaking the ACT, the student will qualify for the Appeal process for admission to the EPP. The appeals committee will consider grades from education coursework taken before entrance to the EPP related to the student's program area, attendance, disposition, and any other stipulation applicable to individual students. Once all other admission requirements are met, the student will be fully accepted into the EPP.

## If a student has an ACT score of 22 or higher but does not meet the GPA requirement of 2.75 or

 higher:1. Students should first attempt to retake any courses with poor grades in an attempt to raise their cumulative GPA.
2. Students with a cumulative GPA between 2.72 and 2.74 may submit an appeal application. If the appeal is accepted, the student will be on probation for one semester. If after one semester, a student is unable to reach a 2.75 cumulative GPA, the student will not be allowed to take any classes requiring admission to the EPP until the cumulative GPA of 2.75 is obtained.

## Components of the appeal:

1. Complete an appeal form with a comprehensive letter of recommendation.
2. Submit a letter from a faculty member with whom the student has had as an instructor and is able to speak to both academic and disposition skills.
3. Provide a criminal background check including a criminal background release form.
4. Demonstrate an acceptable level of written and oral communication skills during an interview process. (Prepare a one-page document for the interview stating Why I Want to be a Teacher.)
5. Submit to and successfully pass a criminal background check and sign the release form.
6. Present this information to the Director of the EPP to be distributed to the Appeals Committee for a decision.

## If a student's cumulative GPA falls below a 2.75 after acceptance into the program:

1. Students will be contacted by the Director of the EPP and placed on probation for one semester.
2. If after one semester the student is unable to obtain a 2.75 cumulative GPA, the student will be required to drop any courses requiring admission to the EPP and will not be permitted to take coursework requiring EPP admission until the 2.75 cumulative GPA has been achieved.

The Appeals Committee will consist of one faculty member representing Health and Human Performance, one from Applied Sciences, one from Fine and Performing Arts and two from ED Studies ( 5 total). The committee will select a chair from this group. These members will rotate off every three years if possible. The Director of the EPP will serve as an exofficio member to coordinate the work.

## B. Admission to Student Teaching Residency will be granted if students:

Note: Student Teaching Application Request for Placement must be submitted to the Office of Educator Preparation Program by the final day of the adjustment period for adding a class. This should be filed one semester prior to the intended semester for the student teaching experience.

1. are admitted to Educator Preparation Program (EPP).
2. complete the appropriate application one semester in advance of the Student Teaching Semester.
3. have a cumulative 2.75 GPA on all courses taken.
4. have a 2.75 GPA in teaching specialty area.
5. complete a minimum of $80 \%$ of course work in the endorsement area(s) including all methods courses.
6. pass all Praxis exams required for licensure in declared major.*
7. complete all courses requiring admission to the Educator Preparation Program with a C or higher.

A student earning a D or an F in a course requiring admission to the Educator Preparation Program must retake the course prior to student teaching.
*The State Department of Education establishes passing scores for the CORE, Praxis II Subject Assessments, and Principles of Learning and Teaching exams. The scores are subject to change each year. In order to obtain the current passing scores when tests are taken, check with the Office of Educator Preparation Program located in 205 Gooch Hall.

## Requirements for Recommendation for Licensure

Tennessee state regulations stipulate that the applicant for a teaching license must be recommended by the Educator Preparation institution. To receive this recommendation, the applicant must have fulfilled the following requirements:

1. minimum cumulative grade point average of 2.75 .
2. minimum grade point average of 2.75 in student teaching.
3. minimum grade point average of 2.75 in each teaching field.
4. pass the edTPA assessment.
5. pass the appropriate Praxis Series Specialty Area Exam(s) if a minimum score is required.
6. complete an approved program that conforms to the above 2.75 grade point guidelines.
7. complete an application for a teacher's license. Request for a teacher's license must be made within five years after degree requirements have been met; otherwise, an additional nine semester hours in residence credit must be earned.

## Praxis Series Examinations

The Praxis Series is a prerequisite mandated by the Tennessee State Department of Education for the professional teacher's license.
The Praxis is given on campus in accordance with the schedule established by the Educational Testing Service of Princeton, New Jersey, for nationwide administration of the test. Students must register for exams online at www. ets.org. In addition to the Praxis, candidates must take and pass the edTPA assessment to meet licensure.
During the 2016-2017 academic year, $99 \%$ of the UT Martin students completing the Educator Preparation Training Program passed the Praxis II exam(s) required for licensure.

## edTPA

As of January 1, 2019, initial license applications in the State of Tennessee are required to submit qualifying scores on the appropriate edTPA performance, subject-based, subject-specific assessment.
Prior to January 1, 2019, licensure candidates submitted a qualifying score on either the relevant Principles of Learning and Teaching Assessment (PLT) or the edTPA.
Candidates completing job-embedded clinical practice must submit the qualifying score before renewing or advancing the teaching license.

Out-of-state applicants who do not hold a professional level license in a state other than Tennessee, must submit qualifying scores on an approved pedagogical assessment. The edTPA may meet this requirement.

## Specialty Area/Major Field Test/ Departmental Exit Exam

Students may fulfill the university's major field test requirement by taking the Praxis test for his/her major which has been identified by his/her department. The specialty area test(s) required for teacher licensure majors are in accordance with state-mandated requirements. These codes are identified by the State Department of Education Office of Teacher Licensing. A list of required tests by major, which meet Exit Exam and licensing requirements, is available in the Office of Educator Preparation Program, 205 Gooch Hall. Exit exams for non-licensure majors in Integrated Studies and Special Education are the same as those identified for licensure-seeking majors in those areas.
Multiple test requirements: Please note the state requires multiple specialty area tests for many areas of licensure. Students should give careful attention to the available test dates for all necessary licensure exams. Refer to the Praxis website (www.ets.org) for available test dates, times, and locations. Testing requirements for all majors are posted on the Office of the Educator Preparation Program website at www.utm.edu/ departments/ess/praxis.php. Students must register for exams online at www.ets.org.

# Department of Behavioral Sciences 

Dr. Justin A. Martin - Interim Chair<br>103 Sociology Building<br>731-881-7519<br>fax 731-881-7576

## Faculty

Stephanie L. Allen, Lindsay A. Anderson, Cindy A. Boyles, Alicia E. Donaldson, Brian W. Donavant, Shelby East, Daphne M. Henderson, Tina L. Lee, Justin A. Martin, Donna M. Massey, Amy H. McLean, Danny Pirtle, Aaron T. Rowland, Cynthia H. West

## Mission

The Department of Behavioral Sciences offers high-quality degree programs designed to provide students with a solid understanding of human behavior, social processes, social institutions, and the linkages between individuals and the larger social reality. The faculty is committed to scholarship in teaching, research, service, and provides learning activities for program majors and minors as well as students in the university at large. The department provides opportunities for out-of-class learning experiences through discipline-specific organizational memberships, research, conferences and workshops, travel studies, fieldwork, and internships. Faculty and students engage in public service and research related to the needs of the university, the community, the region, and respective professional fields. Upon graduation, students will be prepared for graduate study or employment in a wide variety of occupational settings.

The department offers the B.S. in Criminal Justice (B.S.C.J.) and B.S. in Social Work (B.S.S.W.) degrees and the undergraduate major in Sociology in support of the B.S. and B.A. degrees. Minors are available in Sociology, Forensic Science, and Criminal Justice.

## Expected Outcomes

Upon graduation with their respective degrees, students in the Department of Behavioral Sciences are expected to:

- demonstrate familiarity with concepts, theoretical perspectives, empirical trends and historical perspectives in their discipline;
- demonstrate effective interpersonal communication skills and professional attitude in educational, professional, and community settings;
- recognize, understand, and respect the complexity of sociocultural and international diversity;
- value qualitative and empirical evidence, tolerate ambiguity, act ethically, and reflect values inherent to their discipline;
- differentiate between theories and perspectives of their respective discipline to apply basic research methods, including research design, analysis, and interpretation;
- adhere to the ethical principles and standards of scientific research and publication;
- develop strategies for self management and self improvement;
- formulate and pursue realistic goals that best utilize knowledge and skills of their respective discipline to develop career and educational plans.


## Criminal Justice Program

The mission of the Criminal Justice Program is to provide students with a significant exposure to the Arts and Sciences; to provide opportunities for in-service and pre-service students to study specialized criminal justice courses; to provide technical services to the community; to analyze the underlying philosophies and practices of the criminal justice system as well as the causation and prevention of crime and delinquency; and to counsel and assist our students in the making of career decisions.

The Criminal Justice curriculum requires a core of broad-based courses which stress the systemic, philosophical nature of criminal justice. This core requirement is consistent with the primary mission of the University by providing a quality undergraduate education that develops students' to develop an ability to synthesize information, to engage in scholarly inquiry and to accomplish rational problem solving. We believe that traditional arts and sciences education is the best preparation for the study of criminal justice as well as the best means of developing intellectual skills students need to function in modern society.

Further, it is assumed that students must understand the philosophies and processes of criminal justice in order for them to possess broad and representative knowledge of criminal justice as an intellectual discipline. Each of the required courses is designed to present underlying and unifying philosophies of criminal justice; and elective criminal justice courses are offered in several areas such as Criminal Investigation and Forensics, Juvenile Justice Process, and Capital Punishment. When taken in conjunction with the core courses, these courses facilitate pursuits of a particular area of criminal justice as a career.

Students who major or minor in Criminal Justice are taught by experienced, professional faculty who have extensive academic credentials as well as grounded experience in criminal justice. The faculty is active in preparing and teaching in-service training programs and designing and/or attending programs for in-service and pre-service persons which enhances professionalism.

Graduates with a Bachelor of Science in Criminal Justice are highly successful in obtaining positions in the profession. Our students have enjoyed success in numerous state, local and federal criminal justice agencies as well as in municipal police departments, corrections departments, juvenile services and private security. An increasing number of students are enrolling in law school or in graduate schools of criminal justice or public administration due to the enhanced career opportunities for those who hold advanced degrees.

## B.S. in Criminal Justice Curriculum

The student must complete the following minimal requirements and earn a grade of C or better in all major field requirements. In addition to the criminal justice major field core courses, students should select one of the criminal justice concentration areas as outlined below. A minor is required.
I. General Education (38 hours)

Biological and Physical Systems (8 hours)
Complete two courses from approved General Education Biological and Physical Systems courses.
Communications (9 hours)
English 105 or 111
English 112
Communications 230
Fine Arts (Aesthetics) (3 hours)

Complete three hours from approved general education listing.
Humanities (9 hours)
History 201
History 202
English 250, 251, 260, 261, 270, or 271
Mathematics (3 hours)
Mathematics 110 or Mathematics 140
Social and Behavioral Sciences (6 hours)
Sociology 201
Sociology 202
II. Other Required Courses (12 hours)

Mathematics 210
Social Work 220
Any two courses from the following:
Political Science 210, 220
Psychology 101
Sociology 101, 300
III. Major Field Core Courses (27 hours)

Criminal Justice 200, 211, 302, 303, 320, 325, 364, 370, 460
IV. Concentration Requirements (18 hours)

Students must earn a grade of C or better in all courses and are responsible for satisfying any necessary prerequisites. Students pursuing the BSCJ degree may not minor in Forensic Science.
A. Law Enforcement Concentration (5831) (24 hours)

Criminal Justice $310,321,322,400,405,420,421$ and 422. Students must earn a grade of B or higher in CJ 321, 322, 421, and 422. No minor is required for students in this concentration.
B. Corrections Concentration (5832) (18 hours)

Criminal Justice 380, 415, and 425
Nine (9) upper-division hours (300-400) of criminal justice courses in addition to those listed under the major field core courses.
C. Courts and Law Concentration (5833) (18 hours)

Criminal Justice 400, 410, 413, and 420
Six (6) upper-division hours ( $300-400$ ) of criminal justice courses in addition to those listed under the major field core courses.
D. Forensics Concentration (5835) (18 hours)

Chemistry 201 and 202
Criminal Justice 435
Three (3) additional hours selected from
Biology 462 Special Topics: Medical Entomology
Criminal Justice 330
Criminal Justice 420
Wildlife Biology 441
Zoology 325
E. Generalist Concentration (5834) (18 hours)

18 upper-division hours ( $300-400$ level) of criminal justice courses in addition to those listed under the major field core courses
V. Minor Field (12 hours minimum, except that no minor is required for students in the Law Enforcement Concentration)
Completion of course requirements (at least 12 hours) and any prerequisites for a minor in any area approved by the student's adviser.
VI. Electives (Sufficient to complete 120 degree hours)
Minimum hours required for a B.S.C.J. degree 120

## Criminal Justice Minor

A criminal justice minor (5830) consists of Criminal Justice 200, 211, and twelve additional hours selected from upper-division criminal justice courses.

## Forensic Science Minor

A forensic science minor (5836) consists of Chemistry 201 and 202; Criminal Justice 310; and nine additional hours selected from Biology 462 (Special Topics: Medical Entomology), Criminal Justice 330, 420, 435; Wildlife Biology 441 or Zoology 325. Students are responsible for satisfying any necessary prerequisites. Students pursuing the BSCJ Degree are not allowed to minor in Forensic Science.

## Police Academy Credit

The University of Tennessee at Martin has established the Law Enforcement Proficiency Program (LEPP), through which graduates of the Tennessee Law Enforcement Training Academy Basic Law Enforcement Course (or equivalent that provides professional certification through the Tennessee Peace Officer Standards and Training [POST] Commission) may earn 12 semester hours of academic credit. LEPP is designed to provide an incentive for criminal justice professionals to seek or continue higher education and, ultimately, obtain a bachelor's degree. This program provides educational opportunities that are occupationally specific within the field of criminal justice and enhances students' understanding of theoretical concepts by providing a context for practical cultural application.
Through LEPP, academy graduates may earn credit in select UT Martin Criminal Justice courses and apply this credit toward fulfillment of UT Martin baccalaureate degree requirements, including the requirements for the Bachelor of Science in Criminal Justice or Bachelor of Interdisciplinary Studies degree. Officers applying for LEPP credit must submit 1) evidence of successful completion of the basic police school, including dates of attendance, 2) a copy of their POST certificate, and 3) a report detailing the officer's academy grades and overall average.

All officers receiving university credit through LEPP must meet UT Martin entrance criteria for Regular, Non-Traditional Adult, or Special Admission as defined in the current undergraduate catalog and be admitted to the university. In addition to the regular UT Martin application fee, a recording fee is required for each course in which LEPP credit is earned: and, the credit must be earned prior to the student's last 30 hours before graduation from the university. In the event that students were not enrolled at UT Martin at the time of participation in any training program approved for inclusion in LEPP, academic credit may be granted retroactively once all entrance criteria have been met. Although students may be admitted to the university and receive credit under LEPP retroactively, they must have attended a basic police school that enables them to meet the current POST standards for state certification at the time of admission to the university.
Through LEPP, credit may be earned in the following courses:
Criminal Justice 211 Principles of Law Enforcement

Criminal Justice 312 Physical Training and Use of Force
Criminal Justice 320 Criminal Procedure
Criminal Justice 470 Tennessee Criminal Law

## Tennessee Correction Academy Credit

The University of Tennessee at Martin established the Tennessee Correction Academy Proficiency Program (TNCAP2), through which graduates of the Tennessee Correction Academy may earn up to six (6) semester hours of academic credit. TNCAP2 is designed to provide an incentive for criminal justice professionals to seek or continue higher education and, ultimately, obtain a bachelor's degree. This program provides educational opportunities that are occupationally specific within the field of criminal justice and enhances students' understanding of theoretical concepts by providing a context for practical cultural application.
Through TNCAP2, Tennessee Correction Academy (TCA) graduates may earn credit in one or both of the following UT Martin Criminal Justice courses [Criminal Justice 311 Correctional Security (3); Criminal Justice 312 Physical Training and Use of Force (3)] and apply this credit toward fulfillment of UT Martin baccalaureate degree requirements, including the requirements for the Bachelor of Science in Criminal Justice or Bachelor of Interdisciplinary Studies degree. Correctional personnel applying for TNCAP2 credit must submit:

1. evidence of successful completion of the TCA, including dates of attendance, and
2. a report detailing the correctional personnel's academy grades and overall average.

All correctional personnel receiving university credit through TNCAP2 must meet UT Martin entrance criteria for Regular, Non-Traditional Adult, or Special Admission as detailed in the current catalog and be admitted to the university. In addition to the regular UT Martin application fee, a recording fee is required for each course in which TNCAP2 credit is earned. This credit must be earned prior to the student's last 30 hours before graduation from the university. In the event that students were not enrolled at UT Martin at the time of participation in any TCA training program, academic credit may be granted retroactively once all entrance criteria have been met and Tennessee Correction Academy/UT Martin course content have been evaluated and approved.

# Tennessee Peace Officers Standards and Training (P.O.S.T.) 

The Tennessee Peace Officers Standards and Training (POST) Commission has approved the following courses offered at The University of Tennessee at Martin as satisfying the POST annual in-service training requirements for law enforcement officers in the State of Tennessee.

Criminal Justice 200 Introduction to Criminal Justice
Criminal Justice 302 Criminal Justice Ethics
Criminal Justice 310 (510) Principles of Criminal Investigation
Criminal Justice 320 (520) Criminal Procedure
Criminal Justice 325 (525) Criminology
Criminal Justice 330 Serial Killers
Criminal Justice 360 Child Abuse
Criminal Justice 370 Juvenile Justice: Social Problems and Legal Issues for Social Work \& Criminal Justice
Criminal Justice 400 (600) Criminal Law
Criminal Justice 410 Victimology
Criminal Justice 420 (620) Criminal Evidence
Criminal Justice 450 (650) Current Issues in Criminal Justice
Criminal Justice 470 Tennessee Criminal Law

## Social Work Program

The UT Martin Social Work Program is accredited by the Council on Social Work Education (CSWE, 1701 Duke Street, Suite 200, Alexandria, VA 22314, telephone 703-683-8080) within the Council on Postsecondary Education and the United States Department of Education. The underlying philosophy of the Social Work Program at UT Martin is a commitment to human welfare - a concern with the interaction between people and their social environment which affects their ability to accomplish life tasks, handle problems and realize their aspirations and ideals.
Most graduate schools of social work now offer an "accelerated" program of study whereby the student who has graduated from a CSWE-accredited bachelor's-level social work program may complete the master's program in 12 or 18 months, rather than in the traditional two-year program for non-social work majors.
At program entry and concurrent with classroom instruction, social work majors begin to come in contact with both providers and consumers of social services. This enables the student to integrate classroom learning and field experience through meaningful interaction with human services professionals and with clients, patients, consumers and others.

## Social Work Program Mission Statement

The University of Tennessee at Martin Social Work Program prepares students to use social work knowledge, skills, and values to demonstrate competent, ethical, evidence based practice to diverse populations across all social systems. Emphasis is placed on promoting social justice and service to all persons, particularly underserved populations, including rural areas such as those found in Northwest Tennessee.

## Social Work Program Goals

Students are prepared to begin generalist professional practice with individuals, families, small groups, organizations and communities.

Students are prepared to develop an identity which will incorporate the values and ethics of the social work profession.
Students are prepared to practice with diverse, oppressed and at-risk populations and to link social research and social service practice.
Students are prepared for lifelong learning and critical thinking through an educational process combining a liberal arts foundation with professional social work education.
Students are prepared for graduate education in social work.
Students are prepared for service and leadership within the community and the social work profession.

## Internships

Social Work internships (Social Work 490) allow students to apply the knowledge and theory gained in the classroom to practical experience. Also known as "field experience" and "field internship," internships are designed to accomplish the objectives of the Social Work Program by preparing the student for generalist practice, by bringing about readiness for graduate study and by enhancing the student's ability to cope with the pressures, stress and realities of day-to-day living and working.
UT Martin's internships are block placements in agency settings. The student is in the agency each working day during the semester and maintains the same hours as employees of the agency. Numerous agencies in West Tennessee, Nashville and Memphis participate. Examples of these internships sites include family service agencies, health-care settings, social welfare agencies and schools. Every attempt is made to arrange internships in agencies that specialize in the student's primary area of interest in social work.

## Liability Insurance Coverage

The student must provide proof of liability insurance coverage to the Department of Behavioral Sciences prior to beginning SWRK 490: Field Instruction which will necessitate interaction between the social work student and clientele in a variety of placement settings.

## B.S. in Social Work Curriculum

The student must complete the following minimal requirements and earn a grade of C or better in all courses required for the major. A minimum portfolio score of 10 is required by all students for graduation in social work. (More information on the Portfolio Criteria for Graduation Evaluation can be found in the Advisement Handbook for Social Work Majors.) All students considering a major in Social Work are instructed to meet with a Social Work faculty member at the earliest opportunity. Academic credit for life experiences and previous work experience shall not be given in whole or in part in lieu of the field practicum or any other Social Work course. No minor is required.
No minor is offered in Social Work.
I. General Education (38 hours)

Biological and Physical Systems
Complete two courses: Zoology 201 or 251, and any other lab science under general education lab science listing

Communication
9-10
Complete 9 hours from approved general education listing Fine Arts (Aesthetics)
Complete three hours from approved general education listingHumanities
Complete nine hours from approved general education listing Mathematics
Complete three hours from approved general education listing Social and Behavioral Sciences ..... 6
Sociology 201 and Psychology 101
II. Other Required Courses (12-15 hours)
Complete any two courses from the following: ..... 6Economics 201, 202 Principles of Macroeconomics/MicroeconomicsPolitical Science 210, 220 American Government and PoliticsConsumer Resource Management 205 Cultural EtiquetteCommunications 311 Interpersonal Communication
Foreign Language (completion of 122 or higher in any language) ..... 3-6
Sociology 202 Social Problems or 308 Marriage and Family. ..... 3
III. Social Work Requirements (55 hours)
Social Work 200 Introduction to Social Work and Social Welfare ..... 3
Social Work 220 Understanding Human Diversity and Oppressed Populations. ..... 3
Social Work 290 Social Work Program Orientation ..... 1
Social Work 300 Social Welfare Policies and Services ..... 3
Social Work 320 Human Behavior and Social Environment I ..... 3
Social Work 330 Human Behavior and Social Environment II ..... 3
Social Work 340 Social Work Practice I. ..... 3
Social Work 350 Social Work Skills and Techniques. ..... 3
Social Work 400 Social Work Practice II ..... 3
Social Work 410 Social Work Research and Evaluation ..... 3
Social Work 440 Social Work Practice III ..... 3
Social Work 460 Social Work Senior Seminar. ..... 3
Social Work 470 Social Work Field Instruction Preparation. ..... 3
Social Work 490 Social Work Field Instruction ..... 12
Social Work Elective - any two Social Work Electives ..... 6
IV. Electives (12-15 hours)
Minimum hours required for B.S.S.W. degree ..... 120

## Admission to Social Work Program

A three-stage progression model is used to monitor entry into and advancement through the Social Work Program. This process enables the faculty and student to make an early assessment of feelings, reactions, impressions and beginning abilities to function as a helping agent within the profession. The student may also make alternate career selections before too great an investment is made if social work does not appear to be a satisfactory choice.

The following identifies progression criteria for social work students:

## Initial Progression

1. Initial progression must be completed prior to enrollment in any social work courses beyond 220 .
2. Successful completion of Social Work 200 and Social Work 220 with a grade of C or better.
3. Favorable review of the student's application for entry into the Social Work Program.
4. Cumulative grade point average of 2.50 .
5. Social Work grade point average of 2.75 .

## Advanced Progression

1. Advanced progression must be completed prior to enrollment in Social Work 400 and/or Social Work 440.
2. Successful completion of Social Work 340 with a grade of C or better.
3. Approval by social work faculty. This process includes a close review of the student's performance in volunteer work.
4. Cumulative grade point average of 2.50 .
5. Social Work grade point average of 2.75 .

## Full Progression

1. Full progression must be completed prior to enrollment in Social Work 490. Successful completion of a minimum of 90 semester hours with a cumulative grade point average of 2.50 or above and a grade point average in required social work courses of 2.75 or above.
2. Successful completion of Social Work 470 with a grade of C or better.
3. Approval by social work faculty. This process includes a close review of the student's performance in volunteer work for Social Work 440.
4. Social Work grade point average of 2.75 .

Transfer students from other UT Martin majors, junior/community colleges and other four-year colleges and universities must meet with a social work faculty member prior to initial progression.

Course sequence is designed to carry the student through various levels of learning. Each level of learning in the social work curriculum requires a related field activity (internship) which enhances the student's ability to relate what is taught in the classroom with actual practice in a work setting.

## Policies and Procedures for Repeating a Social Work Course

1. Students who earn a grade of $D$ or below in a required upper-division social work classroom course are eligible to repeat the course one time only.
2. Students are allowed to repeat only two required upper-division social work courses in which they received a grade of $D$ or below.
3. Social Work 490 Social Work Field Instruction may not be repeated. Students requesting an exception to these policies must write a letter to the Director of the Social Work Program requesting readmission to a social work course. The letter must include documentation to support unusual or extenuating circumstances which contributed to the academic problem and a readiness to meet expected standards of performance. The Director of the program, in conjunction with the Student Affairs Committee, will make a final decision after careful consideration of all information available. The student will then be notified of the decision in writing. These policies are applicable to declared social work majors as well as those approved for progression.

## Department of Children's Services Stipend Program

The Social Work Program at UT Martin works closely with the Department of Children's Services and offers a Stipend Program. The Stipend Program will pay UT Martin tuition for a minimum of three and maximum of four full-time semesters in the Social Work program and the selected students will receive a stipend to aid with living expenses and books. The recipient for the Stipend Program will be selected by the Department of Children's Services and in return will begin employment with the Department of Children's Services upon graduation. The student agrees to work for the Department of Children's Services for at least two years. During the Stipend Program involvement, the student will complete two child welfare courses (Social Work 325 and 415) which will enable the student to become a certified case manager upon graduation. The stipend student must remain in good standing with the University and complete graduation within four semesters. The courses can also be taken by non-stipend social work students and they too can become a certified case manager with DCS. A certified case manager begins employment with DCS as a Case Manager II and receives a higher starting salary. In the event that the student is unable to complete their portion of the agreement the tuition and stipend will be refunded by the student in full. Students participating in the stipend program will experience their field work within DCS.

## School Social Work Licensure

The Social Work Program, in collaboration with the College of Education, Health, and Behavioral Sciences, has been approved by the Tennessee Department of Education to recommend individuals for licensure as school social workers when the following requirements have been met:

1. graduation from a CSWE-accredited social work program
2. completion of Social Work 375 Social Work in the School Setting*
3. completion of Human Learning 325 Educational Psychology or Teacher Education 716 Growth and Development in School Age Students, 9-12
4. completion of Special Education 300 (500) Children with Exceptionalities*
5. completion of Educational Studies 450 (650) The School, the Teacher, and the Law*
6. completion of Social Work 490 Social Work Field Instruction* (in a school setting), OR one year successful postgraduate experience as a school social worker or family and children social worker may substitute
7. recommendation from the UT Martin Social Work Program and
8. recommendation from the UT Martin College of Education, Health, and Behavioral Sciences.
*Students must receive a grade of C or above to successfully complete courses.

## Sociology Program

The mission of the Sociology Program at the University of Tennessee at Martin is to teach students how to apply the sociological perspective to social life. Students learn fundamental sociological concepts, as well as being trained in theoretical critical thinking, methods of social research and global perspectives allowing them to become both civic and global learners. Through in-depth analysis of major social institutions and processes, students are taught to think from a holistic social perspective which allows them to arrive at an understanding of how people and organizations behave in society.
Student Learning Outcomes for the Sociology Program:

1. Diverse and global perspectives - (Civic and global learning). Explains diverse positions, including those representing different cultural interests on a contested public perception, and evaluates the perception in light of evidence drawn from scholarship.
2. Qualitative and quantitative critical thinking - (Intellectual skills). Constructs mathematical analyses for issues initially described in social; locates, evaluates, incorporates and properly cites multiple information resources.
3. Theoretical critical thinking - (Intellectual skills). Differentiates and evaluates theories and approaches to selected social problems within sociology.
4. Creative problem solving - (Broad and integrative knowledge). Proposes an innovative and creative solution to a complex social issue that draws on specific theories, tools, and methods from at least two fields of study.
5. Holistic social perspective - (Specialized knowledge). Integrates knowledge from multiple subfields drawing on current research, scholarship, and techniques in the field of sociology.

The program offers a major and minor in sociology. Students take courses with experienced and professionally active faculty who are interested in the quality of education that is received. Faculty members attend conferences and conduct research not only to advance the discipline, but also to increase their own understanding of the subject matter.
As students develop skills and understanding of the research process they are able to participate in faculty-initiated projects or to design and pursue their own studies. Those who wish to pursue graduate study are actively helped to locate in a graduate department compatible with their interests and needs. Those who choose to
seek employment upon completion of their degrees will enter the labor force with marketable skills in data analysis, oral and written communication, and study design.

## Sociology Major

B.A. or B.S. Curriculum (5810). A major consists of 33 hours: Sociology 201, 202, 318, 319, 402, 497, and 15 additional upper-division hours in sociology courses. A grade of C or above is required in all major courses. In addition to the general education requirements, a minor or second major is required for both the B.S. and B.A. degrees.

## Sociology Minor

Sociology (M-5810). A minor consists of Sociology 201, 202, and 12 additional hours of upper-division sociology courses.

## Facilities

Criminal Justice, Social Work, and Sociology faculty are housed in the Sociology Building. A computer lab for students is located on the second floor of the Sociology Building.

Psychology faculty are housed on the third floor of the Andy Holt Humanities Building. Lab and computer facilities are available to students for use in lab courses and for individual research projects. Sophisticated behavioral and physiological equipment is used to conduct research on both human and animal subjects.

## Student Organizations

The Criminal Justice Society provides students an opportunity to meet with other students and professionals who share common interests. The organization has speakers from various criminal justice professions who inform them about the current events and careers in criminal justice. The Criminal Justice Society is open to students having taken at least one Criminal Justice course and having an interest in the Criminal Justice field.
The Kappa Epsilon chapter of Alpha Phi Sigma was founded during the Spring 2008 semester at The University of Tennessee at Martin. Those who meet the criteria (Criminal Justice major with a 3.2 overall GPA, a 3.2 GPA in Criminal Justice, completed four criminal justice courses and ranks in the top $35 \%$ of the class) are invited for membership.

The Sociology Club is open to all students with an interest in sociology. Club meetings may involve speakers, career information, films, or informal contact with other students and faculty members.

Alpha Kappa Delta, is the international honor society which seeks to acknowledge and promote excellence in scholarship in the study of sociology. Junior and senior sociology majors who have an overall GPA of at least 3.3 and have at least four courses in sociology with a GPA of 3.0 are eligible to apply for membership.

The Student Social Work Association (SSWA) provides students with an opportunity to investigate major social problems from both an academic and service-oriented frame of reference, and to participate in activities which will serve to coordinate those two approaches. Its aim is to make students more knowledgeable about social problems of national and international scope and to provide the students with opportunities to devise and implement meaningful remedies for the problems at the community level. The Association is open to all students who are interested in becoming involved through service to the University community, as well as the larger geographic area of Northwest Tennessee.

Phi Alpha is a national honor society exclusively for social work majors. This Society gives special recognition to social work majors who have performed at an exceptionally high academic level. Sophomore, junior and senior social work students who have successfully completed nine semester hours of required social work courses and whose cumulative GPA is 3.0 or above and have a 3.25 GPA in required social work courses are eligible for membership.

National Association of Social Workers (NASW) is a professional social work organization with over 140,000 members and chapters throughout the United States. Its primary purpose is helping social workers advance their practice in the field of human service. The membership fee includes a subscription to the journal Social Work, the monthly newspaper NASW News, and the Tennessee NASW Chapter Newsletter. Membership is available to students at a reduced cost.

## Courses Offered by Department of Behavioral Sciences

Criminal Justice 200 Introduction to Criminal Justice (F, Sp)
Criminal Justice 211 Principles of Law Enforcement (F)
Criminal Justice 301 Drugs and Society (Sp)
Criminal Justice 302 Criminal Justice Ethics (F, Sp)
Criminal Justice 303 Research Methods (F, Sp)
Criminal Justice 310 Principles of Criminal Investigation (F)
Criminal Justice 311 Correctional Security (as needed)
Criminal Justice 312 Physical Training and Use of Force (as needed)
Criminal Justice 320 Criminal Procedure (F)
Criminal Justice 321 Apprenticeship (F, Sp)
Criminal Justice 322 Apprenticeship II (F, Sp)
Criminal Justice 325 Criminology (F, Sp)
Criminal Justice 330 Serial Killers (F)
Criminal Justice 360 Child Abuse (F-even)
Criminal Justice 364 (564) Corrections (Sp)
Criminal Justice 370 Juvenile Justice: Social Problems and Legal Issues for Social Work \& Criminal Justice (F)
Criminal Justice 380 Probation and Parole (Sp)
Criminal Justice 400 (600) Criminal Law (F)
Criminal Justice 401 Command and Leadership (as needed)
Criminal Justice 405 Law Enforcement Administration (Sp)
Criminal Justice 410 Victimology (Sp)
Criminal Justice 411 Special Topics [topic title] (as needed)
Criminal Justice 413 Family Law (F-odd)
Criminal Justice 415 American Death Penalty (Sp-odd)
Criminal Justice 420 (620) Criminal Evidence (Sp)
Criminal Justice 421 Apprenticeship III (F, Sp)
Criminal Justice 422 Apprenticeship IV (F, Sp)
Criminal Justice 425 Penology (Sp-even)
Criminal Justice 435 (635) Forensics and Physical Evidence (as needed)
Criminal Justice 450 Current Issues in Criminal Justice (as needed)
Criminal Justice 455 Travel Study in Criminal Justice [Selected Topics] (as needed)
Criminal Justice 460 Senior Seminar in Criminal Justice (F, Sp)
Criminal Justice 470 Tennessee Criminal Law (as needed)
Criminal Justice 480 Internship in Criminal Justice (F, Sp)
Criminal Justice 485 Directed Research in Criminal Justice (as needed)

Criminal Justice 605 Law Enforcement Administration (Sp)
Criminal Justice 680 Internship in Criminal Justice (F, Sp)
Criminal Justice 701 Program Planning (Sp-odd, Su-even)
Criminal Justice 702 Administration of Justice (F-odd)
Criminal Justice 703 Civil Liberties (F-even, Su-odd)
Criminal Justice 704 Topical Seminar in Criminal Justice (F-even, Su-odd)
Criminal Justice 705 Applied Research in Criminal Justice (Sp-odd, Su-even)
Criminal Justice 706 Juvenile Justice Theory and Practice (F-odd)
Criminal Justice 707 Juvenile Justice Strategies (Sp-even)
Criminal Justice 708 Criminological Theory (Sp-even)
Criminal Justice 709 Advanced Topics in Victimology (Sp-odd)
Criminal Justice 710 Foundations of Leadership (as needed)
Criminal Justice 711 Organizational Leadership (as needed)
Criminal Justice 712 Leadership Principles (as needed)
Criminal Justice 713 Leadership and Effective Communication (as needed)
Criminal Justice 714 Leadership Theories and Practices (as needed)
Criminal Justice 715 Practical Leadership (as needed)
Criminal Justice 716 Standards and Training (as needed)
Criminal Justice 717 Professional Development (as needed)
Criminal Justice 718 Public Policy Analysis (as needed)
Social Work 200 Introduction to Social Work and Social Welfare (F, Sp)
Social Work 220 Understanding Human Diversity and Oppressed Populations (F, Sp)
Social Work 290 Social Work Program Orientation (F, Sp)
Social Work 300 Social Welfare Policies and Services (F, Sp)
Social Work 315 Social Work in Health Care (Sp-odd)
Social Work 320 Human Behavior and Social Environment I (F, Sp)
Social Work 325 Social Work in Child Welfare (Sp)
Social Work 330 Human Behavior and Social Environment II (F, Sp)
Social Work 335 Social Work in Mental Health (F-even)
Social Work 340 Social Work Practice I (F, Sp)
Social Work 345 Juvenile Justice: Social Problems and Legal Issues for Social Work \& Criminal Justice (F)
Social Work 350 Social Work Practice Skills and Techniques (F, Sp)
Social Work 355 Social Gerontology (Sp-even)
Social Work 365 Alcohol and Drugs (as needed)
Social Work 375 Social Work in the School Setting (F-odd)
Social Work 385 Stress Management (as needed)
Social Work 400 Social Work Practice II (F, Su)
Social Work 410 Social Work Research and Evaluation (F, Sp)
Social Work 415 Social Work in Child Welfare II (F)
Social Work 425 Special Topics [topic title] (as needed)
Social Work 440 Social Work Practice III (F, Sp)
Social Work 455 Social Work Travel Study [Selected Topics] (as needed)
Social Work 460 Social Work Senior Seminar (F, Sp)
Social Work 470 Social Work Field Instruction Preparation (F, Sp)
Social Work 490 Social Work Field Instruction (F, Sp, Su)
Sociology 101 Introduction to Anthropology (as needed)
Sociology 201 General Sociology (F, Sp)
Sociology 202 Social Problems (F, Sp)

Sociology 202H Honors Social Problems (as needed)
Sociology 300 Cultural Anthropology (Sp-odd)
Sociology 304 (504) Race and Ethnic Relations (F-even)
Sociology 305 (505) Sociology of Deviance and Social Control (F)
Sociology 307 LBGT Issues in Society (Sp-even)
Sociology 308 Family and Intimate Relationships (F-odd)
Sociology 309 Sociology of Food (Sp-odd)
Sociology 311 Society and the Individual (F-even)
Sociology 312 Social Psychology (F, Sp)
Sociology 318 Social Research Methods (F)
Sociology 319 Data Analysis (Sp)
Sociology 320 Social Gerontology (as needed)
Sociology 333 Society and Environment (Sp-odd)
Sociology 334 Sociology of Sport (F-even)
Sociology 341 (541) Gender Roles in American Society (F-odd)
Sociology 364 (564) Corrections (Sp)
Sociology 375 Sociology of Popular Culture (as needed)
Sociology 381 (581) Special Topics [topic title] (as needed)
Sociology 386 Technology and Society (F-odd)
Sociology 390 Social Movements (Sp-even)
Sociology 402 (602) Sociological Theory (Sp)
Sociology 404 Stratification and Inequality (Sp-odd)
Sociology 413 (613) Criminology (F, Sp)
Sociology 415 Political Sociology: Power in Society (as needed)
Sociology 425 Family Violence (Sp-even)
Sociology 431 (631) Urban and Community Sociology (Sp-even)
Sociology 455 Sociology Travel Study [Selected Topics] (as needed)
Sociology 480 Internship in Sociology (as needed)
Sociology 485 Directed Reading and Research (as needed)
Sociology 497 Senior Seminar (F)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Educational Studies 

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## Faculty

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## Mission

The Department of Educational Studies has as its primary mission the preparation of K-12 classroom teachers, administrators and school service personnel for the public schools in Tennessee as well as the nation. Some options exist for students desiring to obtain the skills and strategies of the education profession for use in non-public school districts in curriculum development, in-service staff development and analysis and evaluation of school programs.

## Expected Outcomes

In keeping with the primary mission of the Department of Educational Studies, programs are designed to prepare classroom teachers who exhibit understanding and proficiency with the following characteristics: communication, reflection/relevance and purpose, collaboration, technology, higher order thinking skills, assessment, diversity, professionalism, and pedagogy skills.
The following are the InTASC Standards that serve as our student learning outcomes:

## Standard 1: Learner Development

The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

## Standard 2: Learning Differences

The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

## Standard 3: Learning Environments

The teacher works with others to create environments that support individual and collaborative learning that encourage positive social interaction, active engagement in learning, and self-motivation.

## Content Knowledge

## Standard 4: Content Knowledge

The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

## Standard 5: Application of Content

The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

## Instructional Practice

## Standard 6: Assessment

The teacher understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

## Standard 7: Planning for Instruction

The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

## Standard 8: Instructional Strategies

The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

## Professional Responsibility

## Standard 9: Professional Learning and Ethical Practice

The teacher engages in ongoing professional learning and uses evidence to continually evaluate his/ her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community) and adapts practice to meet the needs of each learner.

## Standard 10: Leadership and Collaboration

The teacher seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

## Education Degree Requirements

The curricula in education has three dimensions: general education, content education (specialty area) and professional education. General education consists of courses of study selected from the traditional academic disciplines: biological and physical systems, communication, fine arts (aesthetics), humanities, mathematics, and social and behavioral sciences. The requirements in these areas represent a consensus of the faculty after review of Tennessee licensure requirements and recommendations of professional and content education societies.

Content education centers on the academic discipline(s) chosen by the pre-service teacher to be the area(s) of teaching expertise. Prospective secondary teachers may select from a variety of disciplines.
Integrated Studies majors may select from P-3, K-5, 6-8 or Special Education Interventionist K-8 licensure programs.

Professional education consists of a sequence of academic events that aid the pre-service teacher in the knowledge, comprehension and application of the skills and strategies professional educators judge to be necessary to make wise educational decisions. The collaborative relationship which exists between the faculties of the College of Education, Health, and Behavioral Sciences and the public school systems of Tennessee makes the attainment of this professional expertise possible.

Typically, the education major develops a personal philosophy of teaching over an extended period of time. The College of Education, Health, and Behavioral Sciences is dedicated to providing a variety of educational opportunities throughout the four-year period of study.

Academic advisers or faculty members are assigned to work with each student in planning a program so that the chosen curriculum is followed, as outlined, in order to assure graduation and eligibility for licensure. It is important that each student work closely with an adviser and that requests for course substitutions be filed with the Undergraduate Committee no later than the end of the junior year.

## Curricula for Integrated Studies

A Bachelor of Science in Education degree with a major in Integrated Studies is available with four concentrations which can lead to licensure in PreK-3 (5161), K-5 (5162), Middle Grades 6-8 (5163), or Special Education Interventionist K-8 (5165) for those students who complete the outlined program of study.

## Curricula for Integrated Studies (PreK-3)

## General Education Requirements (53-54 Hours)

I. Biological and Physical Systems (8 hours)

Biology 110, 120, 130 or 140
Physical Lab Science (four hours selected from Astronomy, Chemistry or Geology; must fulfill university-wide general education requirement)
II. Communications (9-10 hours)

English 110 or 111
English 112 or equivalent honors course
Communications 230
III. Fine Arts (Aesthetics) (6 hours)

3 hours in Art (must fulfill university-wide general education requirement)
3 hours in Music must fulfill university-wide general education requirement)
IV. Humanities (9 hours)

English 250, 251, 260, 261, 270 or 271
History 201 or 202
Philosophy 130
V. Mathematics (6 hours)

Mathematics 110 or 140
Mathematics 191
VI. Social and Behavioral Sciences (15 hours)

Geography 151 or 152
Health 111
Political Science 210 or 220
Psychology 101
Sociology 201

## Professional Education Requirements (31 Hours)

Courses with asterisk $\left({ }^{*}\right)$ require admission to the Educator Preparation Program
Human Learning 311
*Special Education 440
Teacher Education 211
*Early Childhood Education 341
*Early Childhood Education 351
*Early Childhood Education 475
Student Teaching
*Teacher Education/Early Childhood Education 409 or Early Childhood Education 411
*Early Childhood Education 412

## Specialty Area Requirements—PreK-3 Licensure (37 Hours)

Individual and Society (11 Hours)
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Early Childhood Education 360
Child Development and Learning (23 Hours)
Human Learning 325
*Early Childhood Education 460
*Special Education 300
*Special Education 430
*Early Childhood Education 485
*Reading 438
Library Service 451
Guided Elective (3 Hours)
One three-hour elective chosen from: Health and Physical Education 310, Child \& Family Studies 303, Child \& Family Studies 312, Child \& Family Studies 313, Child \& Family Studies 412, or Child \& Family Studies 442.
Minimum total hours required for B.S.Ed. degree with a major in Integrated Studies (PreK-3) ..... 121-122

## Curricula for Integrated Studies (K-5)

## General Education Requirements (57 Hours)

I. Biological and Physical Systems (12 hours)

Biology 110 or 140
Biology 120 or 130
Geology 110 or Astronomy 201
II. Communications (9-10 hours)

English 110 or 111
English 112 or equivalent honors course
Communications 230
III. Fine Arts (Aesthetics) (3 hours)

3 hours selected from university-wide general education requirement
IV. Humanities ( 12 hours)

6 hours from English 250, 251, 260, 261, 270 or 271
History 201-202
V. Mathematics (9 hours)

Mathematics 110 or 140
Mathematics 191-192
VI. Social and Behavioral Sciences (12 hours)

Geography 151 or 152
Health 111
Psychology 101
Social Work 220

## Professional Education Requirements (28 Hours)

Courses with asterisk (*) require admission to the Educator Preparation Program; see Non-Licensure Option.
Special Education 300
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education/Early Childhood Education 475
Student Teaching
*Teacher Education 402 or Teacher Education/Early Childhood Education 409
*Teacher Education 403
Note: For K-5 licensure majors, students may opt to student teach in Kindergarten or grades 1-4.

## Specialty Area Requirements (36 Hours)

*Health and Physical Education 310
Human Learning 311
Human Learning 325
*Special Education 440
*Teacher Education 340
*Teacher Education 342
*Teacher Education 350
Language Arts/Reading
English 110 or 111 and 112 (satisfied by general education)
6 hours from English 250, 251, 260, 261, 270 or 271 (satisfied by general education)
Library Service 451
*Reading 438
*Reading 448
Mathematics
Mathematics 110 or 140 (satisfied by general education)
Mathematics 191-192 (satisfied by general education)
Sciences
Choose eight hours from Biology 110, 120, 130, 140 (satisfied by general education)

Astronomy 201 or Geology 110 (satisfied by general education)
Physics 150
Social Science
Geography 151 or 152 (satisfied by general education)
History 201-202 (satisfied by general education)
Psychology 101 (satisfied by general education)

## Minimum total hours required for B.S.Ed. degree with a major in Integrated Studies (K-5)

$\qquad$ 121

## Non-Licensure Option (5164)

Candidates for the non-licensure option of the K-5 concentration must work out a program of study with their advisers for those hours in place of coursework requiring admission to the Educator Preparation Program, to be selected from the following coursework:

- any upper-division education course not requiring admission to the Educator Preparation Program
- any upper-division psychology course
- Agriculture 450
- any upper-division subject matter course in the areas of English, History, Political Science, Economics, Health, Geography or Physical Education
- any Child \& Family Studies course
- any lab science


## Curricula for Integrated Studies (6-8)

Students who plan to teach in grades 6-8 will follow similar programs during their first two years.

## General Education Requirements (44-47 Hours)

Courses with asterisk (*) require admission to the Educator Preparation Program.
I. Biological and Physical Systems (8-12 hours)

Eight hours selected from the university wide approved general education Biological \& Physical Systems requirements. (6-8 Language Arts, Mathematics and Social Studies) BIOL 130-140 (6-8 science)
II. Communications (9-10 hours)

English 110 or 111
English 112 or honors equivalent
Communications 230
III. Fine Arts (Aesthetics) (3 hours)

3 hours selected from university-wide general education requirement
IV. Humanities (9-12 hours)

English 260 (for Language Arts)
English 261
History 121 (for Social Studies)
History 201-202
V. Mathematics (3-7 hours)

Mathematics 110 or 140
Mathematics 210 (for Math)

## VI. Social and Behavioral Sciences (9 hours)

Geography 151
Political Science 210
Social Work 220
VII. General Elective (2 hours)

6-8 Math only

## Professional Education Requirements (33 Hours)

Courses with asterisk (*) require admission to Educator Preparation Program
Human Learning 311
Human Learning 325
*Reading 438
*Reading 448
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 403
*Teacher Education 404

## Specialty Area Requirements (41-43 Hours)

*Secondary Education 411 (6-8 Science)
*Secondary Education 412 (6-8 Math)
*Secondary Education 414 (6-8 Language Arts)
*Secondary Education 415 (6-8 Social Studies)
Special Education 300
*Special Education 470
*Teacher Education 380
*Teacher Education 450
Concentration - Language Arts ( 15 Hours)
English 250 or 251
English 260 (satisfied by general education)
English 261 (satisfied by general education)
English 270 or 271
English 305, 425
Library Service 452
Concentration - Mathematics (13 Hours)
Mathematics 110 or 140 (satisfied by general education)
Mathematics 210 (satisfied by general education)
Mathematics 170, 191, 192, 251
Concentration - Science ( 15 Hours)
Astronomy 201 (satisfied by general education)
Biology 110 or 140 (satisfied by general education)
Biology 120 or 130 (satisfied by general education)
Botany 301, 302 or 303
Chemistry 121

Geoscience 130
Physics 150
Concentration - Social Studies (15 Hours)
Economics 201
Geography 151 (satisfied by general education)
Geography 152
History 121 (satisfied by general education)
History 122
History 201-202 (satisfied by general education)
History 325
Political Science 210 (satisfied by general education)
Sociology 201 or 202
NOTE: A student must select an area of emphasis different from his/her concentration.
English (12 hours)
English 260, 305, 425
Library Service 452
Mathematics ( 12 hours)
Mathematics 170, 191, 192, 210
Science (12 hours)
Astronomy 201
Chemistry 121
Physics 150
Social Science ( 12 hours)
Economics 201
Geography 152
History 121, 122

## Minimum hours required for B.S.Ed. degree with a major in Integrated Studies (6-8)

## Curricula for Integrated Studies Special Education Interventionist K-8

## General Education Requirements ( 48 Hours)

I Biological and Physical Systems (12 hours)
Biology 110-or 140
Biology 120 or 130
Physical Lab Science (four hours from Astronomy, Chemistry, Geology or Physics; must fulfill
university-wide general education requirement)
II. Communications (9 hours)

English 111
English 112 or equivalent honors course
Communications 230
III. Fine Arts (Aesthetics) (3 hours)3 hours selected from university-wide general education requirement
IV. Humanities (9 hours)3 hours from English 250, 251, 260, 261, 270 or 271
History 201-202
V. Mathematics (9 hours)Mathematics 110 or 140
Mathematics 191, 192
VI. Social and Behavioral Sciences (6 hours)
Geography 151 or 152
Political Science 210
Professional Education Requirements (33 Hours)
Courses with asterisk (*) require admission to the Educator Preparation Program.
Human Learning 311
Human Learning 325
*Reading 438
*Reading 448
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 407
*Teacher Education 408
Specialty Area Requirements (42 Hours)Health and Physical Education 304Library Service 451
*Special Education 300
*Special Education 417
*Special Education 418
*Special Education 419
*Special Education 420
*Special Education 433
*Special Education 434
*Special Education 435
*Special Education 440
*Special Education 460
*Teacher Education 450
Minimum total hours required for B.S.Ed. degree with a major in Integrated Studies (Special Education Interventionist K-8) ..... 121

## Non-Licensure Option (5155)

Non-licensure Special Education (5155) majors will work out a program of study with their adviser for those hours in place of course work requiring admission to the Educator Preparation Program to be selected from the following course work:
any upper-division education course not requiring admission to the Educator Preparation Program any upper-division psychology course
Agriculture 450
any upper-division subject matter course in the areas of English, History, Political Science, Economics, Health, Geography or Physical Education
any Child and Family Studies course
any lab science

## Curricula for Secondary Teachers 6-12, B.S.Ed.

Students who plan to teach in grades 6-12 will follow similar programs during the first two years.
Note: Persons wishing to be non-licensure secondary subject majors should consult with an appropriate adviser regarding the university's Bachelor of Arts/Bachelor of Science degree requirements.

## Curricula for Secondary Education

## General Education Requirements (41-50 hours)

I. Biological and Physical Systems (8-16 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (8-16 hours)
Biology 130 (for Biology and Earth and Space Science)
Biology 140 (for Biology and Earth and Space Science)
Biology 130 or 140 (for Chemistry)
Chemistry 121-122 (for Chemistry, Earth and Space, and Biology)
Physics 211-212 (for Mathematics)
Concentration in Business (8 hours)
Eight hours selected from the university wide approved general education Biological and Physical Systems requirements.
Concentrations in Economics, Geography, Government, and History (8 hours)
Eight hours selected from the university wide approved general education Biological \& Physical Systems requirements.

## Concentration in English (8 hours)

Eight hours selected from the university wide approved general education Biological and Physical Systems requirements.

## Concentrations in French and Spanish (8 hours)

Eight hours selected from the university wide approved general education Biological and Physical Systems requirements.

## Concentration in Special Education - Interventionist 6-12 (8 hours)

Eight hours selected from the university wide approved general education Biological and Physical Systems requirements.
II. Communications (9-10 hours)

English 110 or 111
English 112 (or equivalent honors courses)
Communications 230
III. Fine Arts (Aesthetics) (3 hours)

3 hours selected from university-wide general education requirement
IV. Humanities (9-15 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (9 hours)
Six hours selected from English 250, 251, 260, 261, 270, 271
Three hours selected from History 201 or 202
Concentration in Business (9 hours)
History 201 and 202
Three hours selected from English 250, 251, 260, 261, 270, 271
Concentrations in Economics, Geography, Government, and History (9-12 hours)
History 121 or 122 (for Economics, Geography and Government)
History 121, 122 (for History)
History 201, 202
Concentration in English ( 15 hours)
English 250, 260, 261, 270
Three hours selected from History 201 or 202
Concentrations in French and Spanish (9 hours)
Six hours selected from English 250, 251, 260, 261, 270 or 271
History 201 or 202
Concentration in Special Education - Interventionist 6-12 (9 hours)
Three hours from English 250, 251, 260, 261, 270, or 271 (for math, science, social studies)
Six hours selected from English 250, 251, 270, 271 (for English)
History 201, 202
V. Mathematics (3-7 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, \& Mathematics (3-7 hours)
Mathematics 110 or 140 (for Biology, Earth and Space Science)
Mathematics 160 (for Biology)
Mathematics 251 (for Chemistry and Mathematics)
Mathematics 210 (for Mathematics)
Concentration in Business ( 6 hours)
Mathematics 210
Mathematics (selected from university-wide general education)
Concentrations in Economics, Geography, Government, and History (3 hours)
Mathematics (selected from university-wide general education)
Concentration in English (3 hours)
Mathematics (selected from university-wide general education)

## Concentrations in French and Spanish (3 hours)

Mathematics (selected from university-wide general education requirement)
Concentration in Special Education - Interventionist 6-12 (3-7 hours)
Mathematics 110 or 140
Mathematics 210 (for Mathematics and Science)

## VI. Social and Behavioral Sciences (6-15 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (6 hours)
Psychology 101
Social Work 220
Concentration in Business (12 hours)
Economics 201 and 202
Psychology 101
Social Work 220
Concentrations in Economics, Geography, Government, and History (15 hours)
Geography 151, 152
Political Science 210
Social Work 220
Sociology 201
Concentration in English (6 hours)
Psychology 101
Social Work 220
Concentrations in French and Spanish (6-9 hours)
Psychology 101 or Sociology 201 (Spanish)
Social Work 220
Sociology 201
Concentrations in Special Education - Interventionist 6-12 (6-9 hours)
Geography 151 or 152 (for Interventionist English, Math, Science)
Geography 151, 152 (for Interventionist Social IStudies)
Political Science 210 (for Interventionist English, Math, Science)
Sociology 201 or 202 (for Interventionist Social IStudies)

## VII. General Elective (1-6 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (1 hour) One hour general elective (for Chemistry)

Concentration in English (3 hours)
Three hours general elective
Concentration in French (6 hours)
Six hours general elective
Concentration in Spanish (3 hours)
Three hour general elective

## Professional Education Requirements (33-38 hours)

Concentrations in all 6-12 areas except Special Education - Interventionist 6-12 (33 hours)
Courses with asterisk (*) require admission to the Educator Preparation Program.
Human Learning 311
Human Learning 325
Reading 433
Special Education 300
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 404
*Teacher Education 405

## Concentration in Special Education - Interventionist 6-12 (37-40 hours)

Courses with asterisk (*) require admission to the Educator Preparation Program.
Human Learning 311
Human Learning 325
*Reading 438
*Reading 448 (for English, Math, and Social Studies)
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 380
*Teacher Education 408
*Teacher Education 413
*Teacher Education 450

## Specialty Area Requirements (38-47 hours)

Courses with asterisk (*) require admission to the Educator Preparation Program..
Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (41-44 hours)
Biology (40 hours)
Biology 331, 336, 337, 391
Microbiology 310
*Secondary Education 411
*Special Education 470
*Teacher Education 380
Three hours selected from Botany 301 or 302
Three hours selected from Zoology 315, 325, or 326
Zoology 251, 352
Chemistry (43 hours)
Biochemistry 411
Chemistry 320, 341, 342, 351, 352
Mathematics 252
Physics 211, 212
*Secondary Education 411
*Special Education 470
*Teacher Education 380
Earth and Space Science (44 hours)
Astronomy 201, 202
Geography 305, 472
Geology 110, 120, 340
*Secondary Education 411
*Special Education 470
*Teacher Education 380
Eight hours selected from Geology 315, 345, 350, 365
Mathematics (45 hours)
Mathematics 170, 252, 310, 314, 320, 410, 420, 451, 471
*Secondary Education 412
*Special Education 470
*Teacher Education 380
Six hours selected from upper-division mathematics or statistics courses

## Concentration in Business (40 hours)

Accounting 201-202
Business Education 430
Business Law 301
Finance 301
Information Systems 310, 336 and 351
Management 300 and 461
Marketing 301
*Special Education 470
*Teacher Education 380

## Concentrations in Economics, Geography, Government, and History (40 hours)

Economics (40 hours)
Economics 201, 202, 321, 333
Three of the following: Economics 331, 335, 416, 417
*Secondary Education 415
*Special Education 470
*Teacher Education 380
Area of emphasis - complete one of the following areas of emphasis (9 hours):
History Emphasis (9 hours)
American History - Three hours selected from History 444, 460, 461, 462, 463, 464, 465, 466, 494, 495, 496, 497
European History - Three hours selected from History 339, 340, 341, 342, 343, 420, 421
World History - Three hours selected from History 320, 321, 323, 324, 325, 445, 446, 484
Geography Emphasis (9 hours)
Geography 202, 270, 310
Government Emphasis (9 hours)
Political Science 220, 321, 322
Geography (40 hours)
Geography 202, 310, 355, 380, 381, 471, 472
*Secondary Education 415
*Special Education 470
*Teacher Education 380
Area of emphasis - complete one of the following areas of emphasis (9 hours):
Economics Emphasis (9 hours)
Economics 201, 202, 321
History Emphasis (9 hours)
American History - Three hours selected from History 444, 460, 461, 462, 463, 464, 465, 466, 494, 495, 496, 497

European History - Three hours selected from History 339, 340, 341, 342, 343, 420, 421
World History - Three hours selected from History 320, 325, 321, 323, 324, 445, 446 Government Emphasis (9 hours)

Political Science 220, 321, 322
Government ( 40 hours)
Political Science 220, 321, 322
American Political System (9 hours)
Nine hours selected from Political Science 312, 314, 333, 353, 361, 381, 382, 431, 432, 451
International Political System (3 hours)
Three hours selected from Political Science 341 or 401
*Secondary Education 415
*Special Education 470
*Teacher Education 380
Area of emphasis - complete one of the following areas of emphasis (9 hours):
Economics Emphasis (9 hours)
Economics 201, 202, 321
Geography Emphasis (9 hours)
Geography 202, 270, 310
History Emphasis (9 hours)
American History - Three hours selected from History 444, 460, 461, 462, 463, 464, 465, 466, 494, 495, 496, 497
European History - Three hours selected from History 339, 340, 341, 342, 343, 420, 421
World History - Three hours selected from History 320, 321, 323, 324, 325, 445, 446, 484
History (37 hours)
History 299
*Secondary Education 415
*Special Education 470
*Teacher Education 380
American History (6 hours)
Three hours selected from History 465 or 466
Three hours selected from History 444, 460, 461, 462, 463, 464, 494, 495, 496, 497
European History (3 hours)
Three hours selected from History 339, 340, 341, 342, 343, 420, 421
World History (6 hours)
Six hours selected from History $320,321,323,324,325,445,446,484$
Area of emphasis - complete one of the following areas of emphasis (9 hours):
Economics Emphasis (9 hours)
Economics 201, 202, 321
Geography Emphasis (9 hours)
Geography 202, 270, 310
Government Emphasis (9 hours)
Political Science 220, 321, 322

## Concentration in English (40 hours)

English 305, 425, 485
English 320 or 420
English 365, 370, 401, 465, or 470
English 360, 375, 460, 480, or 490

English 343, 380, or 385
English 345 or 350
Three hour foreign language requirement selected from French, Spanish, German, or Japanese 111, 115 or 122 or Spanish 250
Library Service 452
*Secondary Education 414
*Special Education 470
*Teacher Education 380

## Concentrations in French and Spanish (40-43 hours)

French (40-43 hours)
French 111 or $115,122,222,321,341,342,491$
*Secondary Education 413
*Special Education 470
*Teacher Education 380
Three hours Upper Division French course
Nine to fifteen hours Intensive Language Experience in the United States or abroad (must be approved by the chair of the Department of English and Modern Foreign Languages)

## Spanish (46 hours)

Spanish 111 or $115,122,222,321,322,341,342,420$
*Secondary Education 413
*Special Education 470
*Teacher Education 380
Three hours selected from Spanish Literature courses 481, 482, or 486
Three hours selected from Spanish 381, 382
Three hours selected from Spanish 385, 386
Three to six hours Intensive Language Experience in the United States or abroad (must be approved by the chair of the Department of English and Modern Foreign Languages)

## Concentration in Special Education - Interventionist 6-12 (40-47 hours)

English (43 hours)
English 260, 261, 305
Health and Physical Education 304
Library Service 452
Special Education 300, *417, *418, *419, *433, *434, *435,*460,*470
Math (40 hours)
Health and Physical Education 304
Mathematics 170, 191, 192
Special Education 300, *417,*418,*419,*433,*434,*435,*460,*470
Science (43 hours)
Astronomy 201 or Geology 110
Chemistry 121
Health and Physical Education 304
Physics 150
Special Education 300, *417,*418, *419,*433,*434,*435,*460,*470
Social Studies (40 hours)
Health and Physical Education 304

History 121, 122
Political Science 210
Special Education 300, *417, *418, *419, *433, *434, *435, *460, *470


#### Abstract

Minimum total hours required for B.S.Ed. degree with a major in Secondary Education and an endorsement in Biology, Chemistry, Earth and Space Science, Mathematics, Business, Economics, Geography, Government, History, English, French, Spanish, or Special Education Interventionist 6-12. 121


## Teaching Areas and Electives (36-51 Hours)

In some instances endorsements will exceed the semester hours allocated to this area of the degree due to the inclusion of courses which were required and the semester hours counted under the General Education area.

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I. Agricultural Education (7-12)
See Department of Agriculture, Geosciences, and Natural Resources.
II. Art (K-12)
See Department of Visual and Theatre Arts.
III. Family and Consumer Sciences Education (5-12)
See Department of Family and Consumer Sciences.
IV. Music (K-12)
See Department of Music.
V. School Social Work (K-12)
See Department of Behavioral Sciences.
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Minimum total hours required for B.S.Ed. degree, majors for secondary teachers

## Options for Additional Endorsements

Candidates for additional endorsements must be recommended to the State Department of Education by an institution of higher education which has been approved to prepare teachers in Tennessee. To qualify for an additional endorsement in any subject, a candidate must demonstrate knowledge of and skills in the appropriate teaching content area which has been approved by the State Board of Education for initial endorsement. To determine what additional course work and field experiences will be required to qualify for an additional teaching endorsement, the recommending institution must assess the candidate's academic background, equating it to established standards. Individuals who wish to obtain additional endorsement should contact the Educator Preparation Program Office, 205 Gooch Hall (731-881-7203).

1. Agriculture (6-12)
2. $\operatorname{Art}(\mathrm{K}-12)$
3. Biology (6-12)
4. Earth and Space Science (6-12)
5. Economics (6-12)
6. English (6-12)
7. French (6-12)
8. Geography (6-12)
9. Government (6-12)
10. Health Education (K-12)
11. History (6-12)
12. Mathematics $(6-12)$
13. Music - Instrumental/Vocal (K-12)
14. Physical Education (K-12)
15. Spanish (6-12)
16. Special Education Interventionist (K-8)
17. Special Education Interventionist (6-12)

Note: All add-on endorsements are dependent upon the transcript evaluation. Depending on the current area of certification and the add-on desired, additional professional education course work may be required. In addition to the required course work, individuals must pass the appropriate Praxis Series Subject Assessment Exam(s) in order to be recommended for licensure in the additional endorsement area.

# Courses Offered by Department of Educational Studies 

Business Education 430 (630) Instructional Strategies in Business Subjects (F)
Career and Technical Education 290 Effective Instructional Strategies and Managing the Environment (as needed)
Career and Technical Education 300 Students with Exceptionalities (as needed)
Career and Technical Education 303 Diagnosis and Evaluation (as needed)
Career and Technical Education 311 Technology Integration (as needed)
Career and Technical Education 325 Educational Psychology (as needed)
Career and Technical Education 440 Selected Problems in Education: Directed Internship (as needed)
Counseling 420 (620) Introduction to Counseling (F, Sp)
Counseling 710 Research in Education and Counseling (F, Sp, Su)
Counseling 712 Learning and Instruction (F, Sp)
Counseling 716 Growth and Development Across the Life Span (birth to adult) (F, Sp, Su)
Counseling 721 Multicultural Issues in Education and Counseling (F, Sp, Su)
Counseling 722 Professional, Ethical and Legal Issues in Counseling (as needed)
Counseling 725 Theories and Techniques of Counseling (F, Sp)
Counseling 730 Career Development and Counseling (Sp, Su)
Counseling 740 Group Dynamics (F, Sp)
Counseling 745 Current Issues in Counseling (Topic) (as needed)
Counseling 746 Expressive Arts in Counseling (as needed)
Counseling 747 Introduction to Addictions Counseling (F-odd)
Counseling 748 Principles of Crisis Intervention (Su)
Counseling 750 Mental Health and Psychopathology (Sp)
Counseling 752 Student Affairs in Higher Education (F)
Counseling 753 Student Development and Higher Education (Sp)
Counseling 754 Assessment, Evaluation, and Administration of Student Affairs and College Counseling (Su)
Counseling 760 Individual Appraisal (as needed)
Counseling 775 Counseling Children/Adolescents with Psychological Dysfunctions (Sp)
Counseling 776 Psychopharmacology (as needed)
Counseling 777 Psychopathology: Diagnosis and Treatment (as needed)
Counseling 780 Community Resources (as needed)
Counseling 781 Introduction to Marital and Family Counseling (Summer)
Counseling 782 Alcohol and Substance Abuse Counseling (F)

Counseling 783 Clinical Mental Health Counseling (F, Sp)
Counseling 784 Mental Health Services Management, Consultation, and Supervision (F)
Counseling 785 Counseling Practicum (F, Sp)
Counseling 786 Organization and Administration of School Counseling Services/Programs (F, Sp)
Counseling 787 Pre-Practicum in School Counseling (F, Sp)
Counseling 788 Internship I (F, Sp, Su)
Counseling 789 Internship in Secondary School Counseling (F, Sp, Su)
Counseling 790 Internship in Elementary School Counseling (F, Sp, Su)
Counseling 792 Internship II (F, Sp, Su)
Early Childhood Education 341 Mathematics/Science in Early Childhood Education (F)
Early Childhood Education 351 Language Arts/Social Studies in Early Childhood Education (F)
Early Childhood Education 360 Assessment in Early Childhood (Sp)
Early Childhood Education 409 Student Teaching in Kindergarten (F, Sp)
Early Childhood Education 411 Student Teaching in Pre-Kindergarten (F, Sp)
Early Childhood Education 412 Student Teaching Grades 1-3 (F, Sp)
Early Childhood Education 460 (660) Learning: Birth Through Age Eight Years (F, Sp)
Early Childhood Education 480 (680) Emergent Literacy in the Content Areas: Language Arts, Social Studies, Math, Science and Health (as needed)
Early Childhood Education 481 (681) Emergent Literacy (as needed)
Early Childhood Education 485 (685) Creativity and Play (as needed)
Early Childhood Education 490 Learning Theory and Affective Environment (as needed)
Early Childhood Education 700 Early Childhood Growth and Development (F)
Early Childhood Education 710 Curriculum Models in Early Childhood Education (Sp)
Early Childhood Education 720 History and Theories of Early Childhood Education (F)
Early Childhood Education 730 Guidance, Discipline, and Classroom Environments (Su)
Early Childhood Education 740 Developmentally Appropriate Early Childhood Assessment (Sp)
Early Childhood Education 750 Trends and Issues in Early Childhood Education (Su)
Educational Evaluation 710 Educational Statistics (F, Sp, Su)
Educational Evaluation 761 Educational Assessment and Evaluation (as needed)
Educational Foundations 710 Research in Education and Counseling (F, Sp, Su)
Educational Foundations 711 Data Driven Decision-Making in Education (F, Sp, Su)
Educational Foundations 720 Multicultural Issues in Education \& Counseling (F, Sp, Su)
Educational Foundations 721 Diversity and Equity in Higher Education (as needed)
Educational Foundations 730 Seminar in Post-Secondary Education (as needed)
Educational Foundations 731 Internship in College Teaching (as needed)
Educational Foundations 740 History of Higher Education (F, Sp, Su)
Educational Leadership 710 Instructional Leadership (F)
Educational Leadership 711 Recruitment, Retention and Strategic Enrollment Management (as needed)
Educational Leadership 715 Organizational \& Business Management (F)
Educational Leadership 730 Family \& Community Engagement (Su)
Educational Leadership 731 Higher Education Finance and Resource Management (as needed)
Educational Leadership 735 Electronic Tools for Educational Leaders (F)
Educational Leadership 745 Measurement and Decision Making (F, Sp)
Educational Leadership 750 Clinical Practice I (Su)
Educational Leadership 755 Equitable and Culturally Responsive Practices (Sp)
Educational Leadership 760 School Finance \& Educational Law (Sp)
Educational Leadership 761 Higher Education Law (as needed)
Educational Leadership 775 Leading Educational Change (Sp)
Educational Leadership 780 Clinical Practice II (F, Sp, Su)

Educational Studies 290 Workshop in Education [Title of Workshop] (as needed)
Educational Studies 440 (640) Selected Problems in Education: [Title] (as needed)
Educational Studies 445 (645)Parenting Across Cultures (as needed)
Educational Studies 450 (650) The School, the Teacher, and the Law (as needed)
Educational Studies 455 Educational Travel Study [Selected Topics] (as needed)
Educational Studies 460 (660) Education in a Pluralistic Society (as needed)
Educational Studies 710 Models of Instruction, Curriculum Development and Advanced Teaching Strategies (Su)
Educational Studies 720 Introduction to Leadership (F)
Educational Studies 725 Integrated STEM Curriculum Design for Middle School 5-9 Teachers (as needed)
Educational Studies 740 Project in Education (as needed)
Educational Studies 745 Workshop in Education [Title of Workshop] (as needed)
Educational Studies 750 Teaching with Technology (F, Sp, Su)
Educational Studies 753 Student Development and Engagement in Higher Education (as needed)
Educational Studies 760 Organization and Administration of Postsecondary Education (Sp)
Educational Studies 770 Teaching Adult Learners (F)
Educational Studies 780 Mentoring, Consulting and Coaching the Postsecondary Learner (as needed)
Elementary Education 413 (613) Mental Health in Schools (as needed)
Elementary Education 430 (630) Problems in Teaching Language Arts and Social Studies in the Elementary School (as needed)
Elementary Education 433 (633) Contemporary Approaches to Teaching Arithmetic and Science in the Elementary School (as needed)
Elementary Education 455 (655) Child Psychology (as needed)
Elementary Education 490 (690) Workshop in Education: [Title of Workshop] (as needed)
Elementary Education 730 Methods of Teaching Language Arts and Social Studies in the Elementary Classroom (F)
Elementary Education 731 Methods of Teaching Mathematics and Science in the Elementary Classroom (Sp)
Elementary Education 793 Student Teaching Grades K-4 (F, Sp)
Elementary Education 794 Student Teaching Grades 5-8 (F, Sp)
Elementary Education 795 Student Teaching Grades K-6 (F, Sp)
Human Learning 311 Technology Integration (F, Sp)
Human Learning 325 Educational Psychology (F, Sp)
Instructional Design and Technology 710 Foundations of Distance Learning (as needed)
Instructional Design and Technology 720 Instructional Design (as needed)
Instructional Design and Technology 730 Teaching and Learning at a Distance (as needed)
Instructional Design and Technology 740 Creating Collaborative Learning Environments (as needed)
Instructional Design and Technology 750 Educational Technology (as needed)
Library Service 414 (614) Librarianship and the Administration of the School Library and Media Center (as needed)
Library Service 425-426 (625-626) Technical Services I-II (as needed)
Library Service 433 (633) Information Resources and Services (as needed)
Library Service 451 (651) Children's Literature (F, Sp)
Library Service 452 (652) Books and Non-Print Materials for Adolescents and Adults (Sp)
Library Service 475 (675) Introduction to Educational Media-Materials, Techniques and Preparation (as needed)
Library Service 476 (676) Advanced Educational Media Production (as needed)
Library Service 715 Foundations of Library and Information Services (as needed)
Library Service 725 Information Representation, Access, and Retrieval (as needed)
Library Service 735 Resource Organization, Description, Access and Analysis (as needed)

Library Service 745 School Library Administration and Management (as needed)
Library Service 755 Literature for Children and Young Adults (Sp)
Library Service 765 School Library Internship (Grades Pre K-6) (as needed)
Library Service 766 School Library Internship (Grades 7-12) (as needed)
Reading 100 The Strategic Dimension of Reading (F, Sp)
Reading 433 (633) Reading in the Content Area Classroom (F)
Reading 438 (638) Classroom Approaches to the Teaching of Reading in the Elementary School (F)
Reading 448 Reading Instruction, Assessment, and Intervention in Elementary School (F)
Reading 700 Foundations of Literacy Development (F, Sp)
Reading 710 Assessment, Diagnosis and Intervention in the Reading Classroom (Su)
Reading 720 Practices for Differentiated Literacy Instruction (F)
Reading 730 Reading as a Neurolinguistic Process (Su)
Reading 740 Literacy Practicum (F)
Secondary Education 411 (611) Instructional Strategies: Science (F)
Secondary Education 412 (612) Instructional Strategies: Mathematics (F)
Secondary Education 413 (613) Instructional Strategies: Modern Foreign Language (F)
Secondary Education 414 (614) Instructional Strategies: English (F)
Secondary Education 415 (615) Instructional Strategies: Social Studies (F)
Secondary Education 420 (620) Workshop in Education: [Title of Workshop] (as needed)
Secondary Education 730 Practical Teaching Applications for the Middle School Classroom (as needed)
Secondary Education 731 Advanced Instructional Practices: Teaching in the Secondary Classroom (F, Sp)
Secondary Education 793 Student Teaching Grades 7-8 (F, Sp)
Secondary Education 794 Student Teaching Grades 9-12 (F, Sp)
Secondary Education 795 Student Teaching Grades 7-12 (F, Sp)
Special Education 300 (500) Children with Exceptionalities (F, Sp)
Special Education 386 (586) Practicum in Special Education (as needed)
Special Education 387 (587) Practicum in Teaching Children with Exceptionalities (Birth-6) (as needed)
Special Education 415 (615) Characteristics and Needs of Children with Moderate/Severe Exceptionalities (as needed)
Special Education 416 Math for Children with Exceptionalities (as needed)
Special Education 417 (617) Clinical Field Experience (F)
Special Education 418 (618) Clinical Field Experience II (Sp)
Special Education 419 (619) Clinical Field Experience III (F)
Special Education 420 (620) Language Development and Disorders (F)
Special Education 425 Sign Language (as needed)
Special Education 430 (630) Early Childhood-Special Education (F)
Special Education 431 (631) Behavior Management for the Young Child (as needed)
Special Education 432 (632) Educational Procedures for Children with Exceptionalities (as needed)
Special Education 433 (633) Advanced Methods for Teaching Students with High Incidence (Sp)
Special Education 434 (634) Literacy Interventions for Students with Disabilities (Sp)
Special Education 435 (635) Special Education Assessments and Procedures (F)
Special Education 437 (637) Assessment of Children with Exceptionalities (as needed)
Special Education 440 (640) Inclusive Practices for the Elementary Classroom (Sp)
Special Education 450 (650) Characteristics and Needs of the Gifted/Talented (as needed)
Special Education 451 (651) Strategies and Programs for Teaching the Gifted/Talented (as needed)
Special Education 452 (652) Advanced Methods in Gifted Education (as needed)
Special Education 453 (653) Theories and Trends in Gifted Education (as needed)
Special Education 460 (660) Behavior Strategies and Interventions (F)

Special Education 470 (670) Inclusive Practices for the Middle and Secondary Classroom (F)
Special Education 490 (690) Workshop in Special Education: [Title of Workshop] (as needed)
Special Education 680 Strategies for Differentiation in the Inclusive Classroom (F, Sp, Su)
Special Education 701 Workshop in Special Education [Title of Workshop] (as needed)
Special Education 702 Advanced Behavioral Interventions in Inclusive Settings (as needed)
Special Education 703 Assessment for Individuals with Autism Spectrum Disorder (as needed)
Special Education 704 Introduction to Autism Spectrum Disorder (as needed)
Special Education 709 Practicum in Gifted Education (Sp)
Special Education 710 Advanced Practicum in Teaching Children with Exceptionalities (as needed)
Special Education 712 Research in Single Case Design (LD, CC, DD or EBD) (Su-even)
Special Education 720 Language Development and Disorders of the School-Age Child (Su-even)
Special Education 730 Trends in Special Education (Su-odd)
Special Education 740 Advanced Methods in LD, CC, DD or EBD (Su-even)
Teacher Education 211 Introduction to Teaching (F,Sp)
Teacher Education 301 Foundations of Education (as needed)
Teacher Education 302 Integrated Teaching Strategies (F, Sp)
Teacher Education 303 Diagnosis and Evaluation (Sp)
Teacher Education 305 (505) Classroom Management (F)
Teacher Education 340 Applied Science in Elementary Education (F)
Teacher Education 342 Applied Mathematics in Elementary Education (F)
Teacher Education 350 Applied Social Studies and Language Arts (F)
Teacher Education 380 Teaching Strategies in Middle Level Content (F)
Teacher Education 401 Seminar in Teaching (F, Sp)
Teacher Education 402 Student Teaching Grades 1-4 (F, Sp)
Teacher Education 403 Student Teaching Grades 5-8 (F, Sp)
Teacher Education 404 Student Teaching Grades 7-8 (F, Sp)
Teacher Education 405 Student Teaching Grades 9-12 (F, Sp)
Teacher Education 406 Student Teaching Grades K-8 (F, Sp)
Teacher Education 407 Student Teaching in Special Education (K-5) (F, Sp)
Teacher Education 408 Student Teaching in Special Education (6-8) (F, Sp)
Teacher Education 409 Student Teaching in Kindergarten (F, Sp)
Teacher Education 413 Student Teaching in Special Education (9-12) (F, Sp)
Teacher Education 450 (650) Designing Curriculum for the Early Adolescent (Sp)
Teacher Education 475 (675) Early Literacy Practicum (Sp)
Teacher Education 701 Workshop in Teacher Education [Title of Workshop] (as needed)
Teacher Education 705 Advanced Strategies for Classroom Management (F, Sp, Su)
Teacher Education 712 Learning Theory and Cognition Applied to the School Setting (F)
Teacher Education 716 Growth and Development in School Age Students (F, Sp, Su)
Teacher Education 725 Teaching Language Arts and STEM for Middle School 5-9 Teachers (as needed)
Teacher Education 726 Engineering and Technology for Middle School Teachers (as needed)
Teacher Education 730 Principles and Practices of Effective Teaching (F, Sp)
Teacher Education 780 Principles and Techniques of Teaching (F, Sp)
Teacher Education 789 Application of Academic Language for Planning and Instruction (F, Sp)
Teacher Education 791 Master's Culminating Experience (F, Sp)
Teacher Education 795 Practicum in Initial Licensure (as needed)
Teaching English as a Second Language 700 Principles of Teaching English as a Second Language (F)
Teaching English as a Second Language 710 Strategies for Teaching English as a Second Language (Sp)

# Department of Health and Human Performance 

Dr. Todd E. Sherman, Chair<br>3006 Kathleen and Tom Elam Center<br>731-881-7310<br>fax 731-881-7319

## Faculty

Laura L. Brown, Matthew P. Cupples, Stuart M. Currie, Tim Dasinger, Alison Ellis, Deborah J. Gibson, Peter McGahey, Todd E. Sherman, Tara Tansil-Gentry, Laura K. Taylor, Janet M. Wilbert, Matthew Yeomans

## Mission

The department prepares career ready students for employment or graduate study in Health and Human Performance. Faculty and students engage in public service and scholarship related to the needs of a diverse and dynamic society through a commitment to the development and maintenance of lifetime behaviors that promote health, fitness, sport, and leisure activities.

## HHP Expected Outcomes

The faculty expect each student who graduates with a major in Health and Human Performance to demonstrate appropriate mastery of the following:

## Exercise Science and Wellness Concentration

Students will be able to:

1. Identify and explain the principles and theories within the domains of exercise science and wellness.
2. Apply the knowledge, skills, and abilities within the domains of exercise science and wellness.
3. Demonstrate decision-making influenced by evidence-based practices within the domains of the exercise science and wellness.
4. Demonstrate proficiency in technology within the exercise science and wellness domains.
5. Assess, plan, and implement physical activity and/or exercise interventions in clinical, health-related, and training environments.
6. Demonstrate awareness of professional development.

## K-12 Licensure Physical Education and Health

Students will be able to:

1. Demonstrate competency in health and physical education content and disciplinary concepts.
2. Understand how individuals learn and develop and can provide developmentally appropriate opportunities in health and physical education.
3. Understand individual and group motivation and behavior to create a positive learning environment.
4. Plan and implement a variety of developmentally appropriate instructional strategies in Health and Physical Education.
5. Understand and use assessment and technology to foster student physical activity development.
6. Pursue lifelong learning through professional development and physical activity.
7. Demonstrate behaviors essential to becoming effective Health/Physical Education professionals.

## Public Health

Students will be able to:

1. Discuss essential services that public health programs provide to protect and improve the health of populations.
2. Use research tools and analytical methods to critically analyze, monitor and assess the health status of populations.
3. Understand the impact of policies and legislation on individual and population health.
4. Apply evidence-based principles to the process planning, development, budgeting, management, and evaluation of public health organizations and initiatives.
5. Effectively communicate public health messages to a variety of audiences from professionals to the general public.

## Major

The Department of Health and Human Performance offers a B.S. degree in Health and Human Performance with a choice of 4 concentrations that can lead to a myriad of career choices.

## K-12 Licensure (5213)

The K-12 Licensure program is CAEP and State Board approved offering both a Physical Education and Health and Wellness endorsement. Students engage with faculty in community service, research, attend and present at local and national conferences. Students participate in a variety of field-based teaching experiences prior to a culminating semester of student teaching. Our unique program is an ideal fit for students who value healthenhancing physical activity, physical literacy, and sports. Highly qualified and professional graduating students are licensed to teach K-12 Physical Education, and Health and Wellness. Students interested in coaching are also invited to pursue this concentration. Please see the Office of Educator Preparation Program in the College of Education, Health, and Behavioral Sciences' section for admission guidelines and licensure information.

## Exercise Science and Wellness (5216)

This concentration provides a strong foundation for graduate study and careers in Physical Therapy, Occupational Therapy, Chiropractic, Cardiac Rehabilitation, Physicians Assistant as well as many other healthrelated professions. This concentration is also ideal for Students interested in pursuing bachelors level careers in Corporate Wellness or Strength and Conditioning Coaching

## Human Performance (5218)

This concentration allows the student to customize a program by combining areas of interest into one degree program. Additionally, this program can lead to professional or graduate studies through careful selection of coursework. A Human Performance graduate can be successful in many career venues when working closely with an academic advisor.

## Public Health (5219)

Students selecting this concentration will explore the concepts of population health and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations. This concentration is ideal for students with career interests in public health, disease prevention and health promotion, clinical health care delivery and health care administration.

## Minors

## Athletic Coaching (5240) (18 Hours)

Health 220, HPED 412, HPER 327 and 9 hours selected from ATRN 200, HPED 201, 202, 203, 204, 205, 390, $460,465,470,475,485$, HPER 350, or 435.

## Public Health (5219) (18 Hours)

Health and Human Performance 330, Health 111, 427 and 428. Select 6 hours from CFS 100, COMM 240, HHP 325, 351, 353, 360, HHP 406, HLTH 441, 442, MBIO 311, NUTR 100, PHIL 350, 355, SOC 320 or SWRK 355, SWRK 365, 425.

## Dual Concentrations

Students wishing to pursue dual concentrations within the Department of Health and Human Performance must complete requirements for both academic programs. Dual concentrations must utilize the same catalog year and be completed concurrently prior to graduation. At least 21 hours must be unique to each concentration.

## B.S. in Health and Human Performance Concentration: Exercise Science and Wellness (5216)

 Curricular RequirementsThe student must complete the following minimal requirements and earn a grade of C or better in all courses taken in the department and in Zoology 251.A. University General Education Core (38-40 hours)English 110 or 111, and 112$6 / 7$
Communications 230 ..... 3
Biology 140 and Zoology 251 (minimum grade of C required) ..... 8
Mathematics 110 or 140 or above ..... 3-4
Fine Arts (Aesthetics) Elective (choose from approved General Education listing) ..... 3
Humanities Electives (choose from approved General Education listing) ..... 9
Health 111 ..... 3
Nutrition 100 ..... 3
B. Additional HHP Electives (48 hours)
Choose 48 hours from the following list of courses. Hours can be taken in any combination. No morethan 12 hours from any one area.Athletic Training; Biology 130, 140, 300, 336; Chemistry 111-112 or 121-122, 310, 319, 341, 342,Biochemistry; Child and Family Studies 100; Computer Science 201; Exercise Science; Health andHuman Performance; Health; Human Performance; Heath and Physical Education; Microbiology251, 310, or 311; Nutrition; Philosophy 110, 120, 160, 350; Physical Activity (max 4-hr); Physics$150,101-102$ or 211-212; Psychology 101, 312, 313, 325 or 350; Sociology 101, 201, 202; SportManagement; Mathematics 210; Gerontology; Nursing; Zoology; Military Science \& Leadership
C. Exercise Science \& Wellness Concentration Core (31 hours) Human Performance 327, 350, 435, 440 ..... 12
Health \& Human Performance 406 ..... 3
Exercise Science 305, 429, 430, 431, 433, 434 ..... 16
D. World of Practice (12 hours)Human Performance 49112$75 \%$ of Exercise Science \& Wellness Concentration Core coursework must be taken at this university.Included in the $75 \%$, the following courses must be taken at the main UT Martin campus: Exercise Science429, 431, 433, 434; Human Performance 327 and 491.
Minimum hours required for B.S.H.H.P. degree ..... 120
B.S. in Health and Human Performance Concentration: Human Performance (5218)

## Curricular Requirements

The student must complete the following minimal requirements and earn a grade of C or better in all courses taken in the department.
A. University General Education Core (38-39 hours)*English 110 or 111, and 1126/7
Communications 230 ..... 3
Biological and Physical Systems (choose from approved General Education listing) ..... 4
ZOOL 201 or 251 ..... 4
Mathematics (choose from approved General Education listing) ..... 3
Fine Arts (Aesthetics) Elective (choose from approved General Education listing) ..... 3
Humanities Electives (choose from approved General Education listing) ..... 9
Health 111 ..... 3
Nutrition 100 ..... 3
B. Additional HHP General Education Requirements (9 hours)
Social and Behavioral Sciences Electives (choose from approved General Education listing) ..... 6
Humanities Elective (choose from approved General Education listing) ..... 3
C. HHP Human Performance Concentration Core (30 hours)
Exercise Science 305, 429, 430 ..... 7
Health 220 ..... 3
Health and Human Performance 330 and 360 ..... 6
Human Performance 302, 327, 350, 440, 435 or Nutrition 322 or 433 ..... 14
D. HHP Human Performance Optional Electives (43 hours)Health and Human Performance will only accept 12 hours from a single discipline other than HHPdepartmental courses.Forty-three (43) hours may be taken from the following content areas:Athletic Training, Biochemistry, Biology, Chemistry, Child and Family Studies, Driver Safety Education,Exercise Science, Gerontology, Health, Health and Human Performance, Health and PhysicalEducation, Human Learning, Human Performance, Mathematics, Microbiology, Military Science\& Leadership, Nursing, Nutrition, Philosophy, Physical Activity (PACT-limit 4-hours), Physics,Psychology, Social Work, Sociology, Special Education 300, Sport Business, Teacher Education 211,Zoology. It is recommended to take HPER 303 for additional success.

Note: Community college classes taken in the following programs will be accepted into the Health and Human Performance Human Performance concentration in Section D, Optional Electives, to fulfill up to 22 hours.
Jackson State Community College--Respiratory Care Technology, Radiology, Physical Therapist Assistant, Medical Laboratory Technician, Emergency Medical TechnicianColumbia State Community College--Respiratory Care Technology, Radiology, Emergency Medical TechnicianVolunteer Community College--Respiratory Care, Radiology, Physical Therapist Assistant, Emergency MedicalTechnician
Dyersburg State Community College--Emergency Medical Technician
Southwest Community College--Radiology, Physical Therapist Assistant, Medical Laboratory Technician, Emergency Medical Technician, Biotechnology
Western Kentucky Community and Technical College--Clinical Laboratory Technician, Phlebotomy, DentalAssisting, Dental Hygiene, Diagnostic Medical Sonography, Health Physics, Health Science Technology,Medical Information Technology, Paramedic Completion Program, Pharmacy Technology, PhysicalTherapist Assistant, Radiography, Respiratory Care, Polysomnography, Surgical Technology
Volunteer State Community College--Allied Health Option, Dental Assistant, Diagnostic Medical Sonography,Medical Laboratory Technology, Ophthalmic Technology, Sleep Diagnostics Technology*General Education requirements are met if the student transfers associate degree credits from an articulatedinstitution. For students who have not completed an associate's degree or who are transferring from aninstitution where there is no articulation agreement, courses will be assessed individually. A single coursemay not be used in multiple categories.
$75 \%$ of HHP Human Performance Concentration Core coursework must be taken at this university.
Minimum hours required for B.S.H.H.P. degree120/121
B.S. in Health and Human Performance Concentration: Licensure K-12 (5213)
Curricular Requirements
The student must complete the following minimal requirements and earn a grade of C or better in all coursestaken in the department.
A. University General Education Core (38-39 hours)
Biology 110 and any 4 hours from Biological and Physical Systems General Education listing ..... 8
English 110 or 111, and 112 ..... 6/7
Communications 230 ..... 3
Health 111 ..... 3
Psychology 101 ..... 3
Mathematics (choose from approved General Education listing) ..... 3
Fine Arts (Aesthetics) Elective (choose from approved General Education listing) ..... 3
Humanities Electives (choose from approved General Education listing) ..... 9
B. Additional HHP General Education Requirements (9 hours)
Social \& Behavioral Sciences Elective (choose from approved General Education listing) ..... 3
Health 220 ..... 3
Nutrition 100 ..... 3
C. Licensure K-12 Concentration Core (51 hours) Health 475 ..... 3
Health and Human Performance 351, 353 ..... 6
Health and Physical Education 300, 301, 320, 321, 410, 412 ..... 16
Human Performance 327, 350, 432. ..... 9
Special Education 300 or Health and Physical Education 304 ..... 3
Physical Activity Choose (1 course) from 117, 124, 134, 135, 146, 148, 160, 170 (ST: Soccer), 175, 190 ..... 2
Choose 12 hours from the following:
TCED 302, HPED 201, 202, 203, 204, 205, 280, 460, 465, 470, 475, HPER 406, 440
D. Professional Education Component (22 hours)
Health and Physical Education 308, 309, 411 ..... 9
Teacher Education 211, 405, 406 ..... 13
$75 \%$ of Licensure K-12 Concentration Core coursework must be taken at this university. Included in the 75\%,the following courses must be taken at the main UT Martin campus: Health and Physical Education 308, 309,411 (select two of the three) and Teacher Education 211, 405 and 406.
Minimum hours required for B.S.H.H.P. degree ..... 120/121
B.S. in Health and Human Performance Concentration: Public Health (5219)

## Curricular Requirements

The student must complete the following minimal requirements and earn a grade of C or better in all courses taken in the department.
A. University General Education Core (38-39 hours)**General Education requirements are met if the student transfers associate degree credits froman articulated institution. For students who have not completed an associate's degree or who aretransferring from an institution where there is no articulation agreement, courses will be assessedindividually. A single course may not be used in multiple categories.
English 110 or 111, and 112 ..... 6/7
Communications 230 ..... 3
Biology 140 and Zoology 251 ..... 8
Mathematics 210 ..... 3
Fine Arts (Aesthetics) Elective (choose from approved General Education listing) ..... 3
Health 111 ..... 3
Sociology 201 ..... 3
Humanities Electives (choose from approved General Education listing) ..... 6
Philosophy 160 ..... 3
B. HHP Public Health Concentration Core (42 hours)
Communications 240 ..... 3
English 325 ..... 3
Health 220, 427, 428, 441 ..... 12
Health 442 or Political Science 362 ..... 3
Health and Human Performance 330, 351, 353, 360 ..... 12
Human Performance 327 ..... 3

Nutrition 100 .............................................................................................................................. 3
Sociology 202 ............................................................................................................................ 3
C. Public Health Concentration Optional Electives (28 hours)

No more than 12 hours can be selected from any one area outside the Department of Health \& Human Performance.
Select from the following content areas: Biology, Chemistry, Child and Family Studies, Communications, Exercise Science, Health, Health and Human Performance, Human Performance, General Studies 101, Gerontology, Marketing, Microbiology, Natural Resource Management, Nursing, Nutrition, Physics, Philosophy, Psychology, Sociology, Social Work, Zoology.
D. World of Practice (12 hours)
Health 491 ................................................................................................................................ 12

Minimum hours required for B.S.H.H.P. degree....................................................................... 120

## Departmental Scholarships

Four \$1,000 scholarships for first-time freshmen and four \$1,000 upperclassman scholarships for Health and Human Performance majors are awarded each year by the Health and Human Performance faculty to students demonstrating an outstanding academic record and professional potential. Applications are available at http://www.utm.edu/departments/hhp/Scholarships.php and should be filed no later than February 15 each year.

## Student Organizations

The HAHS Club (Health and Allied Health Students) is a student organization that focuses on the importance of professional development through seminars, workshops, conferences, webinars and networking. The club organizes a professional development conference that is available to both high school and college students in addition to sponsoring seminars on topics that are open to the campus and community.

The SHAPE Club (Sports, Health, Athletics, Physical Education) is the student professional organization which offers the Health and Human Performance major an opportunity for personal and professional growth through involvement in departmental activities and campus events. Members are frequently selected for leadership positions in the Tennessee Association of Health, Physical Education, Recreation and Dance and are eligible to receive this organization's Outstanding Student Award. This recognition qualifies them for the regional and National SHAPE America Outstanding Student Awards. Since 1987, twelve UT Martin students have received these distinguished recognitions.

## Liability Insurance Coverage

The student must provide proof of liability insurance coverage to the Department of Health and Human Performance prior to receiving permission to enroll in courses which will necessitate interaction between the undergraduate student and children in K-12 schools, athletes or patients/clients in other assigned settings. Liability insurance can be purchased through the Department of Health and Human Performance, or the Student Tennessee Education Association.

## Non-Licensure Practicum/Internship

## Internship

Students in Exercise Science and Wellness participate in a 10 -week internship, which may be in the areas such as occupation therapy, physical therapy, cardiac rehabilitation, kinesiology, corporate fitness or hospital
wellness. Application must be made one semester in advance of the internship placement. All non-licensure internships require approximately 40 hours per week. All Core Coursework must be completed prior to enrolling in the internship. No other course work may be taken during the internship without departmental approval, and if so, should not exceed one course or maximum of four hours. Students may or may not receive compensation as a result of this experience.

## Additional Costs

It is the responsibility of the student to provide for and/or make arrangements for transportation to and from his or her practicum and internship assignments. Students must also be appropriately dressed as defined by their supervisor.

## Student Teaching

Students selecting the K-12 Licensure option serve separate seven-and-one-half week student teaching experiences in an elementary school and a middle or high school setting. Information regarding application to student teaching and other requirements are addressed in the College of Education, Health, and Behavioral Science section of the catalog.

## Courses Offered by Department of Health and Human Performance

Athletic Training 200 Basic Principles of Athletic Training and Taping (as needed)
Athletic Training 207 Athletic Training Techniques (as needed)
Athletic Training 300 (500) Prevention of Athletic Injuries (as needed)
Athletic Training 301 Evaluations of the Lower Body (as needed)
Athletic Training 302 Evaluation of the Upper Body (as needed)
Athletic Training 400 (600) Therapeutic Exercise (as needed)
Athletic Training 401 Therapeutic Modalities (as needed)
Athletic Training 402 Health Care Administration/Professional Development and Responsibility (as needed)
Athletic Training 700 Advanced Sport Medicine (F, Sp)
Driver Safety Education 420 (620) General Safety Education (Su)
Driver Safety Education 430 (630) Basic Driver and Traffic Safety Education (Su)
Driver Safety Education 435 (635) Advanced Driver and Traffic Safety Education (Su)
Exercise Science 305 Applied Human Movement (F, Sp)
Exercise Science 316-317 Exercise Science Practicum (as needed)
Exercise Science 318 Exercise Science and Wellness Directed Practicum (as needed)
Exercise Science 319 Exercise Science and Wellness Practicum (F, Sp)
Exercise Science 429 Applications in Exercise Physiology (F, Sp)
Exercise Science 430 Exercise Physiology (F, Sp)
Exercise Science 431 Exercise Testing and Prescription: General Populations (F, Sp)
Exercise Science 433 Exercise Testing and Prescription: Special Populations (F, Sp)
Exercise Science 434 Cardiovascular Exercise Physiology (F, Sp)
Exercise Science 436 Introduction to Electrocardiograph (as needed)
Health 111 Principles and Concepts in Personal Health (F, Sp)
Health 111H Honors Principles and Concepts in Personal Health (F)
Health 220 Advanced First Aid, CPR, and AED (F, Sp)
Health 221 CPR and AED Recertification (F, Sp)
Health 303 Pharmacology and Sports (as needed)

Health 427 Principles of Health Education and Promotion (F, Sp)
Health 428 Public Health Practices (as needed)
Health 441 Planning, Implementing and Evaluating Community Health Initiatives (as needed)
Health 442 Seminar in Policy Development and Advocacy (F, Sp)
Health 475 Health Methods (as needed)
Health 491 Public Health Internship (as needed)
Health and Human Performance 325 Stress Management (as needed)
Health and Human Performance 330 Introduction to Epidemiology (F, Sp)
Health and Human Performance 351 Substance Abuse Prevention (F, Sp)
Health and Human Performance 353 Human Sexuality (F, Sp)
Health and Human Performance 360 Healthy Aging (Sp)
Health and Human Performance 406 Psychosocial Aspects of Physical Activity (as needed)
Health and Human Performance 485 Workshop in Health: [Title of Workshop] (as needed)
Health and Physical Education 20-Topics in Sports Officiating [Name of sport] (as needed)
Health and Physical Education 280 PRAXIS Seminar (as needed)
Health and Physical Education 300 Anatomy and Exercise Physiology (Sp)
Health and Physical Education 301 Anatomy and Exercise Physiology Lab (Sp)
Health and Physical Education 304 (504) Adapted Physical Education (as needed)
Health and Physical Education 308 Class Management for Health and Physical Education (F)
Health and Physical Education 309 Methods of Teaching Elementary Health and Physical Education (Sp)
Health and Physical Education 310 Methods of Teaching Physical Education and Physical Activity for the Classroom Teacher (F, Sp)
Health and Physical Education 320 Foundation and Sport Skills (F, Sp)
Health and Physical Education 321 Individual Lifetime Activity (Sp)
Health and Physical Education 390 Practicum (F, Sp)
Health and Physical Education 410 Teaching Models in Physical Education (F)
Health and Physical Education 411 Secondary Instruction Strategies and Curriculum Development (F)
Health and Physical Education 412 Public Relations for Teachers and Coaches (Sp)
Health and Physical Education 460 Theory and Techniques of Coaching Baseball/Softball (as needed)
Health and Physical Education 465 The Theory and Techniques of Coaching Basketball (as needed)
Health and Physical Education 470 The Theory and Techniques of Coaching Football (as needed)
Health and Physical Education 475 The Theory and Techniques of Coaching Volleyball (as needed)
Health and Physical Education 485 Workshop in Physical Education: [Title of Workshop] (as needed)
Human Performance 302-303 Fitness and Health Promotion Practicum (as needed)
Human Performance 315 Historical and Philosophical Perspectives of Health, Physical Education and
Human Performance 327 Principles of Fitness Training (F, Sp)
Human Performance 350 Motor Development and Learning Across the Life Span (F, Sp)
Human Performance 360 Firearm and Boating Safety (as needed)
Human Performance 415 Professional Leadership (F, Sp)
Human Performance 432 Sport and Exercise Psychology (F, Sp)
Human Performance 435 Nutrition for Health, Fitness and Sport (F, Sp)
Human Performance 440 Evaluation in Human Performance (F, Sp)
Human Performance 485 Workshop in Human Performance [Title of Topic] (F, Sp)
Human Performance 491 Internship (F, Sp, Su)
Physical Activity 112 Scuba I-Open Water (F, Sp)
Physical Activity 113 Scuba II-Advanced Scuba and Rescue (F, Sp)
Physical Activity 114 Scuba III-Dive Master (F, Sp)

Physical Activity 115 Swimming (F, Sp)
Physical Activity 116 Lifeguard Training (as needed)
Physical Activity 117 Water Safety Instructor (as needed)
Physical Activity 118 Judo I (F, Sp)
Physical Activity 119-120 Martial Arts I-II (F, Sp)
Physical Activity 121 Marksmanship/Weapons (as needed)
Physical Activity 122 Aerobic Walking/Jogging (F, Sp)
Physical Activity 123 Hydrorobics (F, Sp)
Physical Activity 124 Rhythmic Aerobics (F, Sp)
Physical Activity 125 Weight Training (F, Sp)
Physical Activity 126 Archery (F, Sp)
Physical Activity 127 Advanced Archery (F, Sp)
Physical Activity 128 Badminton (Sp)
Physical Activity 129 Advanced Judo (F, Sp)
Physical Activity 130 Hapkido (as needed)
Physical Activity 131 Women's Self-Defense (F, Sp)
Physical Activity 132 Advanced Women's Self-Defense (as needed)
Physical Activity 133 Tai Chi (as needed)
Physical Activity 134 Yoga/Stretching Techniques (F, Sp)
Physical Activity 135 Golf (F, Sp)
Physical Activity 136 Intermediate Golf (F, Sp)
Physical Activity 137 Basic Rifle Marksmanship (as needed)
Physical Activity 138 Country/Western and Line Dancing (as needed)
Physical Activity 139 Soccer (F, Sp)
Physical Activity 140 Tumbling and Gymnastics (as needed)
Physical Activity 141 Ballroom/Swing Dance (as needed)
Physical Activity 142 Intermediate Gymnastics (as needed)
Physical Activity 143 Gymnastics for Cheerleading (as needed)
Physical Activity 144 Functional Weight Training (as needed)
Physical Activity 145 CardioKickboxing (F, Sp)
Physical Activity 146 Cardio Fitness (F, Sp)
Physical Activity 147 Boxercise (F, Sp)
Physical Activity 148 Pilates (F, Sp)
Physical Activity 149 Clay Target (as needed)
Physical Activity 150 Pickleball and Paddle Tennis (as needed)
Physical Activity 151 Faculty/Staff Fitness (F, Sp)
Physical Activity 152 Snowskiing/Snowboarding (as needed)
Physical Activity 153 Run Your First 5k (F, Sp)
Physical Activity 154 Disc Golf (as needed)
Physical Activity 155 Racquetball (F, Sp)
Physical Activity 156 Advanced Disc Golf (as needed)
Physical Activity 157 BARRE (F, Sp)
Physical Activity 158 Beginning Chess (F, Sp)
Physical Activity 160 Tennis (F, Sp)
Physical Activity 161 Intermediate Tennis (F, Sp)
Physical Activity 165 Backpacking (as needed)
Physical Activity 170 Special Topics in Physical Education (as needed)
Physical Activity 175 Volleyball (F, Sp)

Physical Activity 180 Intermediate Basketball (as needed)<br>Physical Activity 182 Flag Football (F)<br>Physical Activity 185 Physical Fitness Training (as needed)<br>Physical Activity 190 Softball (F)<br>Physical Activity 195 Varsity Athletics (F, Sp)<br>Physical Activity 214 Master Scuba Diver (F, Sp)

Complete course descriptions can be found in the Course Description section of the catalog.

## Department of Nursing

Dr. Mary E. Radford, Chair<br>136 Gooch Hall<br>731-881-7131<br>fax 731-881-7939

Faculty

Diane L. Austin, Nicole Blackburn, Cbristy A. Blount, Cassie Burks, Gloria A. Browning, Carmen Corder, Peggy A. Davis, Julie P. Floyd, Beth R. Hopper, Dawn Lattus, Linda W. Luther, Alissa R. Parrish, Mary E. Radford, Anita Rogers, Esther C. Sellars, Victoria S. Seng, Samantha Simpson, Cbristy A. Stubblefield, Susan Winters.

## Mission

The faculty of the Department of Nursing accepts the philosophy of The University of Tennessee at Martin supporting the goal to educate and engage responsible citizens to lead and serve in a diverse world. The Department of Nursing's mission is to prepare caring, compassionate, professional nurse generalists committed to advancing the profession of nursing through leadership and service in diverse healthcare communities and the world.

## End of Program Student Learning Outcomes

Upon successful completion of the program, the graduate is expected to:

1. Demonstrate synthesis of theoretical and empirical knowledge in developing and implement nursing practice reflecting understanding of the arts sciences, humanities and the discipline of nursing.
2. Provide safe patient-centered care utilizing clinical judgment and best current evidence.
3. Apply principles of professionalism and leadership to provide patient care across the lifespan in a variety of healthcare settings.
4. Collaborate with patients, families and nursing/interprofessional teams to enhance positive patient outcomes through quality improvement processes.
5. Integrate health promotion practices into the care of diverse individuals, families and populations in a global society.
6. Utilize appropriate use of informatics and technology to provide safe patient-centered care for diverse individuals, families, and populations across the lifespan.

## Major

## Bachelor of Science in Nursing (5310, 5311))

Nursing is a profession for individuals interested in a lifetime of challenge. As a critical part of the healthcare system, nurses use skills in critical thinking, problem solving and effective communication to assist individuals, families and groups in retaining, attaining and maintaining optimal levels of health. Nursing requires a genuine interest in people combined with the ability to pull together knowledge from several disciplines and the physical stamina necessary to meet fast-paced demands.

The B.S.N. nursing curriculum is a four-year program which combines general education and nursing, with nursing content beginning in the sophomore year. Students majoring in B.S. Nursing take 72 semester hours of nursing courses and 48 semester hours of required and elective non-nursing courses. Upon successful completion of the B.S.N. program, the graduate is awarded the Bachelor of Science in Nursing degree (B.S.N.) by the University of Tennessee. Graduates with the B.S.N. degree demonstrate the competencies necessary for entry into nursing practice and are eligible to take the National Council Licensure Examination for licensure as a registered professional nurse. The Bachelor of Science in Nursing degree program has full approval of the Tennessee Board of Nursing and full accreditation from the Accreditation Commission for Education in Nursing (ACEN) (3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, telephone 404-9755000).

A national need for professional nurses with a wide variety of practice options allows great flexibility and mobility for graduates. Graduates with a baccalaureate in nursing can choose from provision of direct patient care, teaching, administration, research, case management and marketing positions in hospital, community, educational, military, government, industrial and expanded-practice settings. Graduate degrees at the master's and doctoral levels allow greater specialization and further expand job opportunities.

## Designation of a Minor

Nursing does not offer or require a minor; however, a nursing student may declare a minor in a non-nursing subject area and have the minor listed on the permanent record under the following conditions:

1. minors must be officially approved and described in the university catalog.
2. all requirements for the minor as set forth by the granting department must be met.
3. courses taken to satisfy the minor may also be used to satisfy nursing requirements even if no minor were declared.
4. the student is responsible to notify academic records and complete any required paperwork necessary to declare a minor.

## Admission, Advanced Standing, Retention, and Readmission

The admission, advanced standing, retention and readmission policies of the Department of Nursing may differ from other programs in the university because limited enrollment is necessary to provide student clinical experiences while assuring safe patient care and adherence to standards required for state licensure of registered professional nurses.

## Admission Requirements

1. Be admitted to the University of Tennessee at Martin as a degree-seeking undergraduate student.
2. Minimum cumulative college GPA of 2.75
3. Prerequisite Courses: Math 140 or Math 100/110, Psychology 101, Microbiology 251, Zoology 251, Zoology 352 or the equivalent of these courses
4. A minimum grade of " C " is required in all prerequisite courses.
5. One (1) science prerequisite course may be repeated only once; if repeated, the second earned letter grade of the repeated course will be used in the GPA calculation (regardless if grade is higher or lower).
6. Science Courses that are seven (7) years or older will not be transferrable. This does not apply to RNBSN applicants.
7. Students who are transferring from another nursing program must submit a letter of good standing from the Dean/Director of the previous nursing program.
8. Transfer applicants with less than a grade of "C" in two (2) Nursing courses will not be eligible. This includes repeated Nursing courses in which a grade above " C " was earned.
9. The ATI TEAS is the required pre-admission test for entrance into the nursing program. Total scores for the TEAS are reported as levels, and a total score at the PROFICIENCY LEVEL of achievement is the minimum acceptable level for candidates applying to the nursing program. The TEAS can only be taken a maximum of two (2) times for one application cycle. Applicants will be ranked based upon the highest total percentile score in case of identical scores. This test is not required for applicants entering the RNBSN option.
10. Candidates may be required to complete an interview process.
11. If indicated, TOEFL scores-Required for non-native English speakers seeking admission to BSN Program or RN-BSN Program at the University of Tennessee at Martin. Applicants must achieve a TOEFL score of at least 550 on the paper test of 80 on the Internet-based test if their native language is not English. A minimum speaking score of 26 is also required. Official scores are required prior to admission and completed within two years of admission to the nursing program. Without acceptable scores, there is not English language conditional admit available.
12. Applications must be received in the Department of Nursing by February 15 before the fall semester seeking admission.

Students accepted to begin B.S.N. nursing courses are required to:

1. have met all UT Martin admission requirements.
2. be certified in Basic Life Support for Healthcare Providers (BLS) before beginning Nursing 213 clinical experiences.
3. maintain a grade of C or above in all required courses (otherwise the student will not be allowed to begin the B.S.N. program) and a cumulative GPA of 2.00 or above.
4. demonstrate evidence of physical and mental health by submitting the appropriate health form to the Department of Nursing on or before the first day of nursing class. Failure to do so cancels eligibility and acceptance to the B.S.N. program. The student is legally and ethically accountable and responsible to provide safe nursing care. Therefore a student may be required to be evaluated by a qualified individual before client contact is permitted if the faculty believes that the student is physically or psychologically impaired for clinical experience.
5. maintain negative reports on drug screen and felony background checks.
6. provide documentation of current screenings and immunizations as required by the Centers for Disease Control and Prevention (CDC) and clinical site guidelines in addition to those required by UT Martin.
7. provide documentation of current personal health insurance by the first day of semester in which student is enrolled in clinical nursing courses. For students who need personal health insurance, student group health insurance is available through the university. Contact Student Health Services at (731) 881-7750.

## Advanced Standing Admission

Students requesting to receive nursing credit for previous nursing education must:

1. submit an application for Advanced Standing to the Admissions and Policies Committee of the Department of Nursing by February 15 for admission to fall semester clinical nursing courses and by August 1 for admission to Spring semester clinical nursing courses.
2. be eligible for admission to the university.
3. meet all admission requirements to the nursing program.
4. submit documents that verify reasons for leaving the previous nursing program.
5. submit a letter of good standing from the director of previous nursing program.
6. successfully pass any written exams and skills evaluations required by the Department of Nursing to demonstrate nursing competencies comparable to the placement level requested.
7. if licensed practical/vocational nurse, successfully pass Nursing 213 and 250 Fundamentals I \& II by challenge examinations (will include skills evaluation). Nursing 222 Professional Nursing I, Nursing 225 Pharmacology and Nursing 242 Health Assessment will still be required.

## Retention

1. To continue in the nursing curriculum, each student must maintain a college grade point average of 2.0 or above and aC or above in all nursing courses.
2. Progression in clinical nursing with grades less than C in non-nursing (general education) courses is permitted provided prerequisite and corequisite requirements are met. Students must remove D and F grades in all required courses in the curriculum before graduation.
a. A prerequisite is a course that must be completed with a C or above prior to taking the desired course.
b. A corequisite is a course that must be taken at the same time as the desired course or completed previously with a grade C or above. Withdrawal from one corequisite will also require withdrawal from the other corequisite course(s).
3. Students must maintain a satisfactory grade in the nursing lab portion of each clinical nursing course and must have aC or above in the theory portion of each required nursing course in order to obtain a final grade of at least a C in the course. The theory portion in clinical courses includes passage of a medication calculation examination.
4. If unsatisfactory clinical performance is characterized by dangerous, inappropriate, or irresponsible behavior which actually or potentially places the welfare of the client or family in jeopardy, the student will be removed from clinical client care and will receive a failing grade for that course.
5. American Heart Association Basic Life Support for Healthcare Providers (BLS) certification must be kept current while enrolled in nursing courses.
6. Students enrolled in clinical nursing courses are required to maintain student liability insurance through the university.
7. Students must take a Dosage Calculation Exam each semester and receive a passing score ( $80 \%$ or above) in order to remain in the program. Two opportunities will be given during the first week of classes to obtain a passing score. If unsuccessful with an $80 \%$ on the second attempt, the student will be dismissed from the nursing program with the option to re-apply.
8. Students enrolled in clinical courses are subject to random drug screens and background checks by the Department of Nursing or clinical agency.
9. Students enrolled in clinical courses must keep health screens and immunizations current as required by the Centers for Disease Control and Prevention (CDC) and clinical agency guidelines.
10. Personal health insurance coverage must be maintained while enrolled in clinical nursing courses.

## Readmission

1. Be admitted to the University of Tennessee at Martin as a degree-seeking undergraduate student.
2. Minimum cumulative college GPA of 2.75
3. A minimum grade of " $C$ " is required in all prerequisite courses.
4. Science Courses that are seven (7) years or older will not be transferrable. This does not apply to RNBSN applicants.
5. Recommendation Letter from a nursing faculty member
6. Withdrawals from the nursing program will count a one (1) D in regards to consideration to readmission.
7. Readmission to the BSN program at University of Tennessee at Martin is not guaranteed.
8. Previous clinical and class performance will be considered.
9. Candidates may be required to complete an interview process.

Note: Ineligibility for the nursing curriculum does not affect the student's eligibility for acceptance into another curriculum offered by the university.

## Graduation Requirements

To receive a Bachelor of Science in Nursing degree (B.S.N.) all students must:

1. satisfy the university's general education requirements for a bachelor's degree;
2. attain a grade of C or above in each of the B.S.N. curriculum requirements;
3. attain $70 \%$ correct on the Kaplan Nursing Assessment Test, a standardized exam, or complete Kaplan remediation if score is less than $70 \%$ correct and;
4. complete the B.S.N. degree program.

## RN to BSN Option

Students already licensed as Registered Nurses may complete the B.S.N. degree program and meet the general requirements for a bachelor's degree as follows:

1. complete required non-nursing courses for which equivalent college credits have not already been received. Credit may be received for some courses through challenge or CLEP exams.
2. receive credit for Nursing 213, 222, 250, 355, 342, 407 and 463 by fulfilling one of the following options:
a. registered nurses with associate degrees in nursing - transfer the courses taken in their associate degree programs in nursing for credit and presentation of a current unencumbered registered nurse license in the state of residence. Registration of the proficiency validation with the registrar is required for NURS 463.
b. registered nurses with hospital diplomas - present record of a hospital diploma transcript and a current unencumbered registered nurse license in the state of residence as validation of knowledge and registration of the proficiency validation with the registrar.
3. complete Nursing 351 Transition to Professional Nursing in place of Nursing 305.
4. take the remainder of required nursing courses. Students may request to challenge Nursing 215, 225, and 313 via a standardized proficiency exam. Students with two years of related clinical experience within the past five years may apply for portfolio credit in NURS 405, 412, or 443.
5. complete 58 semester hours from an accredited four-year school (may include challenge exams).

## Extra Costs

The following costs are approximate and subject to change:

1. Uniform — $\$ 100$
2. Shoes, watch with a sweep second hand, stethoscopes, penlight, scissors and other clinical items - approximately $\$ 200.00$ (total cost will vary depending on selection).
3. Liability insurance - $\$ 25.00$ per year.
4. Kaplan Integrated Testing Program fees - $\$ 100$ per semester.
5. Supply pack - $\$ 40.00$ per year.
6. Background check/drug screen per year — $\$ 75.00$ per year.
7. Lab fee - $\$ 100-150$ per semester, based on program level.

This list does not include student costs incurred for travel to/from clinical, personal health insurance coverage, and physical exam, immunizations, screenings and titers required for admission and retention.

## Curriculum Requirements

## Bachelor of Science in Nursing Degree

General Education Courses
Zoology 352 ..... 4
Biological and Physical Systems (Note 1) .....  8
Zoology 251, Microbiology 251 Communication ..... 9
English 110 or 111, and 112, Communication 230 Fine Arts (Aesthetics) elective ..... 3
Selected from approved general education listing Growth and Development ..... 3
Child and Family Studies 211 or Psychology 313Humanities9
Selected from approved general education listing Mathematics ..... 6
Mathematics 100 and $110,140,185$, or 251, and 210Social and Behavioral Sciences6
Psychology 101; one additional course from Health 111,Social Work 220, Sociology 201, or Sociology 202
Total hours General Education ..... 48
Note 1: Highly recommend Chemistry 121 and 122 if considering higher education and advanced practice, e.g. a specialty area
Major Field Courses: Clinical Nursing
Nursing Level I:
Nursing 225 ..... 4
Nursing 213 ..... 6
Nursing 215 ..... 3
Nursing 222 ..... 1
Nursing 250 ..... 6
Nursing 242 or 313 ..... 5
Nursing Level II:
Nursing 305 or 351 ..... 6
Nursing 331 ..... 7
Nursing 342 ..... 6
Nursing 342 ..... 6
Nursing 352 ..... 3
Nursing 363 ..... 1
Nursing Level III:
Nursing 405 ..... 5
Nursing 407 ..... 7
Nursing 412 ..... 6
Nursing 443 ..... 5
Nursing 463 ..... 2
Total Hours Major Field ..... 72
Minimum hours required for a B.S.N. degree ..... 120

## Facilities

Nursing classes are held on campus or at off-campus sites. Practical lab experiences are held in the departmental labs with patient care and skill stations containing health-care simulators, equipment and supplies for student instruction and practice.

Off-campus clinical lab experiences are taught by UT Martin nursing faculty in area health-care agencies. Transportation to various agencies for clinical experiences must be provided by the student.

## Departmental Scholarships

Scholarships are available through various health-care agencies and organizations in addition to the scholarships and loans available through Financial Aid. Contact the Department of Nursing for additional information on scholarships for nursing majors or check the Nursing Department's Web page at http://www.utm.edu/ departments/nursing.

## Student Organizations

Nurses Christian Fellowship. Nurses Christian Fellowship (NCF) is an organization that embraces nursing students regardless of denomination, race, culture, or gender. The NCF is open to all regularly enrolled nursing students who are interested in learning more about God. In response to God's love, grace and truth:
the purpose of Nurses Christian Fellowship, as a ministry of InterVarsity Christian Fellowship/USA, is to establish and advance in nursing within education and practice, witnessing communities of nursing students and nurses who follow Jesus as Savior and Lord; growing in love for God, God's Word, God's people of every ethnicity and culture and God's purposes in the world. Meetings for NCF are held each month during the school semester.

Student Nurses Association. The Student Nurses Association at UT Martin is the student branch of the American Nurses Association and is composed of students majoring in nursing or pre-nursing who are interested in various nursing careers and experiences. Monthly meetings usually include speakers, films, or other types of programs. SNA sponsors several money-making projects. Benefits available to SNA members include eligibility for the National Student Nurses Association Scholarships, nursing journals, access to nursing conventions, meetings and a banquet at the end of the year.

Any student majoring in nursing can join SNA by contacting a member for a membership blank and paying annual dues. All interested students are urged to attend meetings and consider joining.

Sigma Theta Tau. Pi Tau is the local chapter of Sigma Theta Tau International. Senior nursing students who meet the criteria are invited to be members of the organization in their last year of the B.S.N. program. Later graduate nurses who are recognized as community leaders may be eligible to join. The Sigma Theta Tau is involved in the advancement of nursing practice and of nursing as a profession.

## Courses Offered by the Department of Nursing

Nursing 225 Pharmacology (Sp)
Nursing 213 Foundations in Nursing (F)
Nursing 215 Pathophysiology (F)
Nursing 222 Professional Nursing I (F)
Nursing 242 Health Assessment (Sp)
Nursing 250 Adult Health I (Sp)
Nursing 280-289 Topics in Health Care [topic title] (F, Sp)
Nursing 305 Adult Health II (F)
Nursing 313 Health Assessment (as needed)
Nursing 342 Mental Health Nursing (F)
Nursing 351 Transition to Professional Nursing (as needed)
Nursing 352 Evidence Based Practice (Sp)
Nursing 355 Adult Health III (Sp)
Nursing 363 Professional Nursing II (Sp)
Nursing 380-389 Topics in Health Care [topic title] (F, Sp)
Nursing 405 Population Health (F)
Nursing 407 Maternal-Child Nursing (F)
Nursing 412 Adult Health IV (Sp)
Nursing 443 Leadership and Management (Professional Role Development (Sp)
Nursing 463 Professional Nursing III (Sp)
Nursing 480-489 Topics in Health Care [topic title] (F, Sp)

# Department of Psychology 

Dr. Joseph A. Ostenson - Chair<br>325D Andy Holt Humanities Building<br>731-881-7542<br>fax 731-881-7933

## Faculty

S. Denise Connell, Kyle Dempsey, Brian A. Jobnson, Angelina S. MacKewn, Michelle M. Merwin, Joseph Ostenson

## Mission

The mission of the Department of Psychology is to offer a broadly-based liberal arts education and foster excellence in student scholarship, service, and career and personal growth.

The department offers a major in psychology and minors in psychology and neuroscience. In studying psychology, students take courses with experienced and professionally active faculty who are interested in the quality of education that is received. Faculty members attend conferences and conduct research not only to advance the discipline, but also to increase their own understanding of the subject matter.

As students develop skill and understanding of the research process, they are able to participate in facultyinitiated projects or to design and pursue their own studies. Those who wish to pursue graduate study are actively helped to locate a graduate department compatible with their interests and needs.

## Expected Outcomes

Students working toward a bachelor's degree with a major in Psychology are expected to:

- demonstrate personal and professional skills necessary for post-graduation;
- demonstrate knowledge of the major theories and practices of psychology using its technologies, methods, and specialized terms;
- articulate the traditions, assumptions, and prevailing practices within psychology by examining competing claims through scholarly activity.


## Facilities

Psychology faculty are housed on the third floor of the Andy Holt Humanities Building. Lab equipment and computer facilities are used to conduct human subjects research and are available to students for use in lab courses and for individual research projects.

## Student Organizations

Psi Chi, the national honor society in psychology, is available to psychology majors or minors who have completed nine hours of psychology and are currently registered for, or have already completed, at least three additional hours. A minimum psychology GPA of 3.2 and a cumulative GPA of 3.0 are required.

The Psychology Club is available to anyone interested in psychology. Field trips, speakers and various other activities are provided for members.

## Psychology Major

B.A. or B.S. Curriculum (5860). The major in Psychology is designed for students who want to graduate with a Bachelor's Degree and attend graduate or professional school, or enter the workforce in a variety of applied areas, including mental health, drug rehabilitation, business, industry, or human resources. The major totals 45 hours and consists of the following courses: Psychology 101, 301, 315, 318, 480; at least two courses from the following group: (a) Psychology 312, 313, 350; at least one course from each of the following groups: (b) Psychology 420, 470; and (c) Psychology 450, 475; and an additional fifteen hours of upper-division psychology electives. No more than nine upper-division hours may be taken prior to completing the 315 and 318 sequence with a grade of C or better. A grade of C or better is required for all psychology courses taken and a psychology course may be repeated only once. Psychology 480 must be taken the final year.

Following the American Psychological Association (APA) guidelines for ethical behavior is an essential part of training and education. Students are expected to follow the APA guidelines in all field work and research. If a student places the welfare of a patient, client, or research participant in jeopardy and is determined to be inappropriate or irresponsible, the student will be removed from the course, receive a failing grade for the course and additional disciplinary action may be taken (such as removal from the psychology program). In addition, all general education requirements for the B.A. or B.S. Degree must be met. A minor is required for the B.A. option.

## Psychology Minor

A minor consists of the following courses: Psychology 101 and 15 additional hours of upper-division psychology courses.

## Neuroscience Minor

The Neuroscience Minor (5890)consists of at least 18 credit hours of the following courses: 1) NEUR 200; 2) NEUR $480 ; 3$ ) three hours Basic Neuroscience (biological, chemical, physical) courses selected from BIOL 337, BIOL, 451, 452, 453, or 454, BIOL 464 or 465, CHEM 350, PHYS 212 or 221, or ZOOL 251 or 462; 4) three hours Applied Neuroscience (cognitive, behavioral, functional) courses selected from ENGL 320, HIST 466, HPER 350, NURS 342, PSYC 324, PSYC 420, or NEUR 324, PSYC 360, PYSC 410, NEUR 410 , PSYC 460 or NEUR 460, or PSYC 470, SPED 300; and 5) a minimum of eight additional hours from the Basic Neuroscience and Applied Neuroscience courses above or NEUR electives. The courses in section 5 must be selected from at least three different disciplines. A grade of C or better is required for all minor courses. No more than two courses can be counted for the major, concentration, and the minor.

## Courses Offered by Department of Psychology

Neuroscience 200 Introduction to Neuroscience (F)
Neuroscience 324 Mindfulness and Meditation (as needed)
Neuroscience 362 Special Topics: Basic Neuroscience (as needed)
Neuroscience 363 Special Topics: Applied Neuroscience (as needed)
Neuroscience 365 Special Topics in Neuroscience (as needed)
Neuroscience 410 Sleep and Dreams (as needed)
Neuroscience 455 Neuroscience Travel Study (as needed)
Neuroscience 460 Fundamentals of Clinical Neuropsychology (as needed)

Neuroscience 480 Neuroscience Seminar (Sp)
Psychology 101 Introduction to Psychology (F, Sp, Su)
Psychology 101H Honors: Introduction to Psychology (as needed)
Psychology 165 Special Topics in Psychology [topic title] (as needed)
Psychology 301 Introduction to the Major (F, Sp)
Psychology 310 Human Relations and Personal Adjustment (Sp, Su)
Psychology 311 Human Relations for Staff (as needed)
Psychology 312 Social Psychology (F, Sp)
Psychology 313 Developmental Psychology (F, Sp, Su)
Psychology 315 Experimental Psychology I (F, Sp)
Psychology 318 Experimental Psychology II (F, Sp)
Psychology 324 Mindfulness and Meditation (as needed)
Psychology 325 Health Psychology (as needed)
Psychology 330 Applied Behavior Analysis (Sp)
Psychology 340 Industrial and Organizational Psychology (Sp-odd)
Psychology 350 Abnormal Psychology (F)
Psychology 355 (555) Abnormal Child Psychology (Sp)
Psychology 360 Drugs and Behavior (F)
Psychology 361 Special Topics: Cognitive Psychology (as needed)
Psychology 362 Special Topics: Biological Psychology (as needed)
Psychology 363 Special Topics: Clinical Psychology (as needed)
Psychology 364 Special Topics: Applied Social Psychology (as needed)
Psychology 365 (565) Special Topics in Psychology [topic title] (as needed)
Psychology 370 Psychology of Women (as needed)
Psychology 371 Psychology, Forensics, and the Law (as needed)
Psychology 374 Sport and Exercise Psychology (as needed)
Psychology 375 Psychology of Myth (as needed)
Psychology 400 Psychology of Marriage (F)
Psychology 410 Sleep and Dreams (as needed)
Psychology 415 Internship in Psychology (as needed)
Psychology 418 Advanced Research Methods (F)
Psychology 420 Learning and Cognition (Sp)
Psychology 445 Undergraduate Research Participation (F, Sp, Su)
Psychology 450 Theories of Personality (Sp)
Psychology 455 Psychology Travel Study [Selected Topics] (as needed)
Psychology 460 Fundamentals of Clinical Neuropsychology (as needed)
Psychology 470 Physiological Psychology (F)
Psychology 475 History of Psychology (F)
Psychology 480 Senior Seminar (F, Sp)
Psychology 490 Field Work in Psychology (as needed)
Psychology 701 Directed Studies in Psychology (F, Sp, Su)
Complete course descriptions can be found in the Course Description section of the catalog.

# Office of Interdisciplinary Studies 

Coordinator, Beth Edwards, M.B.A.

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## Mission

The mission of the Bachelor of Interdisciplinary Studies degree is to make undergraduate academic programs available to working adults at times and places convenient to them. It is designed to provide assistance to candidates to complete requirements for a bachelor's degree in a "one stop shop" manner.

## Student Learning Outcomes

The Student Learning Outcomes (SLO) for the Bachelor of Interdisciplinary Studies include:

1. Students will connect relevant experience and academic knowledge;
2. Students will demonstrate their ability to make connections across disciplines, perspectives;
3. Students will adapt and apply skills and/or theories gained in one situation to new situations;
4. Students will integrate communication; and
5. Students will demonstrate a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts.

## Bachelor of Interdisciplinary Studies

The Bachelor of Interdisciplinary Studies (B.I.S.) is an individualized degree program. Created to meet the needs of working adults and others whose educational objectives are unmet by the traditional degree programs, the B.I.S. is a self-designed general studies degree in which students choose those academic courses which best meet their career goals. There are no specific course requirements beyond 38 hours in "core" courses, and students may receive up to 12 hours of academic credit for previous non-college learning experiences. The B.I.S. is a full, four-year baccalaureate degree that complies with all university requirements.

The student interested in the B.I.S. degree prepares an individualized degree program in consultation with his/her adviser. The entire program of study must be approved in writing by the BIS Coordinator and copies filed with the university registrar and the adviser. This document then becomes the student's official Program of Study. Any modification to the student's Program of Study must be approved by the Interdisciplinary Studies Council.

## Graduation Requirements

Minimum credits required for graduation ........................................................................................... 120
Minimum credits in upper-division courses (18 hours in Area of Interest) ............................................. 36
( $75 \%$ must be taken at UT Martin)
Minimum credits at UT Martin30

Minimum credits at an accredited four-year institution.......................................................................... 60

## Specific Curricular Requirements

I. General Education (38)
A. Biological and Physical Systems (8)
B. Communications (9-10)
C. Fine Arts (Aesthetics) (3)
D. Humanities (9)
E. Mathematics (3)
F. Social \& Behavioral Sciences (6)
II. Area of Interest (42-54)

This portion of the student's program provides for the in-depth examination of some area of study. In traditional terms, it would comprise the courses of the major and the minor or the courses of the major plus an integrated cluster of related and supportive courses. The Area of Interest will include no fewer than 42 semester hours and no more than 54 semester hours. A minimum of 18 upper-division hours is required within the Area of Interest. No more than 36 semester hours in one discipline may be used within the Area of Interest and no more than 50 hours in one discipline counted toward the degree. The student must earn a grade of C or better in all courses offered for the Area of Interest.
III. Experiential Credit (0-12)

While not required, students may be awarded up to 12 hours credit for learning that has taken place in settings other than the college classroom or lab. Examples of non-college learning that can be converted into college credit include real estate schools, banking institutes, military training, business programs, law enforcement academies, fire and safety institutes, technical/vocational certificates, seminars, workshops, in-service training, or formal job training. A portfolio, documenting all experiential learning for which credit is sought, will be presented by the student. At the time of submission of the portfolio, the student will be required to pay a $\$ 300$ charge per subject area. An evaluation team will be appointed to evaluate the portfolio and may recommend to the University Studies Council that the student receive from 0-12 hours credit. If experiential credit is awarded, it becomes part of the student's university transcript; it may not substitute for any general education requirement and it may be applied only to the Bachelor of Interdisciplinary Studies degree. Portfolio credit does not fulfill minimum credits at the University of Tennessee at Martin, nor does it apply toward four-year institutional hours.
IV. Senior Seminar (3)
V. Electives (25-37)

Sufficient electives must be taken to bring the total credits for the program to 120 semester hours.

## The College of Engineering and Natural Sciences



The University of Tennessee at Martin

# The College of Engineering and Natural Sciences 

Dr. Shadow JQ Robinson, Dean<br>113 Johnson EPS Building<br>731-881-7380<br>fax 731-881-7375

## Mission

The College of Engineering and Natural Sciences provides high quality education, professional service to the region, and advancement of knowledge through the research activities of its faculty, students, and staff. The educational mission is four-fold: first to provide all students basic instruction in the concepts of biology, chemistry, computer science, engineering, mathematics, physics, and statistics; second, to provide undergraduate programs in biology, chemistry, computer science, engineering, mathematics, physics, and statistics; third, to provide instruction in the basic sciences as a foundation for students pursuing professional degrees in the health sciences and allied health fields; and fourth, to prepare students to successfully continue their education at the graduate school of their choice.

## Organization

The College of Engineering and Natural Sciences is composed of five academic departments: Biological Sciences; Chemistry and Physics; Computer Science; Engineering; and Mathematics and Statistics. The College also houses the Reelfoot Lake Environmental Field Station and the Pre-Professional Health Sciences Program.

## Programs Available in the College

Four degrees are offered within the College of Engineering and Natural Sciences: the university-wide Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degrees, the Bachelor of Science in Chemistry and the Bachelor of Science in Engineering. The Mathematics major is available in support of the B.A. degree. Majors in Biology, Chemistry, Computer Science and Mathematics are available supporting the B.S. degree. The Bachelor of Science in Engineering degree is offered with concentration areas of Civil, Electrical, Industrial, Manufacturing, Mechanical, and Mechatronics Engineering. Curriculum details for these degrees and majors may be found on the succeeding pages.

## Pre-Professional Health Sciences

The University of Tennessee at Martin does not offer professional degrees or certificates of completion in any of the pre-professional health sciences. It does, however, provide training which will prepare students for application to professional schools in the following areas:
Chiropractic
Cytotechnology
Dental Hygiene
Dentistry
Health Informatics and Information
Management
Medicine
Medical Laboratory Science
Occupational Therapy
Optometry
Pharmacy
Physical Therapy
Physician Assistant
Speech Pathology

Professional programs in Chiropractic, Dentistry, Medicine, Optometry, Pharmacy and Physical Therapy normally lead to a doctoral degree, while those in the other health sciences listed above generally lead to a bachelor's or master's degree.

The courses listed under each pre-professional plan are representative of the minimum requirements for admission to most professional schools in that area; however, students are strongly encouraged to review the requirements for their school(s) of choice. Information about professional schools' requirements can be found in the pre-professional program coordinator's office. In most cases, students should expect to take classes well above the minimum recommendations to be considered competitive and students are strongly encouraged to pursue as rigorous a schedule of courses as possible.

It is important to note that the pre-professional plans are not majors and do not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed are recommendations and are not required for degree completion unless also listed under the student's chosen major. Health science pre-professional (HSPP) students planning to graduate from UT Martin must satisfy all requirements for the bachelor's degree they plan to earn, including the general education requirements, as well as meet the admission requirements of the particular professional school(s) to which they are planning to apply. In most cases, students may choose any major they wish as long as they also meet the admission requirements of the professional school(s).

Health science pre-professional (HSPP) students should be aware that careful sequencing of courses is necessary to complete the required course work in a timely fashion and should work closely with their advisers in planning their individual curriculum. Students should always check with their adviser and/ or school(s) of choice before deciding which classes to take. Students are encouraged to research and learn about the field they are interested in prior to application to professional school. The pre-professional program coordinator can provide students with resources and information about the various fields to ensure students are making an informed decision about their choice of career. Additionally, many professional schools recommend that students gain some experience in the field through volunteering and/or shadowing prior to application.

Some professional programs require an entrance exam such as the Medical College Admission Test (MCAT), Pharmacy College Admission Test (PCAT), or Graduate Record Exam (GRE). Although most students do not take those exams until their junior year or later, the exams are typically based on material from introductory classes. Health science pre-professional students (HSPP) should begin to prepare for those exams as soon as
they start their pre-professional coursework. Additionally, entry into most professional schools is competitive and health science pre-professional students should expect to earn a GPA of 3.0 or higher.

Additional information about all of the HSPP plans is available in the HSPP program coordinator's office. Students interested in any of the HSPP plans should speak with their academic advisers and then contact the program coordinator for more information.

## Pre-Chiropractic Plan

The UT Martin Pre-Chiropractic Plan is designed to prepare students for application to a Doctor of Chiropractic (D.C.) program. The courses listed below meet the minimum requirements for admission to chiropractic school as outlined by the Council on Chiropractic Education. By following the Pre-Chiropractic Plan recommendations, students will be eligible for admission into most Doctor of Chiropractic (D.C.) programs; however, students are strongly encouraged to review the requirements for their school(s) of choice. Additionally, the Pre-Chiropractic Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most Doctor of Chiropractic programs do not require applicants to earn a baccalaureate degree before matriculation into the professional program; however, students who have earned a baccalaureate degree are often viewed as more competitive than those who have not. The Biology-Cellular and Molecular Concentration and the Health and Human Performance: Exercise Science and Wellness majors include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen D.C. program(s). Additionally, since many chiropractors own their own businesses, students may wish to consider taking business classes as electives and/or combining a science major with a business major or minor.

The minimum requirements listed by the Council on Chiropractic Education for admission to chiropractic school are as follows:

- Complete the equivalent of three academic years of undergraduate study ( 90 semester hours) at an institution(s)accredited by an agency recognized by the U.S. Department of Education of an equivalent foreign agency;
- earn a GPA of at least 3.0 on a 4.0 scale;
- earn a minimum of 24 semester hours in life and physical science courses, half of which must have a substantive laboratory component;
- include a well-rounded general education program in the humanities and social sciences in their undergraduate education.

In addition, most D.C. programs require applicants to meet the technical skills as defined by the professional school and have some knowledge of the field from direct observations as part of their pre-professional experiences.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Chemistry 121 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Physics 211 College Physics
- Physics 212 College Physics OR Exercise Science 430 Exercise Physiology
- Psychology 101 Introduction to Psychology
- Statistics (Human Performance 440 Evaluation in Human Performance OR Mathematics 210 Elementary Statistics and Probability OR Psychology 315 Experimental Psychology I)


## Pre-Cytotechnology Plan

The UT Martin Pre-Cytotechnology Plan is designed to prepare students for application to a graduate program in cytotechnology. By following the Pre-Cytotechnology Plan recommendations, students will be eligible for admission into most graduate cytotechnology programs. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Cytotechnology Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

There are only a few cytotechnology graduate programs in the country. Most allow students to apply prior to earning a baccalaureate degree and some offer a combined bachelor's/master's program so that students may earn a B.S. and an M.S. simultaneously. It is important to note, however, that in order to be certified, an individual must have a baccalaureate degree or higher from a regionally accredited college/ university and have successfully completed a CAAHEP-accredited cytotechnology program. Additionally, some states (including Tennessee) require individuals to be licensed in order to practice cytotechnology. For students wishing to earn a baccalaureate degree from UT Martin prior to enrolling in a graduate program, the Biology-Cell and Molecular Biology concentration and the Chemistry major include many of the courses listed below.

The admission criteria for graduate cytotechnology programs vary somewhat; however most programs require approximately 20 hours of biology and chemistry electives. The choice of electives is typically left to the student and, in general, only a few prerequisites are specified.

The most common prerequisites are:

- 8 hours of biology
- 8 hours of chemistry
- 6 hours of English
- 3 hours of statistics

When choosing biology and chemistry electives, students are strongly encouraged to choose upper division courses, particularly courses involving a lab. Classes in microbiology, zoology, and physics are recommended. While not an exhaustive list, the following courses are strongly recommended for students considering applying to a graduate program. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 336 Introductory Genetics
- Biology 337 Cell Biology
- Biology 338 Cell Biology Laboratory
- Chemistry 121, 122 General Chemistry
- Communications 230 Public Speaking
- English 111, 112 English Composition
- Mathematics 140 College Algebra and Elementary Functions OR Mathematics 210 Elementary Statistics and Probability
- Microbiology 251 General Bacteriology OR Microbiology 310 General Molecular Microbiology
- Zoology 251, 352 Human Anatomy and Physiology I, II
- Zoology 440 General Parasitology
- Zoology 461 Histology


## Pre-Dental Plan

The UT Martin Pre-Dental Plan is designed to prepare students for application to dental school. By following the Pre-Dental Plan recommendations, students will be eligible for admission into most Doctor of Dental Surgery (D.D.S.) or Doctor of Dental Medicine (D.M.D.) programs; however, the undergraduate courses required for admission vary substantially from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Dental Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most D.D.S. and D.M.D. programs do not require applicants to earn a baccalaureate degree before matriculation into the professional program; however, very few students are accepted who have not earned a baccalaureate degree. The Bachelor of Science in Biology-Cellular and Molecular Biology Concentration and Bachelor of Science in Chemistry major include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen D.D.S. or D.M.D. program(s).

For most D.D.S. and D.M.D. programs:

- Students are eligible to apply after completing a minimum number of semester hours (approximately 90 hours) of course work; however, most dental schools expect or require a bachelor's degree prior to matriculation.
- Applicants must demonstrate that all required coursework will be completed with a grade of C or better prior to admission. Some schools require that prerequisite coursework be completed with a grade of $B$ or higher.
- Applicants must complete the Dental Admission Test (DAT) and meet the technical skills as defined by the professional school.
- Applicants are expected to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- Applicants should submit their applications through the American Dental Education Association Associated American Dental Schools Application Service (ADEA AADSAS) in the summer of the year preceding the desired admission date.

At a minimum, most dental schools require:

- 8 hours of biology
- 8 hours of chemistry
- 8 hours of organic chemistry
- 6 hours of English
- 8 hours of physics
- 3 hours of biochemistry

While the above list of classes meets the minimum requirements for most dental programs, successfully admitted students take classes well beyond the minimum and students are strongly encouraged to pursue as rigorous a schedule of courses as possible to be competitive. In particular, students are encouraged to take 15-16 hours and multiple science classes each term in preparation for the rigors of dental school.

While not an exhaustive list, the following courses are strongly recommended for students considering applying to dental school. As noted above, the requirements for the different dental schools vary and students should always check with their adviser and/or school(s) of choice before deciding which classes to take. Additionally, students are encouraged to take advanced math courses such as statistics and calculus as well as social science and humanities courses such as literature, philosophy, business administration, economics, public speaking, and computer science. Because many dentists open their own practices, students may want to consider combining a science major with a business major or minor.

Recommended courses

- Biochemistry 411 Cell and Comparative Biochemistry
- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 336 Introductory Genetics
- Biology 337 Cell Biology
- Biology 338 Cell Biology Laboratory
- Biology 432 Developmental Biology
- Biology 436 Molecular Biology
- Biology 437 Molecular Biology Lab
- Chemistry 121, 122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Physics 211 College Physics OR Physics 220 University Physics
- Physics 212 College Physics OR Physics 221 University Physics
- Psychology 101 Introduction to Psychology
- Zoology 251, 352 Human Anatomy and Physiology I, II
- Zoology 461 Histology


## Pre-Dental Hygiene Plan

The UT Martin Pre-Dental Hygiene Plan is designed to prepare students for application to a dental hygiene program. By following the Pre-Dental Hygiene Plan recommendations, students will be eligible for admission into most Dental Hygiene programs; however, the prerequisite courses required for admission vary significantly from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Dental Hygiene Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

There are several paths into the field of dental hygiene. An Associate of Applied Science (A.A.S.), Associate of Science (A.S.), or Bachelor of Science (B.S.) degree is considered entry-level and will provide entry to the professional practice of dental hygiene. There are also a few Masters degree programs which prepare graduates for careers as educators, administrators, and researchers. Some entry-level programs require a set number of prerequisite hours before students are eligible to apply to the dental hygiene program; others allow students to complete prerequisites while also taking dental hygiene classes. The pre-dental hygiene plan recommendations are based on the most commonly required prerequisite courses for entry-level (A.A.S., A.S., or B.S.) programs.

In general, students are not required to earn a baccalaureate degree prior to admission to a dental hygiene program; however, for students wishing to earn a baccalaureate degree from UT Martin prior to enrolling in a dental hygiene program, the Biology-Organismal Biology Concentration, Biology-Cell and Molecular Biology Concentration, and the Health and Human Performance: Exercise Science and Wellness majors include many of the courses listed below.

For most dental hygiene programs:

- Students are not required to earn a baccalaureate degree prior to matriculation.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants are expected to have knowledge of the field from direct observations as part of their preprofessional experiences.

At a minimum, most Dental Hygiene programs require:

- 3 hours of sociology
- 4 hours of general chemistry
- 3 hours of English
- 4 hours of microbiology
- 3 hours of nutrition
- 3 hours of general psychology
- 8 hours of anatomy and physiology

Most dental hygiene programs are competitive, often admitting only 20-30 students per year. Additional courses in English, psychology, sociology, biology, math, Spanish, nutrition, computer literacy, or health and first aid are generally helpful. While not an exhaustive list, the following courses are strongly recommended for students considering applying to a dental hygiene program. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 300 Medical and Scientific Terminology
- Chemistry 111 Introduction to Chemistry I: General and Inorganic Chemistry OR Chemistry 121 General Chemistry
- Chemistry 112 Introduction to Chemistry II: Organic and Biochemistry OR Chemistry 122 General Chemistry
- Communication 230 Public Speaking
- English 111, 112 English Composition
- Health 111 Principles and Concepts in Personal Health
- Health 220 Advanced First Aid and CPR
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 251 General Bacteriology
- Nutrition 100 Introductory Nutrition
- Psychology 101 Introduction to Psychology
- Sociology 201 General Sociology
- Spanish 122 Elementary Spanish
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Health Informatics and Information Management Plan

The UT Martin Pre-Health Informatics and Information Management (HIM) Plan is designed to prepare students for application to a Master in Health Informatics (MHI) and/or Master in Health Information Management (MHIM) program. By following the Pre-HIM Plan recommendations, students will be eligible for admission into most MHI/MHIM programs; however, the prerequisite courses required for admission vary significantly from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-HIM Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Although there are only a few MHIM and MHI programs in the country, the requirements for admission vary significantly. Some programs are geared toward working adults and are easily completed while working full-time while others require more of a time commitment. Similarly, some programs are taught in a traditional classroom while others are offered exclusively online and still others use a hybrid of in-class and online learning. Most MHI and MHIM programs require a baccalaureate degree, those that don't often give preference to students who have earned a baccalaureate degree. For students wishing to earn a baccalaureate degree from UT Martin prior to enrolling in an MHIM or MHI program, the Bachelor of

Science in Business Administration (B.S.B.A.) in Management and the B.S.B.A. in Information Systems include many of the courses listed below.
While most MHI and MHIM programs require few or no prerequisites, the most common prerequisites are:

- 3 hours of medical terminology
- 3 hours of information systems
- 4 hours of human anatomy and physiology
- 3 hours of statistics

As noted above, MHIM and MHI program requirements differ significantly. In addition to the required courses, students may wish to take electives such as accounting, business law, organizational behavior and theory, management information systems, business communications, and English literature as well as courses in sociology, economics, history, or psychology. While not an exhaustive list, the following courses are strongly recommended for students considering applying to an MHIM or MHI program. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.
Recommended courses

- Accounting 201, 202 Accounting Information for Decision Making I, II
- Biology 300 Medical and Scientific Terminology
- Business Law 201 Legal Environment of Business
- Business Law 301, 302 Business Law I, II
- Computer Science 201 Introduction to Computer Applications
- Computer Science 351 Object-Oriented System Analysis and Design
- Computer Science 410 Data Base Management Systems
- Information Systems 310 Management Information Systems
- Information Systems 351 Business Communications
- Management 300 Management and Behavior
- Management 303 Organizational Behavior and Theory
- Management 350 Human Resource Management
- Mathematics 210 Elementary Statistics and Probability
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Medical Plan

The UT Martin Pre-Medical Plan is designed to prepare students for application to medical school. The courses listed below are recommended by the American Association of Medical Colleges (AAMC) for preparation for the MCAT. By following the Pre-Medical Plan recommendations, students will be eligible for admission into most allopathic (M.D.) and osteopathic (D.O.) medical schools; however, students are strongly encouraged to review the requirements for their school(s) of choice. Additionally, the Pre-Medical Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most M.D. and D.0. programs do not require applicants to earn a baccalaureate degree before matriculation into the professional program; however, students who have earned a baccalaureate degree are often viewed as more competitive than those who have not. The Biology-Cellular and Molecular Biology Concentration as well as the B.S. in Chemistry major and the Bachelor of Science in Chemistry (B.S.Ch.) include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen medical program(s).

For most M.D. and D.O. programs:

- Students are eligible to apply after completing a minimum of 90 semester hours of course work; however, most medical schools expect applicants to earn a bachelor's degree prior to matriculation.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Satisfactory scores on the Medical College Admission Test are required.
- Applicants are expected to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- A personal interview is a part of the admissions process at most medical schools.
- Applications should be submitted directly to each medical school or through the American Medical College Application Service (AMCAS) or the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS) in the summer or fall of the year preceding the desired admission date.

The minimum requirements recommended by the AAMC for preparation for the MCAT are as follows:

- Two semesters of introductory biology
- Two semesters of physics
- Two semesters of general chemistry
- Two semesters of organic chemistry
- One semester of biochemistry

While the above list of classes meets the minimum requirements for most medical schools, successfully admitted students take classes well beyond the minimum and students are strongly encouraged to pursue as rigorous a schedule of courses as possible to be competitive. In addition, medical schools are particularly interested in well-rounded students who have pursued a course of study which achieves a balance between both science and non-science coursework. Students should consider taking courses in computer science, history, language, literature, microbiology, philosophy, political science, and fine arts.

While not an exhaustive list, the following courses are strongly recommended for students considering applying to medical school. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biochemistry 411, 412 Cellular and Comparative Biochemistry
- Biochemistry 419 Biochemistry Laboratory
- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 336 Introductory Genetics
- Biology 337 Cell Biology
- Biology 338 Cell Biology lab
- Biology 432 Developmental Biology
- Biology 436 Molecular Biology
- Biology 437 Molecular Biology Lab
- Botany 301 Foundations of Botany
- Chemistry 121, 122 General Chemistry
- Chemistry 320 Quantitative Analysis
- Chemistry 341, 342 Organic Chemistry
- Chemistry 351, 352 Physical Chemistry
- Chemistry 359 Physical Chemistry Laboratory
- Chemistry 420 Analytical Methods
- Economics 201 Principles of Macroeconomics
- Economics 202 Principles of Microeconomics
- English 111, 112 English Composition
- English 310 Fiction Workshop
- English 320 Introduction to English Linguistics
- Mathematics 210 Elementary Statistics and Probability
- Mathematics 251, 252 Calculus I, II
- Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Philosophy 210 Elementary Logic
- Physics 211 College Physics I or Physics 220 University Physics I
- Physics 212 College Physics II or Physics 221 University Physics II
- Psychology 101 Introduction to Psychology
- Sociology 201 General Sociology
- Zoology 251, 352 Human Anatomy and Physiology I, II
- Zoology 461 Histology
- Zoology 462 Neuroscience


## Pre-Medical Laboratory Science Plan

The UT Martin Pre-Medical Laboratory Science (MLS) Plan is designed to prepare students for application to a Medical Technology (MT) or Clinical Laboratory Science (CLS) professional program. By following the Pre-MLS Plan recommendations, students will be eligible for admission into most MT or CLS programs; however, the prerequisite courses required for admission vary from one institution to the next. The
courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice. Additionally, the Pre-MLS Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

In order to be eligible for certification as a medical laboratory scientist (MLS), also called a medical technologist or a medical laboratory technologist, an individual must hold a bachelor's degree. Most MLS programs are designed as the last year or the last two years of a Bachelor of Science program, in which case applicants do not need a baccalaureate degree prior to entering the program; however, there are a few MLS programs that only offer a certificate of completion. There are also a few MLS programs that offer a Masters in Medical Laboratory Science. In general, certificate programs and Masters' programs require a baccalaureate degree prior to admission. For MLS programs that do not require a baccalaureate degree, applicants are typically required to complete a minimum of two years of pre-professional college coursework. The specific courses required vary from school to school and students are strongly encouraged to contact their school(s) of choice for more information. For students wishing to earn a baccalaureate degree from UT Martin prior to enrolling in an MLS program, the Biology-Cell and Molecular Biology Concentration and the Bachelors of Science in Chemistry Major include many of the courses listed below.

For most MLS programs:

- Students are not required to earn a baccalaureate degree prior to matriculation.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must meet the minimal technical standards or essential skills necessary for the professional practice of Medical Laboratory Science.

At a minimum, most MLS programs require:

- 8 hours of anatomy and physiology
- 8 hours of general chemistry
- 8 hours of biology
- 6 hours of English
- 8 hours of organic chemistry
- 4 hours of microbiology

While not an exhaustive list, the following courses are strongly recommended for students considering applying to an MLS program. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 336 Introductory Genetics
- Chemistry 121, 122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 251 General Bacteriology OR Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Occupational Therapy Plan

The UTT Martin Pre-Occupational Therapy (OT) Plan is designed to prepare students for application to a graduate occupational therapy program. By following the Pre-OT Plan recommendations, students will be eligible for admission into most Master of Occupational Therapy (M.O.T.) and Doctor of Occupational Therapy (0.T.D.) programs; however, the undergraduate courses required for admission vary significantly from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-OT Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.
Most M.O.T. and 0.T.D. programs require applicants to earn a baccalaureate degree before matriculation into the professional program. The Biology-Organismal Biology Concentration and Health and Human Performance: Exercise Science and Wellness majors include many of the courses listed below. However, students may choose a major in any subject area they wich as long as they aso complete the courses required by their chosen M.O.T. or O.T.D. program(s). Students may also wish to pursue a Psychology or Sociology major as an understanding of those fields is valuable when practicing occupational therapy.

For most M.O.T. and D.0.T programs:

- Applicants are required to earn a baccalaureate degree prior to matriculation.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must complete the Graduate Record Examination (GRE) and meet the technical skills as defined by the professional school.
- Applicants are expected to have knowledge of the field from direct observations as part of their preprofessional experiences. Some professional schools require documentation of observation prior to admission.
- Applications should be submitted directly to each occupational therapy school or through the Occupational Therapy Central Application Service (OTCAS) in the summer or fall of the year preceding the desired admission date.

At a minimum, most occupational therapy schools require:

- Medical terminology
- 3 hours of human development/lifespan psychology
- 8 hours of anatomy and physiology
- 3 hours of general psychology
- 3 hours of general sociology or anthropology
- 3 hours of abnormal psychology
- 3 hours of statistics
- 4 hours of physics or kinesiology

As noted above, most OT schools require a baccalaureate degree; schools that do not require a baccalaureate degree usually require a combination of prerequisite classes and electives for a total of up to 90 hours. While not an exhaustive list, the following courses are strongly recommended for students considering applying to OT school. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 300 Medical and Scientific Vocabulary
- Child and Family Studies 100 Lifespan Human Development
- Communication 230 Public Speaking
- English 111, 112 English Composition
- Human Performance 440 Evaluation in Human Performance OR Mathematics 210 Elementary Statistics and Probability OR Psychology 318 Experimental Psychology II
- Philosophy 160 Introduction to Ethics
- Philosophy 350 Principles of Bioethics
- Physics 101 Physics in Everyday Life OR Physics 150 Concepts and Demonstrations in Physics OR Physics 211 College Physics
- Psychology 101 Introduction to Psychology
- Psychology 350 Abnormal Psychology
- Sociology 101 Introduction to Anthropology OR Sociology 201 General Sociology
- Spanish 122 Elementary Spanish or higher
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Optometry Plan

The UT Martin Pre-Optometry Plan is designed to prepare students for application to optometry school. By following the Pre-Optometry Plan recommendations, students will be eligible for admission into most Doctor of Optometry (O.D.) programs; however, the courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Optometry Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most O.D. programs do not require applicants to earn a baccalaureate degree before matriculation into the professional program; however, most optometry schools expect students to earn a baccalaureate degree prior to matriculation. The Biology-Cellular and Molecular Biology Concentration and the Bachelors of Science in Chemistry major include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen O.D. program(s). Additionally, since many optometrists own their own businesses, students may wish to consider taking business classes as electives and/or combining a science major with a business major or minor.

For most optometry schools:

- Students are eligible to apply after completing 90 semester hours of course work; however, most schools expect students to have a baccalaureate degree prior to matriculation.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must complete the Optometry Admission Test (OAT) and meet the technical skills as defined by the professional school.
- Students should plan to take the OAT in the spring before they plan to apply to optometry school.
- Applicants are expected to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- Students must apply through the Optometry's Centralized Application Service (OptomCAS).
- Students should plan to apply to optometry school in the summer or fall of the year preceding the desired admission date.

The minimum requirements for most O.D. programs include:

- One year of English
- One semester of psychology
- One year of biology with labs
- One year of physics with labs
- One year of general chemistry with labs
- One course of organic chemistry with a lab
- One course of statistics
- One course of microbiology
- One course of calculus
- One course of biochemistry

In addition to the classes listed above, most optometry schools require one year of social and behavioral science or humanities electives. The requirements for these electives vary widely. Students should check with their school(s) of choice to determine how many elective hours are required and if they need to be in a specific area. For example, some schools allow electives to be chosen from any humanities or social sciences area while others specifically require electives from social or behavioral sciences.
While the above list of classes meets the minimum requirements for most optometry schools, successfully admitted students take classes well beyond the minimum and students are strongly encouraged to pursue as rigorous a schedule of courses as possible to be competitive. While not an exhaustive list, the following courses are strongly recommended for students considering applying to optometry school. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biochemistry 411 Cellular and Comparative Biochemistry
- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 337 Cell Biology
- Biology 338 Cell Biology Laboratory
- Biology 436 Molecular Biology
- Biology 437 Molecular Biology Lab
- Chemistry 121, 122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Mathematics 160 Calculus for Business and Life Sciences
- Mathematics 210 Elementary Statistics and Probability OR Psychology 318 Experimental Psychology II
- Microbiology 251 General Bacteriology OR Microbiology 310 General Molecular Microbiology
- Physics 211 College Physics I OR Physics 220 University Physics I
- Physics 212 College Physics II OR Physics 221 University Physics II
- Psychology 101 Introduction to Psychology
- Zoology 251, 352 Human Anatomy and Physiology I, II
- Zoology 461 Histology


## Pre-Pharmacy Plan

The UT Martin Pre-Pharmacy Plan is designed to prepare students for application to pharmacy school. By following the Pre-Pharmacy Plan recommendations, students will be eligible for admission into most Doctor of Pharmacy (Pharm.D.) programs; however, the undergraduate courses required for admission vary substantially from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Pharmacy Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most Pharm.D. programs do not require applicants to earn a baccalaureate degree before matriculation into the professional program; however, students who have earned a baccalaureate degree are often viewed as more competitive than those who have not. The Biology-Cellular and Molecular Biology Concentration as well as the Bachelor of Science in Chemistry (B.S.Ch.) majors include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen Pharm.D. program(s).

Beginning Fall 2019, the University of Tennessee at Martin has entered into a 3+1 agreement with the University of Tennessee Health Science Center's (UTHSC) College of Pharmacy whereby students who have completed UT Martin's general education requirements, UTHSC's prerequisite courses, and have gained acceptance into their Pharm D program will be eligible to receive a Bachelor's degree from the University of Tennessee at Martin. For more information, please contact the HSPP Coordinator.

For most Pharm.D. programs:

- Students are eligible to apply after completing a minimum number of semester hours (varying from 50 hours to 60 hours) of course work; however, preference may be given to applicants who have earned a bachelor's degree
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must meet the technical skills as defined by the professional school.
- Applicants are encouraged to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- Applications should be submitted directly to each pharmacy school or through the Pharmacy College Application Service (PharmCAS) in the summer or fall of the year preceding the desired admission date.

At a minimum, most pharmacy schools require:

- 8 hours of biology
- 8 hours of chemistry
- 8 hours of organic chemistry
- 4 hours of microbiology
- 4 hours of physics
- 8 hours of anatomy and physiology
- 3 hours of communications
- 6 hours of English
- 3 hours of calculus
- 3 hours of statistics
- 6 hours of social science--Recommended electives: sociology, psychology, political science, and economics
- 6 hours of humanities--Recommended electives: fine arts, English, history, foreign language, and philosophy
In addition to the courses listed above, students will need enough general electives to meet the minimum number of semester hours required by the pharmacy school(s). The requirements for those general electives vary widely. Students should check with their school(s) of choice to determine how many general elective hours are required and if there are any courses that are suggested and/or do not count as general electives. For example, many schools suggest students take additional microbiology, anatomy and physiology, and upper level chemistry classes. Additionally, many schools will not count ROTC, participatory physical activity/ sports, or musical performance courses such as choir or band toward general elective hours.

While not an exhaustive list, the following courses are strongly recommended for students considering applying to pharmacy school. As noted above, the requirements for the different pharmacy schools vary widely. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 336 Introductory Genetics
- Chemistry 121,122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- Communication 230 Public Speaking
- Economics 201 Principles of Macroeconomics
- Economics 202 Principles of Microeconomics
- English 111, 112 English Composition
- Calculus (Mathematics 160 Calculus for Business and Life Sciences OR Mathematics 251 Calculus I)
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Physics 211 College Physics I OR Physics 220 University Physics I
- Physics 212 College Physics II OR Physics 221 University Physics II


## Pre-Physical Therapy Plan

The UT Martin Pre-Physical Therapy Plan is designed to prepare students for application to a graduate physical therapy program. By following the Pre-Physical Therapy Plan recommendations, students will be eligible for admission into most Doctor of Physical Therapy (D.P.T.) programs; however, the undergraduate courses required for admission vary substantially from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Physical Therapy Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most D.P.T. programs require applicants to earn a baccalaureate degree before matriculation into the professional program. The Biology-Organismal Biology Concentration as well as the Health and Human Performance: Exercise Science majors include many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen D.P.T. program(s).

For most D.P.T. programs:

- Students must have earned a bachelor's degree prior to admission.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must complete the General Record Examination (GRE) and meet the technical skills as defined by the professional school.
- Applicants are expected to have some knowledge of the field from direct observations as part of their pre-professional experiences. Some professional schools require documentation of observation prior to admission.
- Applicants should submit their application directly to each physical therapy school or through the Physical Therapy Centralized Application Service (PTCAS) in the summer or fall of the year preceding the desired admission date.

At a minimum, most Physical Therapy schools require:

- 8 hours of biology
- 8 hours of chemistry
- 3 hours of statistics
- 8 hours of anatomy and physiology
- 8 hours of physics
- 3 hours of psychology

In addition to the courses listed above, most physical therapy schools require additional humanities and/or social science electives. The requirements for those electives vary widely. Students should check with their school(s) of choice to determine how many elective hours are required and if they need to be in a specific area. For example, some schools allow electives to be chosen from any humanities or social sciences area while others more specifically require electives from behavioral sciences.
While not an exhaustive list, the following courses are recommended for students considering applying to Physical Therapy school. As noted above, the requirements for the different Physical Therapy schools vary widely. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take. Additionally, students may wish to take additional upper division psychology courses as well as courses in foreign language, political science, humanities, art history, philosophy, logic, English literature, history, fine arts, and religion.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 300 Medical and Scientific Terminology
- Chemistry 121,122 General Chemistry
- Exercise Science 430 Exercise Physiology
- Mathematics 210 Elementary Statistics and Probability OR Human Performance 440 Evaluation in Human Performance OR Psychology 318 Experimental Psychology II
- Physics 211 College Physics OR Physics 220 University Physics
- Physics 212 College Physics OR Physics 221 University Physics
- Psychology 101 Introduction to Psychology
- Sociology 201 General Sociology
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Physician Assistant Plan

The UT Martin Pre-Physician Assistant Plan is designed to prepare students for application to a graduate physician assistant program. By following the Pre-Physician Assistant Plan recommendations, students will be eligible for admission into most Master of Science in Physician Assistant Studies (M.S.P.A.S.) programs; however, students are strongly encouraged to review the requirements for their school(s) of choice. Additionally, the Pre-Physician Assistant Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

Most M.S.P.A.S. programs require applicants to earn a baccalaureate degree before matriculation into the professional program. The Biology-Cellular and Molecular Biology concentration includes many of the courses listed below; however, students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen M.S.P.A.S. program(s).

For most M.S.P.A.S. programs:

- Applicants must earn a baccalaureate degree before matriculation into the professional program.
- Applicants must demonstrate that all required course work will be completed with a grade of C or better prior to admission.
- Applicants must complete the Graduate Record Examination (GRE) and meet the technical skills as defined by the professional school.
- Applicants are expected to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- Applicants are expected to also have hands on healthcare experience prior to matriculation into the graduate program.
- Applicants should submit their application directly to each physician assistant school or through the Central Application Service for Physician Assistants (CASPA) in the spring or summer of the year preceding the desired admission date.
At a minimum, most Physician Assistant programs require:
- 3 hours of psychology
- 8 hours of biology
- 8 hours of chemistry
- 8 hours of anatomy and physiology
- 1-3 hours of medical terminology
- 4 hours of microbiology

While the above list of classes meets the minimum requirements for most physician assistant programs, successfully admitted students take classes well beyond the minimum and students are strongly encouraged to pursue as rigorous a schedule of courses as possible to be competitive.

While not an exhaustive list, the following courses are strongly recommended for students considering applying to a graduate physician assistant program. Students should always check with their adviser and/or school(s) of choice before deciding which classes to take.

Recommended courses

- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Biology 300 Medical and Scientific Terminology
- Biology 336 Introductory Genetics
- Biology 337 Cell Biology
- Biology 338 Cell Biology Laboratory
- Chemistry 121,122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 251 General Bacteriology OR Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Psychology 101 Introduction to Psychology
- Psychology 350 Abnormal Psychology
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Speech Pathology Plan

The UT Martin Pre-Speech Pathology Plan is designed to prepare students for application to a graduate speech language pathology program. By following the Pre-Speech Pathology Plan recommendations, students will be eligible for admission into most graduate Speech Language Pathology (SLP) programs; however, the requirements for admission vary substantially from one institution to the next. The courses listed below are intended only as a guideline and students are strongly encouraged to review the requirements for their school(s) of choice as they vary from school to school. Additionally, the Pre-Speech Pathology Plan is not a major and does not fulfill the requirements for a baccalaureate degree at UT Martin. The courses listed below are recommendations and are not required for degree completion unless also listed under the student's chosen major.

The Pre-Speech Pathology Plan is slightly different from the other pre-health plans because the undergraduate prerequisites for most SLP graduate programs are not as rigid as other graduate health professions programs. Moreover, some graduate programs require specific courses in speech language or communication disorders that are not offered at UT Martin. In some cases students can add those courses to their graduate studies; however, in other cases, students will need to plan to take those courses after graduating from UT Martin. Students should contact the HSPP Program Coordinator for more information.

For most SLP programs:

- Applicants must have a baccalaureate degree prior to matriculation. Students may major in any area they choose.
- Applicants must complete courses specifically in speech language pathology, audiology, or communication disorders prior to matriculation. These courses are not typically offered at UT Martin.
- Applicants must take the Graduate Record Exam (GRE) and meet the technical skills as defined by the professional school.
- Applicants are encouraged to have some knowledge of the field from direct observations as part of their pre-professional experiences.
- Applications should be submitted directly to each graduate school or through the Communication Science and Disorders Centralized Application Service (CSDCAS) in the summer or fall of the year preceding the desired admission date.

At a minimum, most SLP programs require:

- one biology course
- one chemistry course
- one statistics course
- one math course

While not an exhaustive list, the following courses are recommended for students considering applying to an SLP program school. As noted above, the requirements for the different SLP programs vary and students should always check with their advisor and/or school(s) of choice before deciding which classes to take. In particular, students need to develop a plan to address the speech language/communication prerequisites.

Recommended courses:

- Biology 130 Foundations of Biology: Ecology, Evolution and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Chemistry 121, 122 General Chemistry
- Physics 101 Physics in Everyday Life or 211 College Physics
- Physics 102 Physics in Everyday Life or 212 College Physics
- Psychology 101 Introduction to Psychology
- Sociology 101 Introduction to Anthropology
- Sociology 201 General Sociology
- Statistics (Mathematics 210 Elementary Statistics and Probability or Human Performance 440 Evaluation in Human Performance or Psychology 315 Experimental Psychology I)
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Courses Offered by College of Engineering and Natural Sciences

STEM 100 Freshman STEM Academy (Su)
STEM 200 Sophomore STEM Academy (Su)
STEM 300 Junior STEM Academy (Su)
STEM 400 Senior STEM Academy (Su)

# Department of Biological Sciences 

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## Faculty

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## Mission

The Department of Biological Sciences provides a diverse, rigorous program with a curriculum designed to produce scientifically literate majors and non-majors knowledgeable in contemporary issues in biology. The department offers opportunities for experiential learning through close student/faculty research collaboration. We prepare our students for post-graduate programs and careers in the life sciences and health professions. The public service activities of the department are primarily directed to the regional needs of West Tennessee.

## Expected Outcomes

Upon completion of the Biology major the graduating senior is expected to:

- define and explain fundamental elements of cell biology, organismal biology, and ecology,
- define and explain how concepts of genetics and evolution influence biological diversity, and apply the scientific process to natural phenomena.
- apply the scientific process to natural phenomena.


## Biology Major

B.S. Curriculum. The Department of Biological Sciences offers four concentrations leading to the Bachelor of Science degree. A minor is not required. No more than four credit hours of research participation (Biology 451-454) may be counted toward the major. Majors in any concentration are required to complete all of the general education requirements for the Bachelor of Science degree.

While there are several courses that each of the concentrations share, differences in specific prerequisites and requirements do exist. Students should work closely with their academic advisers in order to prepare a course of study.

Required Biology courses for all concentrations: Biology 130, 140, 331, 336, 337, 391, and 410 or 411.

Concentration in Cell and Molecular Biology (6211). The concentration in Cell and Molecular Biology
is supported by coursework from the Department of Chemistry and Physics and the Department of Mathematics and Statistics and is composed of 45 hours of courses from the Department of Biological Sciences as detailed below.

Required Courses: (Students must earn a grade of C or better in each of the following courses.)

## Supporting courses:

Chemistry
Mathematics
Physics
Biology Requirements:
Biology
Microbiology
Electives:

Chemistry 121, 122, 341 and 342
Mathematics 210 and either Mathematics 160 or 251
Physics 211 and 212

Biology 130; 140; 331; 336; 337; 338; 391; 410 or 411; 436; 437
Microbiology 310
Thirteen additional hours selected from upper-division courses offered by the Department of Biological Sciences.

Note: Up to four hours of Biochemistry (BCHE) may be used to satisfy the elective requirement. Students must earn a grade of C or better in all elective courses.

Concentration in Organismal Biology (6212). The concentration in Organismal Biology is supported by coursework from the Departments of Chemistry and Physics and Mathematics and Statistics and is composed of 45 hours of courses from the Department of Biological Sciences as detailed below.

Required Courses: (Students must earn a grade of C or better in each of the following courses.)

## Supporting courses:

Chemistry
Chemistry 121, 122 and either 310 (and 319) or 341
Mathematics Mathematics 210 and either Mathematics 160 or 251
Biology Requirements:
Biology $\quad$ Biology 130; 140; 331; 336; 337; 391; 410 or 411
Botany Select one course from Botany 301, 302, 303, 305, or 306
Invertebrate Zoology Select one course from Zoology 315, 325, 326, or 440
Vertebrate Zoology Select one course from Zoology 319, 320, 321, 322, 323, 327, 328, or 352
Additional Lab Science: Select one 8 hour sequence:
ASTR 201, 202; GEOS 110 and 120, 130, or 140; PHYS 211, 212 or PHYS 220, 221
Electives:
Fifteen additional hours selected from upper-division courses offered by the Department of Biological Sciences.
Note: Up to four hours of Biochemistry (BCHE) may be used to satisfy the elective requirement. Students must earn a grade of C or better in all elective courses.

Concentration in Ecology and Environmental Biology (6213). The concentration in Ecology and Environmental Biology is supported by coursework from the Departments of Agriculture, Geosciences and Natural Resources; Chemistry and Physics; and Mathematics and Statistics and is composed of 45 hours of courses from the Department of Biological Sciences as detailed below.

Required Courses: (Students must earn a grade of C or better in each of the following courses.)

## Supporting courses:

Chemistry
Mathematics
Professional Skills: In addition to the basic skills provided by successful completion of the required
supporting courses in Chemistry and Mathematics, students in the Ecology and Environmental Biology concentration are required to complete one of the following courses and earn a grade of C or better in each of the selected courses: Agriculture 270 or Geography 270, Geography 310, 364

## Biology Requirements:

Biology $\quad$ Biology 130, 140, 331, 336, 337, 391, and either 410 or 411
Botany $\quad$ Botany 303 or 306
Zoology $\quad$ Select one course from Zoology 315, 319, 320, 321, 322, 323, 325, 326, 327, 328, 440
Ecology Biology 443; and either Botany 431 (and 432) or Zoology 441 (and 442)
Additional Lab Science: Select one 8 hour sequence:
ASTR 201, 202; GEOS 110 and 120, 130, or 140; PHYS 211, 212 or PHYS 220, 221
Electives: $\quad$ Fourteen additional hours selected from upper-division courses offered by the Department of Biological Sciences. It is recommended that elective hours be chosen from the following Environmental Electives: Biology 418, 444, 475; Botany 302, 303, 305, 306, 431, 432; Plant Science 341; Soil Science 430; Zoology 315, 319, 320, 321, $322,323,325,326,327,328,440,441,442,443$. Note: Up to six hours of Biochemistry (BCHE), Plant Science 341, or Soil Science 430 may be used to satisfy the elective requirement. Students must earn a grade of C or better in all elective courses.

Concentration in Health Sciences (6214). This concentration is restricted to students pursuing a 3+1 program in pharmacy at an approved college of pharmacy with which UT Martin maintains an articulation agreement. Please consult with an advisor or the Pre-Health Science coordinator for a current list of participating pharmacy programs. A student accepted into an accredited doctoral program in pharmacy may receive a Bachelor of Science degree from UT Martin with a Major in Biology and a concentration in Health Sciences. The $3+1$ program is a degree path designed to combine three years of undergraduate course work (a minimum of 94 credit hours)-including all general education requirements ( 54 or 55 credit hours), required course work for the major (detailed below) and pharmacy school prerequisites (a total of 40 credit hours)-with one year of pharmacy school.

Required Courses: (Students must earn a grade of C or better in each of the following courses.)

## Supporting Courses:

| Chemistry | Chemistry 121, 122, 341, 342 |
| :--- | :--- |
| Physics | Physics 211, 212 or Physics 220, 221 |
| Mathematics | Mathematics 210 and either Mathematics 160 or 251 |

Required Biology Courses:
Biology
Biology 130, 140, 336, 337, 338, 436
Microbiology
Microbiology 310
Zoology
Zoology 251*, 352
*Zoology 251 does not count as hours toward the Biology major, but serves as a prerequisite to Zoology 352, and is a required course for many pharmacy schools.

## Pharmacy School Requirement (30 hours)

To fulfill the pharmacy school requirement, a student will:

- Submit a letter to the Pre-Professional Coordinator upon acceptance into an approved pharmacy school doctoral program stating his or her intent to complete the Health Sciences concentration.
- Satisfactorily complete a minimum of 30 credit hours of pharmacy course work in the first year of pharmacy school with a minimum grade of C .
- Request a transcript of the completed pharmacy course work to be sent to the Office of the Registrar. Course work will be reviewed and applied to the student's record thereafter.

Note: Students in the Health Sciences concentration must meet all eligibility and residency requirements in their catalog of record, and/or as specified or necessitated by the $3+1$ articulation agreement. Participation in the $3+1$ program does not ensure admission to pharmacy school. Students who wish to complete a traditional four-year B.S. degree prior to entering pharmacy school should pursue one of the standard Biology concentrations.

If the student does not enter a pharmacy school after three years at UT Martin, he/she may complete a degree by completing one of the other three concentrations in the Biology major to best meet his/her interests. Please consult with an academic advisor for more information and assistance.

## Biology Minor

A minor consists of Biology 130-140 and 13 hours selected from courses numbered 300 or above in Biology, Botany, Microbiology and Zoology.

## Summer Field Courses at the Gulf Coast Research Laboratory

The University of Tennessee at Martin is affiliated with the Gulf Coast Research Laboratory (GCRL), Ocean Springs, Mississippi, for the purpose of training in the marine sciences. The GCRL is administered by the University of Southern Mississippi. Institutional affiliation allows students at the University of Tennessee at Martin to enroll at the GCRL for summer courses without paying out-of-state fees.

Course offerings are announced annually by the GCRL and are available from their website (http://gcrl.usm. edu/). Additional information may be obtained from the Department of Biological Sciences.

## Facilities

The Biology Department and faculty offices are located in Brehm Hall. Research and summer course opportunities are available at the Reelfoot Lake Environmental Field Station in Samburg, TN.

## Student Organizations

Tri Beta Honorary Biological Society. Beta Beta Beta Biological Honor Society was established as a society for undergraduate students. It emphasizes a three-fold program: stimulation of scholarship, dissemination of scientific knowledge and promotion of biological research. Therefore, BBB gives students the opportunity to report on their findings in the lab through BIOS, the journal of the society. Published since 1930, BIOS is a quarterly journal which publishes articles of interest to the society, articles written by undergraduates and articles of general biological interest.

Mu Epsilon Delta Pre-Health Science Fraternity. Mu Epsilon Delta is a pre-health science organization composed of Biology, Chemistry and other majors dedicated to promoting the health sciences. Its mission is to assist students in the pre-health sciences by sponsoring seminars, visits with health science professionals,
tours of professional schools, etc. and fellowship with students, teachers and professionals, who are interested in health science professions.

The Ecology Club. The goals of the Ecology Club are to: 1) cultivate and support student interest in ecology, 2) develop professional skills in the fields of ecology, conservation biology, and environmental biology, and
3) participate in community service that promotes sound ecological practices.

## Courses Offered by Department of Biological Sciences

Biology 110 Introductory Cell Biology and Genetics (F, Sp, Su)
Biology 120 Introductory Plant and Animal Biology (F, Sp, Su)
Biology 130 Foundations of Biology: Ecology, Evolution and Diversity (F, Sp, Su)
Biology 140 Foundations of Biology: Cell and Molecular (F, Sp, Su)
Biology 180 Special Topics in Biology [topic title] (as needed)
Biology 300 Medical and Scientific Vocabulary (F, Sp, Su)
Biology 331 (531) General Ecology (F, Sp, Su-odd)
Biology 336 (536) Introductory Genetics (F, Sp, Su)
Biology 337 (537) Cell Biology (F, Sp)
Biology 338 (538) Cell Biology Laboratory (F, Sp)
Biology 355 (555) Introduction to Environmental Health (Sp)
Biology 391 (591) Evolutionary Biology (F, Sp, Su-even)
Biology 410 Seminar in Biological Sciences [topic title] (F, Sp)
Biology 411 Seminar in Biological Sciences [topic title] (F, Sp)
Biology 418 (618) Limnology (F)
Biology 420 (620) Human Virology (Sp)
Biology 432 (632) Developmental Biology (Sp-even)
Biology 436 (636) Molecular Biology (F, Sp)
Biology 437 (637) Molecular Biology Lab (F, Sp)
Biology 439 (639) Cancer Biology (as needed)
Biology 443 (643) Ecological Methods (F)
Biology 444 (644) Conservation Biology (Sp-even)
Biology 451-452 Research Participation (F, Sp)
Biology 453-454 Research Participation (F, Sp)
Biology 462 Special Topics in Biology [Title of topic] (as needed)
Biology 464-465 Directed Studies in Biology [title] (as needed)
Biology 475 (675) Field Investigations in Biology (Sp)
Biology 700-701 Special Topics in Botany (as needed)
Biology 703-704 Research Participation (as needed)
Biology 710-711 Special Topics in Zoology (as needed)
Biology 720-721 Special Topics in Ecology (as needed)
Biology 730-731 Special Topics in Evolution (as needed)
Biology 740-741 Special Topics in Microbiology (as needed)
Biology 750-751 Special Topics in Genetics (as needed)
Biology 760-761 Special Topics in Cell Biology (as needed)
Biology 770-771 Special Topics in Molecular Biology (as needed)
Botany 301 (501) Foundations of Botany (F)
Botany 302 (502) Plant Morphology (Sp)
Botany 303 (503) Plant Taxonomy (Sp)
Botany 305 (505) Freshwater Algae (Su, as needed)

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Botany 306 (506) Aquatic and Wetland Plants (Su, as needed)
Botany }421\mathrm{ (621) Plant Physiology (Sp-even)
Botany }431\mathrm{ (631) Plant Ecology (F)
Botany }432\mathrm{ (632) Plant Ecology Laboratory (F)
Microbiology 251 General Bacteriology (F, Sp, Su)
Microbiology 310 (510) General Molecular Microbiology (F, Sp)
Microbiology 311 (511) Public Health Microbiology (Sp)
Microbiology 401 (601) Immunology (F)
Microbiology 402 (602) Immunology Laboratory (F)
Microbiology }410\mathrm{ (610) Applications in Food Microbiology (F)
Zoology }201\mathrm{ Human Anatomy and Physiology (F, Sp)
Zoology }251\mathrm{ Human Anatomy and Physiology I (F, Sp, Su)
Zoology 304 (504) Comparative Vertebrate Anatomy (as needed)
Zoology 315 (515) Invertebrate Zoology (Sp-even)
Zoology 319 (519) Mammalogy (F)
Zoology 320 (520) Ichthyology (F)
Zoology 321 (521) Ornithology (Sp)
Zoology 322 (522) Herpetology (Sp)
Zoology 323 (523) Field Ornithology (as needed)
Zoology 325 (525) General Entomology (F, Su-odd)
Zoology 326 (526) Aquatic Macroinvertebrates (Su-even)
Zoology 327 (527) Field Herpetology (as needed)
Zoology 328 (528) Natural History of the Vertebrates (as needed)
Zoology 352 (552) Human Anatomy and Physiology II (F, Sp, Su)
Zoology 413 Vertebrate Physiology (F)
Zoology 440 (640) General Parasitology (as needed)
Zoology 441 (641) Animal Ecology (F)
Zoology }442\mathrm{ (642) Animal Ecology Laboratory (F)
Zoology 443 (643) Animal Behavior (Sp-odd)
Zoology 461 (661) Histology (Sp-even)
Zoology 462 (662) Neuroscience (Sp-odd)
Zoology 463 (663) Endocrinology (Sp-even)
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Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Chemistry and Physics 

Dr. Robbie L. Montgomery, Chair<br>319C Johnson EPS Building<br>731-881-7450<br>fax 731-881-7443

## Faculty

Jason Alexander, Scott A. Bain, Verna B. Baron, Adam S. Bruner, LionelJ. Crews, Jozsef Devenyi, Cabit Erkal, Misganaw Getaneh, Robbie L. Montgomery, Abigail H. Shelton, Phillip A. Shelton, Genessa Smith, Cbarles R. Thomas

## Mission

The Department of Chemistry and Physics at the University of Tennessee at Martin has a three-fold mission in teaching Chemistry: first, to provide basic instruction to all students at the university in the concepts and methods of this central experimental science within the framework of a traditional liberal education designed to prepare the individual for productive citizenship in the modern world; second, to provide further instruction in basic science as a foundation for those students wishing to pursue professional studies in medicine and the related health sciences; and, third, to provide broadly based opportunities for advanced training for students who wish to pursue careers in chemistry or related professions either upon completion of a bachelor's degree or following additional advanced study. Faculty are committed to mentoring students and to advancing the professions of chemistry and education through a full range of scholarly activities and service to both the campus and community.

The traditional Bachelor of Science degree with a major in chemistry and a minor in a second area (biology, mathematics, physics, geosciences, psychology, etc.) provides an excellent background for students planning careers in medicine or one of the other health sciences, in the emerging field of environmental sciences, or in virtually any technically based area. The Bachelor of Science in Chemistry degree, designed to follow the guidelines and recommendations set forth by the American Chemical Society for a professional degree program in chemistry at the undergraduate level and fully accredited by the ACS, allows students to concentrate their studies in chemistry and mathematics. It is recommended primarily for students with a career interest in chemistry or for students who plan to pursue graduate study in science. Both programs provide a balance between theory and lab experience. The department is well equipped with modern chemical instrumentation. Beginning in the sophomore year, students have direct access to and obtain considerable first-hand experience in the use of all of the instrumentation within the department. Research participation by undergraduates is encouraged.

The Physics faculty is committed to:

1. providing students with a basic understanding and appreciation of physics and astronomy;
2. training engineering students in physics research methods;
3. providing Pre-Health Science students with the strong physics background necessary for their degrees;
4. advancing physics and astronomy through research;
5. serving the university and community in the fields of physics and astronomy;
6. engaging in outreach activities to regional schools to promote better teaching of physics and astronomy concepts.

## Student Learning Outcomes

Upon completion of the B.S. in Chemistry or the B.S. with a major in Chemistry, the graduate will be able to:

- apply a comprehensive understanding of the fundamental principles of chemistry appropriate to the degree;
-apply an appropriate level of mathematical skill in order to understand and derive fundamental relationships and to analyze and manipulate experimental data;
- solve problems and reason scientifically;
- assemble experimental chemical apparatus and perform experiments;
- use modern instrumentation to acquire information on chemical substances and interpret the information;
- make an oral presentation of technical content.


## Declaring a Major

Students must complete Chemistry 121-122 and Chemistry 320 with a grade of C or better prior to declaring a major in chemistry.

## Chemistry Major

Chemistry majors must complete all general education requirements for the B.S. degree. (See Undergraduate Degrees and Specialized Programs section of catalog.) A minimum grade of C must be made for all courses in the major. The following courses are required for all chemistry majors:


Chemistry Courses (20 hours)
Chemistry 121-122
Chemistry 320 .
Chemistry 341-342 ..................................................................................................................... 8
Chemical Sciences Concentration (6311). The Chemical Sciences concentration is offered for students who seek a broad general background in chemistry. Completion of a minor or a second major is required. A maximum of three hours of Chemistry 490 may be applied toward the major. Required courses for the concentration include:
Supporting Courses (4 hours)
Mathematics 252 ..... 4
Chemistry Courses (13 hours)
Chemistry 351 or 352 ..... 3
Chemistry 359 ..... 2
Eight additional hours of upper-division Chemistry or Biochemistry ..... 8

Health Sciences Concentration (6312). This concentration is restricted to students pursuing a 3+1 program in pharmacy at an approved college of pharmacy with which UT Martin maintains an articulation agreement. Please consult with an advisor or the pre-health science coordinator for a current list of participating pharmacy programs.

Students who have been accepted for early admission into an approved doctoral program in pharmacy are eligible to pursue the Health Sciences concentration. The $3+1$ program is a degree path designed to combine three years of undergraduate course work-including all general education requirements, required course work for the major (detailed below), and pharmacy school prerequisites-with one year of pharmacy school.

## Supporting Courses (20 hours)

Biology 130-140 ......................................................................................................................... 8
Microbiology 310 ....................................................................................................................... 4
Zoology 352*............................................................................................................................. 4
Mathematics 210 ........................................................................................................................ 3

Chemistry Courses (6-7 hours)
Chemistry 350 or 420 or Biochemistry 412 ........................................................................... 3 or 4
Biochemistry 411....................................................................................................................... 3
*Zoology 251 does not count as hours toward the major, but serves as a prerequisite to Zoology 352, and is a required course for many pharmacy schools.

## Pharmacy School Requirement (30 hours)

To fulfill the pharmacy school requirement, a student will:

- Submit a letter to the Pre-Professional Coordinator upon acceptance into an approved pharmacy school doctoral program stating his or her intent to complete the Health Sciences concentration.
- Satisfactorily complete a minimum of 30 hours of pharmacy course work in the first year of pharmacy school with a minimum grade of C .
- Request a transcript of the completed pharmacy course work to be sent to the Office of the Registrar. Course work will be reviewed and applied to the student's record thereafter.

Note: Students who wish to complete a traditional four-year B.S. degree prior to entering pharmacy school should pursue a Chemical Sciences concentration (see above). Students in the Health Sciences concentration must meet all eligibility and residency requirements in their catalog of record. Participation in the $3+1$ program does not ensure admission to pharmacy school. Student who do not gain admission to pharmacy school after three years still have the option to complete a major in four years by completing the required courses for the Chemical Sciences concentration (with a suggested minor in Biology):

Courses to complete the Chemistry Major (11 hours)
Mathematics 252
Chemistry 351 or 352 ..... 3
Chemistry 359 ..... 2
Two additional hours of upper-division Chemistry or Biochemistry ..... 2

Courses to complete the Biology Minor (5 hours)
Five additional hours of upper-division Biology, Botany, Microbiology, or Zoology.......................... 5

## B.S. in Chemistry

B.S. in Chemistry (6320) Curriculum (ACS approved major). This curriculum is designed to follow the guidelines and recommendations set forth by the American Chemical Society for a professional degree program in chemistry at the undergraduate level. The program is fully accredited by the American Chemical Society ( 1155 Sixteenth Street NW, Washington, DC 20036, telephone 202-872-4589). Specific course requirements are outlined below. Students fulfilling these requirements will also satisfy the university-wide general education requirements. No minor is required.

> I. General Education (30-35 hours)
> English 105 or 111 and 112, Communications 230 ..................................................................... 9-10
> Complete two courses representing two areas chosen from Economics 201, 202; Political Science 210; Psychology 101; Sociology 201
> In order for the ACS-certified degree to indicate one of the following specializations, the corresponding listed courses are required. The listed chemistry and biochemistry courses may be used in meeting the above requirement for three additional courses.
> Biochemistry: Biochemistry 412, Microbiology 310, Biology 337 and 338
> Organic Chemistry: two courses selected from Chemistry 343, 350, 430, 440, and 460
> Analytical Chemistry: Chemistry 420 and one course selected from Chemistry 422, 430, and Biochemistry 412
> Computational Chemistry: Chemistry 352, 430, and 450. Computer Science 221, 222, and 325; Mathematics 320 and 330; Physics 333
III. Physics (8 hours)

Physics 220, 221
IV. Mathematics (8 hours)

Mathematics 251, 252

## V. Electives

Student must select sufficient additional elective courses for a minimum 120 hours for the degree.

A minimum of 120 hours, at least 42 of which must be at the $\mathbf{3 0 0}$ or $\mathbf{4 0 0}$ level, are required for the degree. A maximum of $\mathbf{5 0}$ hours of chemistry may be counted toward the minimum 120 hours required for the degree.

## Minors

Chemistry (M-6310) -- Chemistry 121, 122 and Chemistry 320 are prerequisites to a minor, which consists of an additional 11 hours of upper-division chemistry or biochemistry.

Physics (M-6330) The minor in physics provides a strong support program for degrees in biology, chemistry, computer science, engineering, geography, geology and mathematics and for the pre-professional curricula in the health sciences. Physics 220-221 or both Mathematics 251-252 and Physics 211-212 are prerequisites to a physics minor, which consists of the following 12 hours of upper-division courses: Physics $322,323,343$, and 491.

## Cooperative Education Program in Chemistry

The five-year Cooperative Education Program, available to students pursuing either degree program in chemistry, offers the student valuable professional experience as preparation for a permanent position or for admission to graduate school as well as a source of income to help finance college expenses. Qualified students admitted to the program alternate semesters at the university with semesters of work. Application for admission should be made during the freshman year. Further information may be obtained by contacting the Department of Chemistry and Physics or the College of Engineering and Natural Sciences.

## Student Organizations

The University of Tennessee at Martin chapter of the Student Members of the American Chemical Society (SMACS) offers students an opportunity to organize and/or participate in varied programs for: developing professionalism, leadership skills and social interactions; service to the community, department and the University, and promoting sustainability/green chemistry awareness/practice. The chapter was chartered in 1971, and has since won an "Outstanding" rating from the Education Division and a "Green Chapter" award from the Green Chemistry Institute of the American Chemical Society each for a record number of times from among 1000+ chapters nationwide.

## Departmental Awards/Scholarships

S.K. and Shashi Airee Scholarship $\$ 1,000$ is awarded to a sophomore or junior attending UT Martin and living on-campus, who has a B average or higher and is an active member of the American Chemical Society (SMACS). The recipient is selected by the chemistry faculty.
David S. Loebbaka Award is a cash award of $\$ 150$ to an outstanding astronomy or physics student. The award recognizes Dr. Loebbaka's many contributions to the department and the university. To be eligible a student must have been enrolled in a physics or astronomy course during the fall semester of the year in which the award is presented. The physics faculty selects the recipient based on academic achievement.

Lower-Division Chemistry Award is given to an outstanding student or students in general chemistry. The award is a cash amount and a copy of The Elements: A Visual Exploration of Every Known Atom in the Universe. The selection is made by the chemistry faculty.

Norman and Ruby Campbell Scholarship Award is awarded annually to a returning student or students majoring in chemistry. Dr. Norman Campbell served UT Martin for many years as professor of chemistry, head of the physical sciences division, dean of instruction and vice chancellor for academic affairs. The
scholarship was established by his family to honor him and his wife, Ruby. The recipient is selected by the chemistry faculty.

Outstanding Chemistry Major Award is a cash amount given to an outstanding senior(s) chemistry major. The selection is made by the chemistry faculty.

Roseman Family Scholarship of $\$ 1,200$ is given to a freshman from West Tennessee who is a pre-med major within the chemistry department. The selection is made by the chemistry faculty.

## Courses Offered by Department of Chemistry and Physics

Astronomy 201 Astronomy (F)
Astronomy 202 Astronomy (Sp)
Biochemistry 411 (611) Cellular and Comparative Biochemistry (Sp)
Biochemistry 412 (612) Cellular and Comparative Biochemistry (F)
Biochemistry 419 (619) Biochemistry Laboratory (Sp)
Biochemistry 422 Biochemistry 2 (F)
Chemistry 101 Fundamentals of Chemistry (as needed)
Chemistry 111 Introduction to Chemistry I: General and Inorganic Chemistry (F, Sp)
Chemistry 112 Introduction to Chemistry II: Organic and Biochemistry (F, Sp)
Chemistry 121-122 General Chemistry (F, Sp, Su)
Chemistry 122 H Honors General Chemistry II (Sp)
Chemistry 201 Introduction to Forensic Science (F)
Chemistry 202 Introduction to Forensic Science (Sp)
Chemistry 280 Special Topics [title] (as needed)
Chemistry 310 Organic and Biochemistry (F-even)
Chemistry 319 Organic and Biochemistry Laboratory (F-even)
Chemistry 320 (520) Quantitative Analysis (F, Sp)
Chemistry 341-342 (541-542) Organic Chemistry (F, Sp, Su)
Chemistry 343 Advanced Organic Chemistry (as needed)
Chemistry 350 Medicinal Chemistry (as needed)
Chemistry 351 (551) Physical Chemistry (F)
Chemistry 352 (552) Physical Chemistry (Sp)
Chemistry 359 (559) Physical Chemistry Laboratory (Sp)
Chemistry 365 Green Chemistry and the Environment (Sp-even)
Chemistry 390 Internship in Chemistry (as needed)
Chemistry 399 Chemistry Seminar (F)
Chemistry 410 (610) Physical Inorganic Chemistry (F)
Chemistry 420 (620) Instrumental Analysis (F)
Chemistry 422 Forensic Chemistry ( Sp )
Chemistry 430 (630) Spectrometric Methods (Sp-odd)
Chemistry 440 (640) Polymer Chemistry (as needed)
Chemistry 441 Introduction to Polymer Chemistry (as needed)
Chemistry 450 (650) Advanced Physical Chemistry (as needed)
Chemistry 455 (655) Applied Nuclear Chemistry (Sp-odd)
Chemistry 460 (660) Advanced Synthesis (Sp-even)
Chemistry 470 Introduction to Research in Chemistry (as needed)
Chemistry 480 Special Topics [topic title] (as needed)

Chemistry 490 Research in Chemistry (as needed)
Chemistry 700 Directed Studies in Chemistry (as needed)
Chemistry 710 Selected Topics in Chemistry [topic title] (as needed)
Physics 101 Physics in Everyday Life (F)
Physics 102 Physics in Everyday Life (Sp)
Physics 111 Concepts and Problem Solving in Physics (as needed)
Physics 150 Concepts and Demonstrations in Physics (F, Sp)
Physics 211-212 College Physics (F, Sp, Su)
Physics 212H Honors College Physics (Sp)
Physics 220-221 University Physics (F, Sp)
Physics 305 Introduction to Research in Physics (as needed)
Physics 322 Thermodynamics, Waves and Optics (F)
Physics 323 Introduction to Modern Physics (Sp)
Physics 324 Electronic Circuits (as needed)
Physics 326 Introduction to Stellar Astrophysics (as needed)
Physics 331-332 (531-532) Mechanics (as needed)
Physics 333 Mathematical Methods for Classical and Modern Physics (as needed)
Physics 341-342 (541-542) Electricity and Magnetism (as needed)
Physics 343 Methods in Physics Research I (as needed)
Physics 344 Methods in Physics Research II (as needed)
Physics 351 Thermal Physics (as needed)
Physics 380 Special Topics in Physics (as needed)
Physics 412 Senior Seminar (as needed)
Physics 471-472 (671-672) Modern Physics (as needed)
Physics 481-482 Quantum Mechanics (as needed)
Physics 491-492 (691-692) Special Projects in Physics [topic title] (as needed)
Physics 710 Selected Topics in Physics [topic title] (as needed)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Computer Science 

Dr. Joshua T. Guerin, Chair<br>101 Johnson EPS Building<br>731-881-7391<br>fax 731-881-7383

## Faculty

Xiangdong An, James R. (Bob) Bradley, Kathleen (Kate) Ericson, Joshua T. Guerin, Qing Wang.

## Mission

With a primary focus on teaching, the Department of Computer Science emphasizes high-quality undergraduate instruction. The curriculum is designed to produce students knowledgeable in the applied and theoretical fundamentals of computer science, to train students to effectively apply their educational experiences to solve real-world problems, and to provide excellent preparation of our graduates for leadership in either the computer science profession or in graduate study. Faculty are dedicated to excellence in the classroom, professional development, and the advancement of the profession of computer science through a full range of scholarship activities and service to both the campus and community.

## Program Educational Objectives

The Program Educational Objectives of the Department of Computer Science are to produce graduates who will:

1. engage in professions where they apply their computing skills or pursue graduate study;
2. possess the ability to work independently and function well in team environments;
3. and continue to grow professionally by acquiring new professional skills and adapting to new technologies, tools, and methodologies.

## B.S. Computer Science Major

The general education requirements for the B.S. degree are outlined in the Undergraduate Degrees and Specialized Programs section of the catalog. The Department of Computer Science offers a wide range of computer science courses to support the B.S. degree with a major in computer science (6610). These courses are designed to prepare students for computing careers in business, education, government, and industry. The courses also provide the foundation for graduate study in computer science. The courses blend theory and practice to prepare the students for careers in a rapidly changing field.

In order to prepare students for current and future computing demands in varied industries, the major in computer science is offered with one of the following concentrations:

Software and Systems (6611)
Data Science (6612)
Digital Hardware and Embedded Systems (6613)

A computer science major must earn a minimum grade of C in all computer science and mathematics courses that are prerequisites for another course in the curriculum prior to taking the course that requires the prerequisite. E.g., A student may not take CSCI 325 (Data Structures) until the student has earned a C or better in CSCI 222 (Programming Concepts and Problem Solving II). Prior to graduation a grade of C or better must be earned in all computer science and mathematics courses used to fulfill the degree requirements of a Computer Science major.

In the event of a grade lower than a C in a computer science or mathematics course used to fulfill a requirement for the major in Computer Science, that course may be repeated twice. After a third attempt of a required computer science or mathematics course the student must submit a written appeal to the Department of Computer Science for approval before enrolling in the course.

Computer Science majors are required to select a course sequence from biology, chemistry, or physics to fulfill one of the general biological and physical systems sequences. Students enrolled in the Digital Hardware and Embedded Systems concentration (6613) should take University Physics (Physics 220-221) as one of their science sequences in order to fulfill the Coreq: Physics 221 or Engineering 232.

If a student is not prepared to enter calculus as the first mathematics course, he/she may be required to take college algebra and/or pre-calculus.

## Computer Science Major Requirements (49 hours)

Computer Science 221-222 Program Concepts
and Problem Solving I, II............................................................................ 6
Computer Science 215 Cybersecurity Analysis .................................................... 3
Computer Science 301 Discrete Structures of Computer Science I........................ 3
Computer Science 302 Discrete Structures of Computer Science II ...................... 3
Computer Science 325 Data Structures.............................................................. 3
Computer Science 352 Software Engineering..................................................... 3
Computer Science 420 Computer Organization and Architecture......................... 3
Computer Science 430 Algorithm Design and Analysis........................................ 3
Computer Science 435 Theory of Computation................................................... 3
Computer Science 470 Organization of Programming Languages ........................ 3
Computer Science 485 Computer Operating Systems.......................................... 3
Computer Science 495 Senior Design Project..................................................... 3
Mathematics 210 Elementary Statistics and Probability....................................... 3
Mathematics 251 Calculus I.............................................................................. 4
Mathematics 310 Linear Algebra ...................................................................... 3

## Concentration Requirements (9-19 hours)

In addition to completing the Computer Science Major Requirements, a Computer Science student must complete one of the following Concentration Requirements in order to satisfy their degree requirements:

## Software and Systems (6611)

Upper-division computer science electives, not including cooperative education ..... 9
The upper-division electives chosen from any additional (300 level or above) Computer Science courses. Total Hours ..... 9
Data Science (6612)
Computer Science 410 Database Management Systems. ..... 3
One course from:
Computer Science 380 Artificial Intelligence ..... 3
Computer Science 385 Distributed Systems ..... 3
Computer Science 455 Data Mining and Information Retrieval ..... 3
Mathematics 252 Calculus II. ..... 4
Statistics 325 Statistical Methods ..... 3
Statistics 365 Regression Analysis ..... 3
Upper-division computer science electives, not including cooperative education ..... 3
The upper-division electives chosen from any additional ( 300 level or above Computer Science courses. Total Hours ..... 19
Digital Hardware and Embedded Systems (6613)
Engineering 231 Digital Logic ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 467 Embedded Systems Laboratory .....  1
Mathematics 252 Calculus II. ..... 4
and at least 6 additional hours from:
Computer Science 360 Networking ..... 3
Computer Science 385 Distributed Systems ..... 3
Computer Science 458 Autonomous Mobile Robotics ..... 3
Engineering 466 Digital Systems Design ..... 3
Computer Science 475 Compilers, Interpreters, and Language Translators ..... 3
Total Hours ..... 18

In addition to the course requirements for the major, all general education requirements for the Bachelor of Science degree must be met.

## Minor

The minor in computer science ( $\mathrm{M}-4670$ ) consists of: CSCI 221, CSCI 222, CSCI 325 and at least 9 additional hours of upper division Computer Science coursework.

## Student Organizations

The Computer Science Department sponsors a local student chapter of the Association for Computing Machinery (ACM) and also helps support a regional chapter of ACM. ACM is the world's largest educational and scientific computing society, and delivers resources that advance computing as a science and a profession. The local student chapter of the ACM has a faculty adviser and engages in activities and projects such as programming competitions and conferences, and sponsors technical presentations. Students are encouraged to participate in this organization for professional growth.

## Courses Offered by Department of Computer Science

Computer Science 115 Cyber Literacy (as needed) Computer Science 201 Introduction to Computer Applications (as needed) Computer Science 211 Introduction to Computer Programming (as needed) Computer Science 215 Cybersecurity Analysis (as needed)

Computer Science 220 Introduction to Computer Science (F, Sp)
Computer Science 221 Programming Concepts and Problem Solving I (F, Sp)
Computer Science 222 Programming Concepts and Problem Solving II (F, Sp)
Computer Science 226 Intermediate Programming in a Second Language (as needed)
Computer Science 250 COBOL Programming (as needed)
Computer Science 260 RPG Programming (as needed)
Computer Science 290 Lower Division Special Topics [Topic title] (as needed)
Computer Science 301 Discrete Structures for Computer Science I (F, Sp)
Computer Science 302 Discrete Structures for Computer Science II (F, Sp)
Computer Science 310 System Administration (as needed)
Computer Science 320 Assembler Language and Computer Science Organization (as needed)
Computer Science 325 Data Structures and Algorithms (F, Sp)
Computer Science 335 Mobile and Web Development (Sp even)
Computer Science 340 (540) Numerical Analysis (as needed)
Computer Science 350 Advanced COBOL (as needed)
Computer Science 351 Object-Oriented System Analysis and Design (as needed)
Computer Science 352 Software Engineering (F, Sp)
Computer Science 360 Introduction to Computer Networks (Sp)
Computer Science 371 Competitive Programming Seminar (F, Sp)
Computer Science 380 Artificial Intelligence (F even)
Computer Science 385 Distributed Systems (Sp even)
Computer Science 410 Database Management Systems (F)
Computer Science 415 Web-Based Client-Server Programming (Sp odd)
Computer Science 420 Computer Organization and Architecture (F)
Computer Science 430 Algorithm Design and Analysis (F)
Computer Science 435 Theory of Computation (Sp)
Computer Science 445 Computer Graphics (Sp)
Computer Science 455 Data Mining and Information Retrieval (Sp)
Computer Science 458 Autonomous Mobile Robotics (F odd)
Computer Science 460 Bioinformatics (Sp odd)
Computer Science 470 Comparison of Programming Languages (Sp)
Computer Science 475 Compilers, Interpreters and Language Translators (Sp odd)
Computer Science 480 Internship in Computer Science (as needed)
Computer Science 485 Computer Operating Systems (Sp)
Computer Science 490 Advanced Topics in Computer Science [Topic title] (as needed)
Computer Science 495 Senior Design Project (F)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Engineering 

Dr. Timothy J. Nipp, Chair<br>101 Johnson EPS Building<br>731-881-7571<br>fax 731-881-7375

## Faculty

Eatedal Alqusaireen, Richard J. Helgeson, Jeffrey S. McCullough, Gregory H. Nail, Mohammad A. Obadat, Ali Seyedkavoosi, J. Douglas Sterrett, Jared A. Teague, Edward W. Wheeler, Ray W. Witmer, Jr.

## Mission

The mission of the Bachelor of Science in the Engineering Program is to provide relevant, high-quality undergraduate engineering education in a traditional collegiate atmosphere while serving as engineering resource for West Tennessee. The faculty enhances the engineering profession by conducting applied research and providing public service in their fields of expertise.

## Program Educational Objectives

The following program educational objectives have been adopted by the engineering faculty of the Department of Engineering to meet the criteria established by the Engineering Accreditation Commission of ABET, http://www.abet.org. After graduation from our program, engineers will be able to:

1. become successful professionals that recognize the complexity of a modern global society and meet the diverse needs of a broad spectrum of employers.
2. serve and contribute to the engineering needs of West Tennessee and the broader regional, state, national, and global markets.
3. continue to grow professionally, including leadership and communication skills, through life-long learning activities such as becoming a licensed professional engineer, pursuing graduate study, participating in continuing professional education, and active membership in professional engineering societies.

## Bachelor of Science in Engineering (6510)

In support of the university's mission, the Department of Engineering offers the Bachelor of Science in Engineering (B.S.E.) (accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org) with a concentration in one of the following:

> civil engineering ( 6511 )
> electrical engineering ( 6512 )
> industrial engineering ( 6513 )
> manufacturing engineering ( 6515 )
> mechatronics engineering ( 6516 )
> mechanical engineering ( 6514 )

Engineering majors learn the fundamentals of engineering with an emphasis on problem solving, design and integrated systems, while also taking courses in business, social sciences and the humanities. During the junior and senior years, the student takes a cohesive set of upper-division engineering courses that together provide
depth of knowledge and design content in the
chosen engineering concentration. Upon graduation, the engineering concentration is recorded on the student's permanent record, i.e., on the student's final transcript.

Designed for completion in four years (or five years when combined with the engineering Cooperative Education Program), the B.S.E. incorporates the latest guidelines from the professional engineering world as well as the advice and guidance of UT Martin's Department of Engineering Industrial Advisery Board. The B.S.E. degree program draws from classroom, lab and real-world experiences, using the rich resources of the university, faculty and professional engineering community to prepare students for the engineering world of today and the future.

As a result of the focused efforts of the university, government and industry partnership that led to its development, the comprehensive B.S.E. program offers an engineering degree that is uniquely relevant to today's students and employers. Graduates are prepared for practice as professional engineers. They have acquired the foundation for maintaining professional competence throughout their careers and they have the skills and experiences needed to move quickly into leadership roles in today's engineering and management environments.

Students who desire the option of further study at the graduate level are well prepared to continue their engineering education at the master's and doctoral level. Some students may choose to follow their engineering degree with an M.B.A. degree. Also in today's highly technological world, this comprehensive engineering degree program provides an excellent core, when combined with the appropriate biology and chemistry courses, for a pre-medical curriculum.

All UT Martin engineering students develop a firm foundation in engineering science and in engineering design, with a concentration in civil, electrical, industrial or mechanical engineering. Our students also gain real-world engineering job experience; acquire knowledge in fundamental business concepts; develop an understanding of ethical, political and societal issues; and build their skills in written and oral communications, teamwork and leadership.

Additional information about the B.S.E. program may be obtained by viewing the Web pages at www.utm.edu, select the Academics button, then the Department of Engineering; by sending an e-mail note to engin@www.utm.edu; or by calling the Department Chair of Engineering.

## Designation of a Minor

An engineering student may declare a minor in a non-engineering subject area and have the minor listed on the permanent record under the following conditions:

1. minors must be officially approved and described in the university catalog. No unofficial minors will be recognized.
2. courses taken to satisfy the minor may also be used to satisfy engineering degree requirements, provided that the courses are a part of the engineering degree requirements even if no minor were declared.
3. the intention to complete a minor must be declared at the time of application for a degree if the minor is to appear on the final transcript.

## Admission, Retention and Graduation Requirements

In addition to the university's admission requirements, a student must meet one of the following requirements to be provisionally admitted to one of the engineering majors:

1. obtain an ACT math sub-score of 25 or higher or;
2. have completed at least one semester of college trigonometry with a grade of C or better.

These requirements apply to freshmen, transfer students, and students desiring to change majors.
Full admission to one of the engineering concentrations requires that a student complete eight core courses with 1) a grade $C$ or better, and 2) a minimum GPA of 2.00 computed using all attempts in a course. The eight core courses are by concentration:

Civil: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 220, 241
Computer: MATH 251, 252, 320, PHYS 220, 221, ENGR 232, CSCI 222, 325
Electrical: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 232, 241
Industrial: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 220, 241
Manufacturing: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 220, 241
Mechanical: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 220, 241
Mechatronics: MATH 251, 252, 320, PHYS 220, 221, ENGR 121, 232, 241
Prior to qualifying for full admission to one of the engineering majors, a student pursuing an engineering major receives academic advisement from an engineering faculty member and is allowed to take any lowerdivision (numbered 100-299) engineering course if the student 1 ) meets the course prerequisites and corequisites and 2) meets the department's prerequisite grade rule. Students who have not gained full admission to one of the engineering majors cannot take upper-division (numbered 300-499) engineering courses, with the exception of Engineering 301 Computer Aided Engineering/Design tools, Engineering 315 Engineering Analysis, ENGR 350 Principles of Land Surveying and Geometrics, and Engineering 380 Engineering Economy.

An engineering student must earn a minimum grade of C in all math, science and engineering courses that are prerequisites for another course in the curriculum prior to taking the course that requires the prerequisite; e.g., a student may not take Mathematics 252 until the student has earned a grade of at least a C in Mathematics 251 and may not take Engineering 241 until earning minimum grades of C in Mathematics 252, Physics 220 and Engineering 121. Prior to graduation, a grade of C or better must be earned in all math, science and engineering courses used to fulfill degree requirements.

## BSE Degree Requirements

A student must, in addition to meeting the university's graduation requirements and the curricula requirements presented in the following sections, pass the National Council of Examiners for Engineering and Surveying (NCEES), Fundamentals of Engineering (FE) examination. Engineering students typically take this exam during their senior year.

## General Education Requirements (51/52 Hours)

Communications 230 Public Speaking
Chemistry 121 General Chemistry I ..... 4
English 105 Critical Thinking and Writing or 111 Composition I ..... 4/3
English 112 English Composition II or English 113 English for Technical Writers. ..... 3
Mathematics 251-252 Calculus I, II ..... 8
Mathematics 320 Multivariate Calculus ..... 4
Physics 220-221 University Physics I, II ..... 8
Fine Arts (Aesthetics) (from approved list) ..... 3
Humanities* (from approved list) ..... 9
Social and Behavioral Sciences** ..... 6*The nine hours of Humanities courses must be chosen to satisfy the university's general educationrequirements. The student will take a two-course sequence in the Humanities general educationcategory to provide depth in a subject area.
**Economics 201 Macroeconomics and one course from approved list
Engineering Core Requirements (23/24 Hours) (14/15 for Computer Engineering concentra- tion)
Engineering 101 Engineering Graphics* ..... 3
Engineering 121 Statics* ..... 3
Engineering 201 Engineering Methods or Math 310 Linear Algebra ..... 2/3
Engineering 241 Dynamics* ..... 3
Engineering 301 Computer Aided Engineering/Design Tools ..... 1
Engineering 313 Industrial Internship ..... 1
Engineering 315 Engineering Analysis or Math 330 Differential Equations ..... 3
Engineering 380 Engineering Economy ..... 3
Engineering 410 Senior Design I ..... 1
Engineering 411 Senior Design II ..... 3
*Indicates this class is not a Core Requirement for Computer Engineering concentration.
Bachelor of Science in Engineering
Students pursuing a Bachelor of Science in Engineering degree must complete one of the following concentration requirements in addition to the General Education, Engineering Core and Fundamen- tals of Engineering examination requirements.
Civil Engineering Concentration (54/55 Hours)
Approved Science Elective ..... 3/4
Engineering 220 Strength of Materials ..... 3
Engineering 356 Construction Materials ..... 2
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 341 Fluid Mechanics ..... 3
Engineering 350 Principles of Land Surveying and Geometrics. ..... 3
Engineering 351 Basic Structural Analysis ..... 4
Engineering 352 Transportation Engineering ..... 3
Engineering 353 Hydraulics and Hydrology ..... 3
Engineering 450 Reinforced Concrete Design ..... 4
Engineering 451 Geotechnical Engineering ..... 4
Engineering 456 Environmental Engineering I. ..... 3
Engineering 459 Engineering Design and Construction Management. ..... 2
And approved concentration electives ..... 14*
Computer Engineering Concentration (63 Hours)
Computer Science 221 Programming Concepts and Problem Solving I ..... 3
Computer Science 222 Programming Concepts and Problem Solving II ..... 3
Computer Science 301 Discrete Structure for Computer Science I. ..... 3
Computer Science 302 Discrete Structure for Computer Science II ..... 3
Computer Science 325 Data Structures and Algorithms. ..... 3
Computer Science 385 Distributed Systems ..... 3
Computer Science 420 Computer Organization and Architecture ..... 3
Computer Science 430 Algorithm Design and Analysis ..... 3
Computer Science 485 Computer Operating Systems ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 311 Engineering Applications of Probability \& Statistics. ..... 3
Engineering 316 Signals and Systems ..... 3
Engineering 331 Semiconductor Electronics ..... 3
Engineering 332 Linear Circuits II. ..... 3
Engineering 333 Electrical Laboratory II ..... 1
Engineering 361 Digital Signal Processing ..... 4
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 466 Digital Systems Design ..... 3
Engineering 467 Embedded Systems Laboratory. ..... 1
And approved concentration electives ..... 6
Electrical Engineering Concentration (54 hours)
Computer Science 221 Programming Concepts and Problem Solving I ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 316 Signals and Systems ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 331 Semiconductor Electronics ..... 3
Engineering 332 Linear Circuits II. ..... 3
Engineering 333 Electrical Laboratory II ..... 1
Engineering 361 Digital Signal Processing ..... 4
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 460 Microprocessors and Computer Organization ..... 4
Engineering 461 Communication Systems ..... 3
Engineering 462 Linear Control Systems Design ..... 3
Engineering 463 Electrical Power Systems ..... 3
Engineering 464 Engineering Electromagnetics. ..... 3
Engineering 465 Electric Machines ..... 3
Engineering 466 Digital Systems Design ..... 3
Engineering 467 Embedded Systems Laboratory. ..... 1
Industrial Engineering Concentration (54 Hours)
Engineering 220 Strength of Materials ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 302 Computer Aided Manufacturing (CAM) Lab ..... 1
Engineering 311 Engineering Applications of Probability \& Statistics. ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 340 Thermodynamics ..... 3
Engineering 341 Fluid Mechanics. ..... 3
Engineering 381 Human Factors in Engineering ..... 3
Engineering 383 Material Forming Processes ..... 2
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 413 Engineering Management. ..... 3
Engineering 462 Linear Control Systems Design ..... 3
Engineering 483 Industrial Controls I. ..... 3
Engineering 484 Industrial Controls II ..... 3
Industrial Engineering 310 Production Management. ..... 3
Industrial Engineering 312 Introduction to Management Science ..... 3
Industrial Engineering 330 Process Control and Improvement ..... 3
Industrial Engineering 402 Industrial Safety ..... 3
Manufacturing Engineering Concentration (54 Hours)
Engineering 220 Strength of Materials ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 302 Computer Aided Manufacturing (CAM) Laboratory ..... 1
Engineering 310 Engineering Materials ..... 3
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 340 Thermodynamics ..... 3
Engineering 341 Fluid Mechanics ..... 3
Engineering 382 Metals Casting and Joining Processes ..... 3
Engineering 383 Material Forming Processes ..... 2
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 481 Machine Vision and Robotics. ..... 3
Engineering 483 Industrial Controls I. ..... 3
Engineering 484 Industrial Controls II ..... 3
Engineering 485 Polymer Manufacturing Processes ..... 3
Engineering 486 Quality Engineering. ..... 3
Engineering 487 Hydraulic and Pneumatic Systems Design ..... 3
Industrial Engineering 330 Process Control and Improvement ..... 3
Mechanical Engineering Concentration (54 Hours)
Engineering 220 Strength of Materials ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 310 Engineering Materials ..... 3
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 340 Thermodynamics ..... 3
Engineering 341 Fluid Mechanics ..... 3
Engineering 370 Vibrations ..... 4
Engineering 371 Advanced Strength of Materials ..... 3
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 462 Linear Control Systems Design ..... 3
Engineering 471 Heat Transfer ..... 3
Engineering 472 Kinematics/Dynamics of Machines ..... 4
Engineering 473 Machine Design ..... 3
Engineering 476 Applied Finite Element Analysis Lab ..... 1
And approved concentration electives ..... 6*
Mechatronics Engineering Concentration (54 Hours)
Engineering 220 Strength of Materials. ..... 3
Engineering 231 Digital Logic. ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 302 Computer Aided Manufacturing (CAM) Laboratory ..... 1
Engineering 310 Engineering Materials ..... 3
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 332 Linear Circuits II. ..... 3
Engineering 333 Electrical Laboratory II ..... 1
Engineering 340 Thermodynamics ..... 3
Engineering 341 Fluid Mechanics. ..... 3
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 462 Linear Control Systems Design ..... 3
Engineering 465 Electric Machines ..... 3
Engineering 472 Kinematics/Dynamics of Machines ..... 4
Engineering 481 Machine Vision and Robotics ..... 3
Engineering 483 Industrial Controls I ..... 3
Engineering 484 Industrial Controls II ..... 3
Engineering 487 Hydraulic and Pneumatic Systems Design ..... 3
*Concentration electives must be approved by Department of Engineering Curriculum and DegreesCommittees.
Minimum hours required for a B.S. in Engineering degree ..... 128
MinorElectrical Engineering [Concentration Area] A minor in the Electrical Engineering concentration arearequires Engineering 231, 232, 233, 331, 332, 333, 460, and Computer Science 221.
Bachelor of Science in Mechanical Engineering (6540)

The Department of Engineering offers the Bachelor of Science in Mechanical Engineering (BSME) degree in support of the University's mission.

The BSME degree will be evaluated for accreditation by the ABET-EAC (http://www.abet.org) in 2022. The first student to graduate under the BSME degree are expected to be in the Spring of 2021.
All UT Martin engineering students develop a firm foundation in engineering science and design while receiving a broad education including courses in business, social sciences and the humanities. Students also gain real world job experience through a required internship.

## Designation of a Minor

An engineering student may declare a minor in a non-engineering subject area and have the minor listed on the permanent record under the following conditions:

1. minors must be officially approved and described in the university catalog.
2. courses taken to satisfy the minor may also be used to satisfy engineering degree requirements, provided that the courses are a part of the engineering degree requirements even if no minor were declared.
3. the intention to complete a minor must be declared at the time of application for a degree if the minor is to appear on the final transcript.

## Admission and Retention

In addition to the university's admission requirements, a student must meet one of the following requirements to be provisionally admitted to the engineering major:

1. obtain an ACT math sub-score of 25 or higher or;
2. complete at least one semester of college trigonometry with a grade of C or better.

These requirements apply to freshmen, transfer students, and students desiring to change majors.
Full admission to the engineering major requires that a student complete eight core courses with 1) a grade of $C$ or better, and 2) a minimum GPA of 2.00 computed using all attempts in a course. The eight core courses for the BSME are listed below:

| BSME Core 8 |
| :--- |
| MATH 251 |
| MATH 252 |
| MATH 320 |
| PHYS 220 |
| PHYS 221 |
| ENGR 121 |
| ENGR 220 |
| ENGR 241 |

Prior to qualifying for full admission to the engineering major, a student pursuing an engineering major receives academic advisement from an engineering faculty member and is allowed to take any lower division (numbered 100-299) engineering course if the student 1 ) meets the course prerequisites and corequisites and 2) meets the department's prerequisite grade rule. Students who have not gained full admission to one of hte engineering majors cannot take upper-division (numbered 300-499) engineering courses, with the exception of ENGR 301 Computer Aided Engineering/Desigh Tools, ENGR 315 Engineering Analysis, and ENGR 380 Engineering Economy.
An engineering student must earn a minimum grade of C in all math, science and engineering courses that are prerequisites for another course in the curriculum prior to taking the course that requires the prerequisites, e.g. a student may not take MATH 252 until the student has earned a grade of at least a C in MATH 251 and may not take ENGR 241 until earning minimum grades of C in MATH 252, PHYS 220 and ENGR 121. Prior to graduation, a grade of $C$ or better must be earned in all math, science and engineering courses required to fulfill degree requirements.

## BSME Degree Requirements

A student must, in addition to meeting the university's graduation requirements and the curricula requirements presented in the following sections, pass the National Council of Examiners for Engineering and
Surveying (NCEES) Fundamentals of Engineering (FE) examination. Engineering students typically take this exam during their senior year.
General Education Requirements (51/52 Hours)
Communication 230 Public Speaking ..... 3
Chemistry 121 General Chemistry I ..... 4
English 105 Critical Thinking and Writing or 111 Composition I ..... 4/3
English 112 English Composition II or English 113 English for Technical Writers ..... 3
Mathematics 251-252 Calculus I, II ..... 8
Mathematics 320 Multivariate Calculus ..... 4
Physics 220-221 University Physics I, II ..... 8
Fine Arts (Aesthetics) (from approved list) ..... 3
Humanities* (from approved list) ..... 9
Social and Behavioral Sciences** ..... 6
*The nine hours of Humanities courses must be chosen to satisfy the university's general education requirements. The student will take a two-course sequence in the Humanities general education category to provide depth in a subject area.
**Economics 201 Macroeconomics and one course from approved list
BSME Requirements: List I Classes (23/24 Hours)
Engineering 101 Engineering Graphics ..... 3
Engineering 121 Statics ..... 3
Engineering 201 Engineering Methods or Math 310 Linear Algebra ..... 2/3
Engineering 241 Dynamics ..... 3
Engineering 301 Computer Aided Engineering/Design Tools ..... 1
Engineering 313 Industrial Internship ..... 1
Engineering 315 Engineering Analysis or Math 330 Differential Equations. ..... 3
Engineering 380 Engineering Economy ..... 3
Engineering 410 Senior Design I ..... 1
Engineering 411 Senior Design II ..... 3
BSME Requirements: List II Classes (54 Hours)Engineering 220 Strength of Materials3
Engineering 231 Digital Logic ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 310 Engineering Materials ..... 3
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 317 Computational Methods and Numerical Analysis ..... 3
Engineering 340 Thermodynamics ..... 3
Engineering 341 Fluid Mechanics ..... 3
Engineering 370 Vibrations ..... 4
Engineering 371 Advanced Strength of Materials ..... 3
Engineering 409 Engineering Design and Project Management. ..... 2
Engineering 462 Linear Control Systems Design ..... 3
Engineering 471 Heat Transfer ..... 3
Engineering 472 Kinematics/Dynamics of Machines ..... 4
Engineering 473 Machine Design ..... 3
Engineering 476 Applied Finite Element Analysis Lab. ..... 1
And approved concentration electives. ..... 6*
Minimum hours required for a B.S. in Mechanical Engineering degree ..... 128

## Cooperative Education and Internship Programs

The Department of Engineering Cooperative Education (Co-op) and Internship Programs are designed to provide the services of young men and women committed to pursuing careers in Engineering to the West Tennessee region and beyond. Productive, practical engineering work experiences are a fundamental part of the student's education. The concept recognizes the value of the three-way partnership between the UT Martin Department of Engineering, the employer and the student.

## Co-op Program

The engineering Co-op program is offered as an educational enhancement to the B.S.E. program. To complete the Co-op program, a student works full-time in progressive engineering work assignments for at least three semesters (the equivalent of one year) prior to the student's senior year. Students enrolling in the Coop program gain the benefits of a planned progression of work experiences which complement and enrich their engineering studies on campus. Participants gain insight into the engineering work world, are able to apply their insights from the real world to their studies, grow in understanding of their own interests and career objectives and advance in professional maturity.
Co-op positions must be full-time engineering work experiences supervised by an engineer for a period of at least ten consecutive weeks. During the full-time work semesters, the College of Engineering and Natural Sciences considers the student full-time. Co-op work assignments are paid positions, and students are able to help finance their education while gaining real-world engineering experience.

After completing all the B.S.E. freshman year course work, an engineering student with a cumulative GPA of at least 2.50 may elect to participate in the engineering Co-op program. A transfer student must complete at least one full-time academic semester at UT Martin and must have a minimum cumulative GPA of 2.50 to qualify.
Co-op work periods are tailored to meet the needs of the student and employer.

## Internship Program

Intern positions must be full-time engineering work experiences supervised by an engineer for a period of at least ten consecutive weeks. During the full-time work semesters, the College of Engineering and Natural Sciences considers the student full-time. The internship should be planned no sooner than the summer between the junior and senior year.

Students pursuing the Bachelor of Science degree in Engineering (B.S.E.) have the following two options concerning fulfilling the internship requirement:

1. complete at least a one-semester internship as part of the B.S.E. degree requirements. The internship will be scheduled when the student is within three semesters of graduation; or
2. complete three co-op semesters. Completion of the co-op program will substitute for the required internship.

## Facilities

Instructional facilities of the department include: two dedicated, 24 -seat computer labs for engineering students, with a wide range of software including Matlab, LabVIEW, AutoCAD, Autodesk Inventor, Autodesk Inventor CAM, Microstation, PSpice, and Microsoft Office; a wide range of laboratories to support an engi-
neering hands-on education: Asphalt Lab; Electrical Lab; Automation and Manufacturing Lab; Materials Lab; Soils and Concrete Lab; Instrumentation, Vibrations, and Controls Lab; Electrical Development Lab; Civil and Mechanical Lab; and Student Development Lab; and student study rooms.

## Student Organizations

There are currently four student chapters of professional societies in the Department of Engineering: The American Society of Civil Engineers (ASCE), the Institute of Electrical and Electronics Engineers (IEEE), the Society of Automotive Engineers (SAE), and the Society of Manufacturing Engineers (SME). Each society has a faculty adviser and engages in activities and projects of common interest to the membership. Students are encouraged to participate in one or more of these organizations for professional growth.

## Courses Offered by Department of Engineering

Civil Engineering 354 Advanced Land Surveying and Geomatics (as needed)
Civil Engineering 454 Land Surveying with GPS (as needed)
Civil Engineering 456 Boundary Control and Legal Principles (as needed)
Civil Engineering 458 Subdivision Site Planning and Development (as needed)
Engineering 100 Society and Technology (F)
Engineering 101 Engineering Graphics (F, Sp)
Engineering 121 Statics (F, Sp)
Engineering 201 Engineering Methods (F, Sp)
Engineering 220 Strength of Materials (F, Sp)
Engineering 231 Digital Logic (F, Sp)
Engineering 232 Linear Circuits I (F, Sp)
Engineering 233 Electrical Laboratory I (F, Sp)
Engineering 241 Dynamics (F, Sp)
Engineering 301 Computer Aided Engineering/Design Tools (F)
Engineering 302 Computer Aided Manufacturing (CAM) Laboratory (Sp)
Engineering 310 Engineering Materials (F, Sp)
Engineering 311 Engineering Applications of Probability and Statistics (F, Sp)
Engineering 313 Engineering Internship (F, Sp, Su)
Engineering 315 Engineering Analysis (F, Sp)
Engineering 315H Honors Engineering Analysis (F, Sp)
Engineering 316 Signals and Systems (F)
Engineering 317 Computational Methods and Numerical Analysis (Sp)
Engineering 331 Semiconductor Electronics (F)
Engineering 332 Linear Circuits II (Sp)
Engineering 333 Electrical Laboratory II (Sp)
Engineering 340 Thermodynamics (F)
Engineering 341 Fluid Mechanics (Sp)
Engineering 350 Principles of Land Surveying and Geomatics (F)
Engineering 351 Basic Structural Analysis (Sp)
Engineering 352 Transportation Engineering (F)
Engineering 353 Hydraulics and Hydrology (Sp)
Engineering 361 Digital Signal Processing (Sp)
Engineering 370 Vibrations (F)

Engineering 371 Advanced Strength of Materials (Sp)
Engineering 380 Engineering Economy (F, Sp)
Engineering 381 Human Factors in Engineering (F-even)
Engineering 382 Joining and Casting Processes (F)
Engineering 383 Material Removal and Forming Processes (Sp)
Engineering 409 Engineering Design and Project Management (F)
Engineering 410 Senior Design I (F)
Engineering 411 Senior Design II (Sp)
Engineering 413 Engineering Management (F-odd)
Engineering 440 Energy Systems (F)
Engineering 450 Reinforced Concrete Design (F)
Engineering 451 Geotechnical Engineering (Sp)
Engineering 452 Steel Design (F)
Engineering 453 Pavement Design and Analysis ( Sp )
Engineering 454 Computational Hydraulics and Computational Hydrology Modeling (F)
Engineering 455 Timber Design (Sp)
Engineering 456 Environmental Engineering (Sp)
Engineering 459 Engineering Design and Construction Management (F)
Engineering 460 Microprocessors and Computer Organization (Sp)
Engineering 461 Communication Systems (Sp)
Engineering 462 Linear Control Systems Design (F)
Engineering 463 Electric Machines (as needed)
Engineering 464 Engineering Electromagnetics (Sp)
Engineering 465 Electrical Energy Conversion Systems (Sp)
Engineering 466 Digital Systems Design (Sp)
Engineering 467 Embedded Systems Laboratory (as needed)
Engineering 471 Heat Transfer (Sp)
Engineering 472 Kinematics/Dynamics of Machines (F)
Engineering 473 Machine Design (Sp)
Engineering 476 Applied Finite Element Analysis Lab (Sp)
Engineering 477 Gas Dynamics (Sp)
Engineering 481 Machine Vision and Robotics (F)
Engineering 483 Industrial Controls I (F)
Engineering 484 Industrial Controls II (Sp)
Engineering 485 Polymer Manufacturing Processes (F)
Engineering 486 Quality Engineering (F, Sp)
Engineering 487 Hydraulic and Pneumatic Systems Design (F, Sp)
Engineering 490 Special Topics (Title of topic) (as needed)
Industrial Engineering 310 Operations Management (F, Sp, Su)
Industrial Engineering 312 Introduction to Management Science (F)
Industrial Engineering 330 Process Control and Improvement (Sp)
Industrial Engineering 332 Quality Management Systems (as needed)
Industrial Engineering 334 Process and Service Design and Control (as needed)
Industrial Engineering 336 Quantitative Methods and Improvement (as needed)
Industrial Engineering 402 Industrial Safety (as needed)
Industrial Engineering 412 Service Operations Management (Sp)

# Department of Mathematics and Statistics 

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## Faculty

John P. Bush, Chris K. Caldwell, Jennifer Cearfoss, John Cochran, Jason DeVito, James D. Elder, E. Steve Elliott, Thomas E. Eskew, Dana Gatewood, Pamela Guerrero, Susan Hamilton, Louis W. Kolitsch, Stephanie M. Kolitsch, Curtis J. Kunkel, Desireé A. McCullough, Robert Niedzialomski, David L. Ray, Bryan Sandor, Jobn J. Schommer, Justin R. Sims, Brian C. Wagner

## Mission

The mission of the Department of Mathematics and Statistics is to provide a high-quality program that enables students throughout the university to examine and appreciate the principal concepts of mathematics and statistics and to utilize them effectively in applications. The program incorporates modeling, real-world data, classical and contemporary methods and modern technology. The department offers majors and minors that are designed to prepare students for graduate study or for entering a profession. The curriculum also provides service courses to programs in all colleges. The department maintains a vital program of research and makes outreach courses available to the citizens of the region.

## Student Learning Outcomes

Upon completion of his/her degree from the University of Tennessee at Martin with a major in mathematics, the graduate will be able to:

1. apply mathematical concepts and principles to perform numerical and symbolic computations.
2. use technology appropriately to investigate and solve (mathematical and statistical) problems.
3. write clear and precise proofs.
4. communicate effectively in both written and oral form.
5. demonstrate the ability to read and learn mathematics and/or statistics independently.

## Mathematics Major

The Department of Mathematics and Statistics offers six concentrations leading to the Bachelor of Arts or the Bachelor of Science degree with a major in mathematics. Majors in any concentration are required to complete the general education requirements for the appropriate degree and are advised to select physics as one of the lab sciences. If a student is not prepared to enter calculus as the first mathematics course, the elective hours can be used to take either college algebra and trigonometry or precalculus. The completion of a minor or the professional-education courses necessary for professional licensure is required for the B.A. degree. For the B.S. degree, no minor is required. Students completing the B.S. degree with a Secondary Mathemat-
ics Concentration are required to complete the professional-education courses necessary for professional licensure.
Double majors: Mathematics/Computer Science 340 may be allowed only in the requirements for a mathematics major or computer science major but not both.
One of the goals of the mathematics major is to prepare students for mathematical careers in business, government, education, or industry. To meet the various professional needs of the mathematics major, different concentrations are available within the major.
Students interested in pursuing a graduate degree in mathematics should pursue one of the following concentrations.

## Mathematics Concentration (6911 BA):

Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 252 Calculus II. ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation .....  1
Mathematics 320 Multivariate Calculus. ..... 4
Mathematics 330 Differential Equations I ..... 3
Mathematics 471 Abstract Algebra I ..... 3
Mathematics 472 Abstract Algebra II ..... 3
Mathematics 481 Real Analysis I ..... 3
Mathematics 482 Real Analysis II. ..... 3
Nine additional hours from: Mathematics 331; Mathematics 340; Mathematics 350; Mathematics 351; Mathematics 410; Mathematics 430; Mathematics 451; Mathematics 452; Mathematics 498; Math- ematics 499; Statistics 461
and
Completion of a minor.
Mathematics Concentration (6911 BS):
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I. ..... 4
Mathematics 252 Calculus II. ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics. ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus ..... 4
Mathematics 330 Differential Equations I ..... 3
Mathematics 471 Abstract Algebra I ..... 3
Mathematics 472 Abstract Algebra II ..... 3
Mathematics 481 Real Analysis I ..... 3
Mathematics 482 Real Analysis II. ..... 3
Computer Science 221 Introduction to Computer Programming. ..... 3
Computer Science 301 Discrete Structures for Computer Science. ..... 3
Nine additional hours from: Mathematics 331; Mathematics 340; Mathematics 350; Mathematics 351;Mathematics 410; Mathematics 430; Mathematics 451; Mathematics 452; Mathematics 498; Math-ematics 499; Statistics 461
and
Additional elective hours needed to total 120 hours for the degree.
Students interested in pursuing a graduate degree in statistics, actuarial science, or a career as a statistician should pursue the following concentration.

## Statistics Concentration ( 6912 BA ):

Mathematics 210 Elementary Statistics and Probability .................................................................. 3
Mathematics 251 Calculus I........................................................................................................ 4
Mathematics 252 Calculus II........................................................................................................ 4
Mathematics 310 Linear Algebra.................................................................................................. 3
Mathematics 314 Foundations of Mathematics............................................................................... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..................................................... 1
Mathematics 320 Multivariate Calculus........................................................................................ 4
Mathematics 481 Real Analysis I.................................................................................................. 3
Statistics 325 Statistical Methods.................................................................................................. 3
Statistics 365 Regression Analysis ................................................................................................. 3
Statistics 461 Probability and Statistics I ....................................................................................... 3
Statistics 462 Probability and Statistics II ...................................................................................... 3
Statistics 465 Statistical Computing .............................................................................................. 3
Six additional hours from: Statistics 375; Statistics 385; Statistics 425; Statistics 435; Statistics 441; Statistics 442; Statistics 455; Statistics 498; Statistics 499; Mathematics 451
and
Completion of a minor.

## Statistics Concentration (6912 BS):

Mathematics 210 Elementary Statistics and Probability .................................................................. 3
Mathematics 251 Calculus I......................................................................................................... 4
Mathematics 252 Calculus II........................................................................................................ 4
Mathematics 310 Linear Algebra.................................................................................................. 3
Mathematics 314 Foundations of Mathematics............................................................................... 3
Mathematics 315 Mathematics and Statistics Career Preparation .................................................... 1
Mathematics 320 Multivariate Calculus ........................................................................................ 4
Mathematics 481 Real Analysis I.................................................................................................. 3
Statistics 325 Statistical Methods.................................................................................................. 3
Statistics 365 Regression Analysis ................................................................................................ 3
Statistics 461 Probability and Statistics I ....................................................................................... 3
Statistics 462 Probability and Statistics II ...................................................................................... 3
Statistics 465 Statistical Computing .............................................................................................. 3
Computer Science 221 Introduction to Computer Programming.................................................... 3
Computer Science 301 Discrete Structures for Computer Science................................................... 3 Six additional hours from: Statistics 375; Statistics 385; Statistics 425; Statistics 435; Statistics 441; Statistics 442; Statistics 455; Statistics 498; Statistics 499; Mathematics 451
and
Additional elective hours needed to total 120 hours for the degree.
Students interested in pursuing a career in secondary mathematics teaching should pursue the following concentration.
Secondary Mathematics Concentration ( 6913 BA or 6913 BS):Students in the College of Engineering and Natural Sciences who are seeking the necessary professional-edu-cation courses to qualify for licensure as a secondary mathematics teacher must be admitted to the teacher-education program in the College of Education, Health, and Behavioral Sciences. They should consult theCollege of Education, Health, and Behavioral Sciences about admission and licensure requirements. Thenecessary mathematics courses are listed below. This option will usually require at least four-and-one-halfyears (nine semesters).
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I. ..... 4
Mathematics 252 Calculus II. ..... 4
Mathematics 310 Linear Algebra. ..... 3
Mathematics 314 Foundations of Mathematics. ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus ..... 4
Statistics 325 Statistical Methods ..... 3
Mathematics 410 Geometry ..... 3
Mathematics 420 History of Mathematics ..... 3
Mathematics 451 Applied Mathematics I. ..... 3
Mathematics 471 Abstract Algebra I. ..... 3
one course from:
Statistics 461 Probability and Statistics I ..... 3
Mathematics 481 Real Analysis I. ..... 3
one course from:
Statistics 462 Probability and Statistics II ..... 3
Mathematics 472 Abstract Algebra II ..... 3
Mathematics 482 Real Analysis II. ..... 3andThree additional hours of upper-division mathematics or statistics courses not including cooperative-education courses.
Students interested in a broad general background in mathematics and statistics should pursue one of the following concentration.
General Mathematics and Statistics Concentration (6914 BA):
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 252 Calculus II ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics. ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus ..... 4
two courses from:
Statistics 461 Probability and Statistics I ..... 3
Mathematics 471 Abstract Algebra I. ..... 3
Mathematics 481 Real Analysis I ..... 3
one course from:Statistics 462 Probability and Statistics II3
Mathematics 472 Abstract Algebra II ..... 3
Mathematics 482 Real Analysis II. ..... 3
Fifteen additional hours of upper-division mathematics and statistics courses not including cooperative-education courses.
and
Completion of a minor
.General Mathematics and Statistics Concentration (6914 BS):
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 252 Calculus II ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus ..... 4
two courses from:
Statistics 461 Probability and Statistics I ..... 3
Mathematics 471 Abstract Algebra I ..... 3
Mathematics 481 Real Analysis I ..... 3
one course from:
Statistics 462 Probability and Statistics II ..... 3
Mathematics 472 Abstract Algebra II ..... 3
Mathematics 482 Real Analysis II ..... 3
Computer Science 221 Introduction to Computer Programming ..... 3
Computer Science 301 Discrete Structures for Computer Science ..... 3
Fifteen additional hours of upper-division mathematics and statistics courses not including coopera- tive-education courses. ..... andAdditional elective hours needed to total 120 hours for the degree.
Students interested in pursuing a career in applied mathematics should complete the following concentration.
Applied Mathematics Concentration (6915 BS):
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 252 Calculus II ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics. ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus ..... 4
Mathematics 330 Differential Equations I ..... 3
Mathematics 331 Differential Equations II ..... 3
Mathematics 340 Numerical Analysis ..... 3
Mathematics 351 Graph Theory and Combinatorics ..... 3
Mathematics 451 Applied Mathematics I ..... 3
Mathematics 452 Applied Mathematics II ..... 3
Mathematics 471 Abstract Algebra I or Mathematics 481 Real Analysis I ..... 3
Computer Science 221 Introduction to Computer Programming ..... 3
Computer Science 301 Discrete Structures for Computer Science I ..... 3
Statistics 325 Statistical Methods ..... 3
Six additional hours selected from: Biology 331 General Ecology; Biology 337 Cell Biology; Biology 444 Conservation Biology; Chemistry 351 Physical Chemistry I/Chemistry 352 Physical Chemistry II; Geology 315 Principles of Oceanography; Geology 345 Natural Hazards; Geology 355 Principles of Geomorphology; Physics 322 Thermodynamics, Waves and Optics; Physics 323 Introduction to Modern Physics; Physics 331/332 Mechanics; Engineering 340 Thermodynamics
andAdditional elective hours needed to total 120 hours for the degree.
Students interested in a career in actuarial science with coursework directly preparing them for the first two actuarial exams should pursue the following concentration.
Actuarial Science Concentration (6916 BS):
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 252 Calculus II ..... 4
Mathematics 310 Linear Algebra ..... 3
Mathematics 314 Foundations of Mathematics ..... 3
Mathematics 315 Mathematics and Statistics Career Preparation ..... 1
Mathematics 320 Multivariate Calculus. ..... 4
Statistics 325 Statistical Methods ..... 3
Statistics 365 Regression Analysis ..... 3
Statistics 425 Time Series Analysis ..... 3
Statistics 441 Actuarial Science P. ..... 3
Statistics 442 Actuarial Science FM ..... 3
Statistics 461 Probability and Statistics I ..... 3
Statistics 462 Probability and Statistics II ..... 3
Computer Science 221 Introduction to Computer Programming. ..... 3
Computer Science 301 Discrete Structures for Computer Science I ..... 3
Accounting 201 Accounting Information for Decision Marking I ..... 3
Economics 201 Principles of Macroeconomics ..... 3
Economics 202 Principles of Microeconomics ..... 3
Finance 301 Managerial Finance ..... 3
Three additional hours selected from: Statistics 375; Statistics 385; Statistics 435; Statistics 455; Statis-tics 465; Statistics 491; Statistics 492; Statistics 498; Statistics 499
and
Additional elective hours needed to total 120 hours for the degree.
Minors

## Mathematics (M-6910)

Mathematics 251-252, Calculus I-II, are prerequisites to the mathematics minor which consists of Math 310 Linear Algebra and twelve additional hours of upper-division mathematics courses.

## Statistics (M-6912)

Mathematics 210 Elementary Statistics and Probability and Mathematics 251 Calculus I are prerequisites to the statistics minor. The minor consists of Statistics 325 Statistical Methods and nine additional hours of upper-division statistics courses.

## Secondary Mathematics Majors in the College of Education and Behavioral Sciences

Students in the College of Education, Health, and Behavioral Sciences who are secondary mathematics majors with the intent of teaching in secondary schools are required by the College of Education, Health, and Behavioral Sciences to complete the following courses: Mathematics 210, 251, 252, 310, 314, 320, 410, 420, 451, 471 and six additional hours of upper-division mathematics or statistics courses. Students should consult the College of Education, Health, and Behavioral Sciences pages in the catalog for all other course requirements.

## Admission Requirements

Mathematics placement recommendations for entering students will be based on their mathematics placement examination results, their mathematics ACT score and their high school record. All students are encouraged to take the placement exam before enrolling in their first mathematics course.

Students who have a deficiency in algebra or geometry must remove the deficiency by taking the appropriate mathematics course(s), one per deficiency.

Students, particularly in science, who need more than one year of mathematics should plan to take Mathematics 251-252. If a student has not completed high school trigonometry, he/she should take Mathematics 170 or Mathematics 185 before enrolling in Mathematics 251.

## Facilities

As the first state university in Tennessee to allow Internet access to all students and faculty from residence halls, apartments and offices, UT Martin's computer facilities rank among some of the best in the Southeast if not the nation. Numerous student labs provide access to a variety of personal computers (Windows and MacOS). Some of the labs are open 24 hours. All computers in the university labs provide for Internet access. Student computer labs adjacent to the Paul Meek Library are open 24 hours, 7 days a week and include Maple and Minitab software for mathematics and statistics students.

The Department of Mathematics and Statistics operates a people-oriented mathematics lab. Tutorial assistance is provided for students in freshman and sophomore-level mathematics courses. Several self-paced courses are offered through the lab. Students in mathematics-intensive majors are employed as tutors in the mathematics lab.

## Scholarships and Awards

The Arthur L. and Nelle L. Sparks Mathematics Scholarships are awarded to students majoring in mathematics who have demonstrated successful academic performance. Selection is made by the UT Martin Scholarship Committee. The Louise Knifley Memorial Scholarship is awarded to a junior or senior mathematics major with appropriate mathematics courses and grade point average. The faculty selects the recipient. In addition to the Knifley scholarship, the Mathematics Award is given to the outstanding senior in mathematics as selected by the faculty.

## Student Organizations

The department supports a student mathematics organization that provides opportunities for extra-curricular mathematical activities and interaction with the faculty in an informal setting. The department encourages student membership in a national organization of mathematicians and/or statisticians such as the Mathematics Association of America (MAA) or the American Statistical Association (ASA). The department also encourages student research, student presentations and student attendance at regional mathematics conferences.

## Courses Offered by Department of Mathematics and Statistics

Mathematics 100-110 Essentials of Algebra I, II (F, Sp)
Mathematics 130 The Nature of Mathematics ( $\mathrm{F}, \mathrm{Sp}$ )
Mathematics 140 Precalculus College Algebra (F, Sp)
Mathematics 160 Calculus for Business and Life Sciences (F, Sp)
Mathematics 170 Precalculus Trigonometry (F, Sp)
Mathematics 185 Precalculus (F, Sp)
Mathematics 191-192 Principles of Mathematics (F, Sp)
Mathematics 210 Elementary Statistics and Probability (F, Sp)
Mathematics 210 H Honors Elementary Statistics and Probability (Sp)
Mathematics 251-252 Calculus I-II (F, Sp)
Mathematics 251H Honors Calculus I (F)
Mathematics 291 Special Topics in Mathematics (as needed)
Mathematics 310 Linear Algebra (Sp)
Mathematics 314 Foundations of Mathematics (F)
Mathematics 315 Mathematics and Statistics Career Preparation (Sp)
Mathematics 320 Multivariate Calculus (F, Sp)
Mathematics 330 Differential Equations I(F)
Mathematics 331 Differential Equations II (Sp)
Mathematics 340 (540) Numerical Analysis (Sp-even)
Mathematics 350 Number Theory (Sp-odd)
Mathematics 351 Graph Theory and Combinatorics (Sp-even)
Mathematics 410 (610) Geometry (Sp-even)
Mathematics 420 (620) History of Mathematics (Sp-odd)
Mathematics 430 (630) Complex Variables (Sp-even)
Mathematics 451 (651) Applied Mathematics I (F)
Mathematics 452 Applied Mathematics II (Sp)
Mathematics 471 (671) Abstract Algebra I (F)
Mathematics 472 (672) Abstract Algebra II (Sp)
Mathematics 481 (681) Real Analysis I (F-odd)
Mathematics 482 (682) Real Analysis II (Sp-even)
Mathematics 491-492 (691-692) Special Topics [topic title] (as needed)
Mathematics 498 Undergraduate Research Experience I (as needed)
Mathematics 499 Undergraduate Research Experience II (as needed)
Mathematics 710 Selected Topics in Number Theory for Teachers (as needed)
Mathematics 720 Selected Topics in Algebra for Teachers (as needed)
Mathematics 730 Selected Topics in Geometry for Teachers (as needed)

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Mathematics 740 Selected Topics in Applications of Mathematics for Teachers (as needed)
Mathematics 750 Selected Topics in Probability and Statistics for Teachers (as needed)
Statistics 325 Statistical Methods (F)
Statistics 365 (565) Regression Analysis (F-odd)
Statistics 375 (575) Sampling Theory (Sp-even)
Statistics 385 (585) Nonparametric Methods (F-even)
Statistics }425\mathrm{ (625) Time Series Analysis (Sp-even)
Statistics }435\mathrm{ (635) Categorical Data Analysis (F-odd)
Statistics 441 Actuarial Science P (F-odd)
Statistics 442 Actuarial Science FM (Sp-even)
Statistics 455 (655) Design of Experiments (Sp-even)
Statistics 461 (661) Probability and Statistics I (F-even)
Statistics 462 (662) Probability and Statistics II (Sp-odd)
Statistics 465 (665) Statistical Computing (Sp-odd)
Statistics 491-492 (691-692) Special Topics [topic title] (as needed)
Statistics }498\mathrm{ Undergraduate Research Experience I (as needed)
Statistics 499 Undergraduate Research Experience II (as needed)
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Complete course descriptions can be found in the Course Description section of the catalog.

# The College of Humanities and Fine Arts 



The University of Tennessee at Martin

## The College of Humanities and Fine Arts

Dr. Lynn M. Alexander, Dean<br>225 Andy Holt Humanities Building<br>731-881-7490<br>fax 731-881-7494<br>\section*{Mission}

The College of Humanities and Fine Arts educates and prepares students to be responsible citizens through an academically rigorous and creative environment that provides broad and diverse humanistic experiences.

We believe that by providing quality programs and degrees we offer opportunities for thought, inquiry, and expression that engage and unify the campus and the local and regional communities in a cultural life that fosters curiosity, responsible citizenship, and extended boundaries of knowledge.

## Organization

The College of Humanities and Fine Arts is composed of five departments: Communications; English and Modern Foreign Languages; History and Philosophy; Music; and Visual and Theatre Arts.

## Degree Programs \& Majors/Minors

The departments within the College of Humanities and Fine Arts offer the Bachelor of Fine Arts degree with a major in Fine and Performing Arts (emphases in Visual Art, Art Education, Graphic Design, and Theatre); the Bachelor of Music degree with a major in Music (Performance and Music Education options); and the Bachelor of Arts in Music. They also provide majors/submajors and minors in support of the university's Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) degrees as indicated in the following table:
SUBJECT AREAAfrican-American Studies.X
Communications. ..... X
English ..... X
French ..... X
German ..... X
History ..... X
Japanese ..... X
Philosophy. ..... X
Religious Studies ..... X
Spanish ..... X
Women's Studies ..... X

# Department of Communications 

Dr. Robert Nanney, Chair<br>305 Gooch Hall<br>731-881-7546<br>fax 731-881-7550

## Faculty

Andrew B. Brown, Teresa Y. Collard, Rodney L. Freed, Stacy A. Freed, Henrietta Giles, Angela L. Glunz, Arthur W. Hunt, III, Tomi M. McCutchen, Robert Nanney, E. Jerald Ogg, Richard C. Robinson, Tracy M. Rutledge, Kathryn Toelken, Chara K. Van Horn

## Mission

Our mission is to prepare students to become effective thinkers, creators, and communicators. Students will learn to use current technologies, to understand global diversity, and to apply professional ethics and practices in the workplace. Students are further equipped for successful careers through student media, internships, and experiential learning.

## Expected Outcomes

Communications graduates should know:

1. the history and development of mass communication
2. the current working relationships and establishments of the modern mass communication industries
3. the role of business/management principles in media organizations
4. the principles of and basic procedures for media production
5. the laws and regulations governing mass communications
6. the ethics of the profession
7. basic communication theory as it applies to informative and persuasive speaking

Broadcasting graduates should be able to:
a. develop and write copy and scripts for all forms of electronic media
b. produce all forms of electronic media products
c. intelligently discuss the principles of management and programming of broadcast/cable media
d. perform as talent or direct the performances of talent in broadcast media productions
e. once employed, develop additional skills to respond to changes in media and related/integrated industries
f. prepare and deliver informative and persuasive oral presentations.

News-Editorial graduates should be able to:
a. write professional-quality news and feature stories, commentary and editorials for the mass media
b. edit and produce newspapers and magazines
c. be a skilled newsgatherer (researching and "sourcing" stories and interviewing newsmakers)
d. intelligently discuss the principles of management of print news organizations
e. once employed, develop additional skills to respond to changes in media and related/integrated industries
f. prepare and deliver informative and persuasive oral presentations.

Public Relations graduates should be able to:
a. understand the administrative/managerial role of the public relations practitioner in various organizational structures and understand how that role interplays with the organization's integrity, its public acceptance and the larger cultural milieu
b. utilize research and objective-based planning in implementing particular communication strategies with individual publics
c. plan, prepare copy for and/or produce all forms (print, electronic and multimedia) of public communication devices
d. serve as corporate spokesperson and media liaison
e. once employed, develop additional skills to respond to changes in media and related/integrated industries
f. prepare and deliver informative and persuasive oral presentations.

Media Design graduates should be able to:
a. produce, edit and design print (newspaper, magazine, desktop publishing) and online media
b. produce and prepare photographic materials for use in all forms of visual media
c. generate and write copy for the visual media
d. once employed, develop additional skills to respond to changes in the visual media and related/integrated industries
e. understand the administrative/managerial role in the production workflow for media design
f. prepare and deliver informative and persuasive oral presentations.

The Communications major is a professionally-oriented program in the College of Humanities and Fine Arts. The curriculum is designed to educate students in both the theoretical and applied aspects of the communications discipline. Each sequence, Broadcasting, News-Editorial, Public Relations and Media Design, has a similar core and develops a specialization in its upper-division courses. The Broadcasting sequence prepares students for a number of careers in various aspects of the electronic media, including jobs in writing, production, promotion, news, advertising sales and management in radio, television and cable TV. Broadcasting graduates also work in writing and media production in corporate communications, advertising, public relations and in many other industries, from hospital video to recording engineering. The News-Editorial sequence prepares students for many kinds of careers in the print media, including jobs in reporting, editing and advertising sales and management in newspapers and magazines. Because of their preparation at UT Martin in newswriting, editing and desktop publishing, some News-Editorial graduates become writers and editors in corporate or organizational publications. The Public Relations sequence prepares students for a number of different careers in corporate, organizational, or advertising/P.R. agency communications. As spokespersons, information officers, press secretaries and organizational communications specialists, public relations practitioners manage communications with many constituent publics. Media Design graduates work in all forms of print and online media to generate and edit images (photography/digital imaging), to design for print media (newspapers, magazines, newsletters and other corporate/desktop publications) and online media (designing and maintaining online media) and to play a key role in the production workflow, from conception of the idea to completion of the media product. As media are blending and becoming more visual, students skilled in this emerging area will increasingly be in high demand.
Through mass media internships, senior seminar preparation, personnel placement and alumni communications activities, the department's faculty work to assist students in obtaining their first career opportunities. The Department of Communications also provides courses in Public Speaking and Interpersonal Communication in support of the university's oral communication requirement. Visit the department Web site at http://www. utm.edu/departments/comm/].

## Communications Major

## Communications

B.A. or B.S. Curriculum (2410). Each communications major must complete the department's lowerdivision requirements and then choose and complete one of the four sequences described below. Communications majors must also complete the B.A. or B.S. general education requirements and a minor or a second major. Students must complete a minimum of 72 semester hours in courses (with the exception of Communications 230) outside the Department of Communications.
I. Lower-Division Requirements (13 hours)

Required Courses: Communications 100, 110, 200, 240, and 250.
All these courses must be completed with a grade of at least C before beginning upper-division work. A 2.00 overall grade point average and successful completion of English 112 are prerequisites to upper-division Communications courses. Communications 475 Internship in Communications may not be used by students in the Broadcasting or News-Editorial sequences to satisfy the 48 hours required for their major. Students in the Public Relations sequence may use either three hours of Communications 381/383 Communications Practicum or Communications 475 Internship in Communications, but not both, to satisfy the 48 hours required for their major.

## Broadcasting Sequence (2412)

## Production/Management Track

II. Upper-division Requirements ( 36 hours)
A. Required Communications courses: $315,350,355$ or $356,360,420,491$, and 492
B. Communications Practicum: 3 hours of $381 / 382$ (repeated) (1 hour each)
C. Elective Communications courses:

12 upper-division hours to be selected by the student and adviser. It is recommended that they be selected from (in priority order) $460,365,340$, and 425.
Total Communications Hours Required:
48

## Performance/Journalism Track

II. Upper-division Requirements ( 36 hours)
A. Required Communications courses: 315, 350, 355, 360, 420, 491, and 492
B. Communications Practicum: 3 hours of $381 / 382$ (repeated) (1 hour each)
C. Elective Communications courses: 12 upper-division hours to be selected by the student and adviser. It is recommended that they be selected from (in priority order) $370,365,460$, and 341.
Total Communications Hours Required: 48

## News-Editorial Sequence (2414)

II. Upper-division Requirements ( 36 hours)

A Required Communications courses: 300, 305, 320, 323, 341, 491 and 492
B. Communications Practicum: three (3) hours of 383 (repeated), or 383 (2 hours) and 381 (1 hour)
C. Elective Communications courses: 12 upper-division hours to be selected by the student and adviser. It is recommended that they be selected from (in priority order) 405, 322, 455, 425, and 356.
Total Communications Hours Required:

## Public Relations Sequence (2416)

II. Upper-division Requirements ( 36 hours)
A. Required Communications courses: 326, 327, 328, 329, 356, 491, and 492
B. Communications Internship: three (3) hours from 475
C. Elective Communications courses: 12 upper-division hours to be selected by the student and adviser. It is recommended that they be selected from (in priority order according to career path):
PR Management/Corporate PR: 425, 356, 323, 341, and 322. PR Campaign Support: 322, 323, 341, 336, 305, and 425.
Total Communications Hours Required: 48

## Media Design Sequence (2419)

II. Upper-division Requirements ( 36 hours)
A. Required Communications courses: 321, 322, 323, 341, 410, 491, and 492
B. Communications Internship: three (3) hours from 475
C. Elective Communications courses: 12 upper-division hours to be selected by the student and adviser. It is recommended that they be selected from (in priority order according to career path):
Communication Strategy and Management: 425, 356, and 405.
Media Production: 305, 336, 340, and 455.
Total Communications Hours Required: .................................................................... 48

## Communications Minor

The Communications minor consists of Communications 100, 200, 230, 240, 250, and six additional hours of upper-division Communications courses (exclusive of practicum or internship hours). English 112 is a prerequisite to all upper-division Communications courses.

## Facilities

The Department of Communications has superior facilities and laboratories in which students gain valuable hands-on experience. Broadcasting students operate two radio stations and two television studios, where programs and video products are made for airing on WLJT-TV, on UT Martin's campus cable television system and for use by organizations and businesses. WLJT operates a mobile TV production truck and uses many Communications majors to work on live television coverage of football and basketball games and other field and studio productions. Students complete post-production editing on radio and television projects in the department's multi-format audio/videotape editing lab.
The UT Martin campus newspaper, The Pacer, is produced by News-Editorial students and other student volunteers. Students produce The Pacer electronically, writing stories, scanning pictures and art, designing and laying out pages on computers using the latest software. The Pacer also publishes an electronic version on the World Wide Web. Visit this Web site at http://www.utmpacer.com. News writing and editing labs interconnected in a computer network are used to teach students the most modern journalistic practices.
The department has a large departmental reading room for student use. It is equipped with newspapers from across the region and the country, broadcasting, journalistic visual communication and public relations trade publications, academic journals, textbooks, almanacs, writers' guides, special collections, library tables and chairs and comfortable lounging furniture.

## Scholarships

The Department of Communications offers scholarships for entering freshmen who have declared a Communications major, as well as for sophomores, juniors and seniors. At the department's annual Communications Awards Reception, a number of scholarships sponsored by the faculty, alumni, philanthropists, broadcasters, newspapers, local industries and media organizations are awarded to Communications majors.

## Student Organizations

The Department of Communications sponsors a Radio Television Digital News Association, plus chapters of the Society of Professional Journalists, the Public Relations Student Society of America, Women in Communications, Inc., the National Association of Black Journalists and the Society of News Design.

## Courses Offered by Department of Communications

Communications 100 Survey of Mass Media (F, Sp)
Communications 110 Language Competency ( $\mathrm{F}, \mathrm{Sp}$ )
Communications 110 Language Competency ( $\mathrm{F}, \mathrm{Sp}$ )
Communications 200 Introduction to Media Writing (F, Sp)
Communications 220 Voice and Diction (F, Sp)
Communications 229 Public Communication (Sp)
Communications 230 Public Speaking ( $\mathrm{F}, \mathrm{Sp}$ )
Communications 230H Honors Public Speaking (F, Sp)
Communications 240 Introduction to Media Design and Public Relations (F, Sp)
Communications 250 Introduction to Broadcasting (F, Sp)
Communications 300 Advanced Media Writing (F)
Communications 305 Copy Editing and Design (Sp)
Communications 311 Interpersonal Communication (F, Sp)
Communications 315 Broadcast Media Writing (F, Sp)
Communications 320 Writing Features (Sp-even)
Communications 321 Principles of Media Design (Sp)
Communications 322 Basic Print Design (F, Sp)
Communications 323 Basic Web Design (F)
Communications 326 Principles of Public Relations (F)
Communications 327 Public Relations Techniques (F, Sp)
Communications 328 Public Relations Research (F)
Communications 329 Public Relations Strategy and Implementation (Sp)
Communications 332 Small Group Communication (as needed)
Communications 334 (534) International Public Relations (Sp-odd)
Communications 336 Advanced Web and Multimedia Design (Sp)
Communications 337 Argumentation and Debate (Sp)
Communications 337H Honors Argumentation and Debate (Sp)
Communications 338 Non-Profit Public Relations (Sp-even)
Communications 339 Crisis Communication (Sp)
Communications 340 Film Appreciation (F)
Communications 341 Photojournalism (F, Sp)
Communications 350 Radio Production (F)
Communications 355 Broadcast Performance (F)
Communications 356 Communication in Professional Environments (F, Sp)

Communications 360 Television Production (Sp)
Communications 363 Documentary Storytelling (Sp)
Communications 365 Electronic Field Production (as needed)
Communications 370 Broadcast News (F)
Communications 381 Practicum in Radio (F, Sp)
Communications 382 Practicum in Television (F, Sp)
Communications 383 Practicum in Journalism (F, Sp)
Communications 399 Special Topics in Communications (as needed)
Communications 405 (605) Social Media Management (Sp)
Communications 410 Advanced Media Design (Sp)
Communications 420 Broadcast Management and Sales (Sp)
Communications 425 (625) Strategic Communication Campaigns (F)
Communications 455 (655) Digital Media production for Corporate Environments (as needed)
Communications 460 Broadcast Producing and Directing (as needed)
Communications 470 Intercultural Communication (Sp-odd)
Communications 471 (671) Independent Study (F, Sp, Su)
Communications 475 Internship in Communications (F, Sp)
Communications 491 Communication Law and Ethics (F, Sp)
Communications 492 Senior Seminar in Communications (F, Sp)
Communications 595 Introduction to Social Media for Strategic Communication (as needed)
Communications 700 Seminar in Strategic Communication (as needed)
Communications 701 Professional Seminar I (as needed)
Communications 702 Professional Seminar II (as needed)
Communications 703 Professional Seminar III (as needed)
Communications 705 Advanced Copywriting and Editing (as needed)
Communications 706 Independent Reading and Research (as needed)
Communications 710 Applied Research Methods for Professionals (as needed)
Communications 715 Technical Communication (as needed)
Communications 720 Media and Communication Theory for Professionals (as needed)
Communications 730 Organizational Communication (as needed)
Communications 735 Introduction to Strategic Communication(as needed)
Communications 740 Leadership Theory and Practice (as needed)
Communications 745 Crisis Communication (as needed)
Communications 750 Media Management (as needed)
Communications 760 Media Programming and Analytics (as needed)
Communications 765 Persuasive Communication Techniques and Strategies (as needed)
Communications 766 Propaganda (as needed)
Communications 767 Public Communication (as needed)
Communications 770 Communication and the Global Audience (as needed)
Communications 775 Professional Ethics in Strategic Communication (as needed)
Communications 780 Media Ecology (as needed)
Communications 785 Communication Law for Professionals (as needed)
Communications 790 Capstone Professional Project (as needed)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of English and Modern Foreign Languages 

Dr. David R. Carithers, Chair

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731-881-7300
fax 731-881-7276

## Faculty

Kelle E. Alden, Lynn M. Alexander, Sally G. Brannen, Trisha K. Capansky, David R. Carithers, April L. Elam-Dierks, Lúcia Flórido, Anton Garcia-Fernandez, Randal P. Garza, Jobn V. Glass, Asbley Goulder, Timothy J. Hacker, Cbarles Hammond, Jr., Kyoko A. Hammond, Ean High, Cbristopher A. Hill, Melvin G. Hill, Heidi A. Huse, Jeffrey S. Longacre, Daniel J. Nappo, Daniel F. Pigg, Allen M. Shull, David M. Williams

## Mission

The mission of the Department of English and Modern Foreign Languages is to provide courses that foster effective communication and clear thinking and that stress social awareness, aesthetic appreciation and intellectual growth. The department lays the basis for self-expression, self-knowledge, written and oral communication and creative adaptation to the changing realities of life. Students and faculty further this development through a variety of service and scholarly activities.

The Department of English and Modern Foreign Languages supports the mission of the university by:

1. improving cross-cultural understanding, international awareness, and appreciation of one's own culture;
2. increasing aesthetic awareness and engagement;
3. providing undergraduate instruction in certain important languages, literatures, and cultures;
4. improving the literacy and communication skills of the non-major (reading, writing, grammar, listening, vocabulary building and pronunciation);
5. preparing advanced-level students for careers or graduate study in which such skills, knowledge and awareness are valuable;
6. sharing its expertise in languages, literatures and cultures with the outside community and professionals in the field;
7. promoting international travel and study;
8. participating in the activities of civic and professional organizations that promote the study of languages, literatures and cultures, and public interest in them.

## English Program Student Learning Outcomes

Students who complete the English program will be able to demonstrate that they can:

1. Analyze a variety of texts, particularly British and American writings;
2. Integrate relevant sources effectively into their written discourses;
3. Apply critical theory to language and literature;
4. Evaluate their learning experiences through the selection and revision of key assignments;
5. Incorporate concepts from other disciplines into the study of language and literature;
6. Write for a variety of audiences and purposes.

## Spanish Program Student Learning Outcomes

Students who complete the Spanish program will be able to demonstrate that they can:

1. Analyze a variety of Spanish and Latin American texts;
2. Communicate effectively in Spanish, both orally and in writing, using appropriate grammar and vocabulary;
3. Construct effective analytical arguments in Spanish;
4. Show an understanding of and an appreciation for Spanish and Spanish American culture;
5. Evaluate their learning experiences through the selection and revision of key assignments;
6. Incorporate interdisciplinary elements into the study of the Spanish language and Spanish and Spanish American literature and culture.

## Majors

The Department of English and Modern Foreign Languages offers majors in English and Spanish (B.A. degree).

## English

B.A. Curriculum (2610). A major in English consists of 49 hours: six hours of English Composition, 15 hours of sophomore-level courses and 28 hours of upper-division English courses. Students may select Concentration 1, Concentration 2, or Concentration 3 outlined below. Students who pursue the English major for pre-professional training, for graduate study, or for careers outside teaching should consult with their advisers and follow either Concentration 1 or Concentration 2; students seeking teacher licensure should follow Concentration 3. Majors are expected to consult their advisers each semester regarding the selection of options and courses.

In general, majors should work during their freshman and sophomore years toward the completion of the general education requirements for the Bachelor of Arts and toward completing at least one sophomore-level literature survey sequence.

Some recommended minors for English majors include foreign languages, history, philosophy, political science, international studies, communications, theatre, one of the other fine arts, or education.

## Concentration 1: Literature Emphasis

1. A major in English must complete the following lower-division prerequisite hours:
a. English 111-112 (or equivalents) as prerequisites to all other English courses;
b. English 200, 250-251, 260-261;
c. Students planning to go on to graduate school in English are encouraged to take English 270-271 for elective credit.
2. A major in English must also complete 28 upper-division hours (300 and above), including the following:
a. English 485 and nine additional hours in British literature (English 360, 365, 370, 375, 401, 460, 465, 470, 480, 490);
b. six hours in American literature (English 341, 343, 345, 440, 445);
c. three hours in theory, language and linguistics (English 320, 420, 425, 450);
d. English 305 and three additional hours (English 310, 311, 315, 325, 330, 335, 350, 355, 380, $385,390,395,435,475,494,495,496,497,498)$;
e. one hour in capstone course (English 499).
3. A major may use English $350,380,385,395,435,475$, and $495,496,497$ if the topics are appropriate, to substitute for courses above, in category 2 a and 2 b for three (3) hours of the requirements.

## Concentration 2: Writing Emphasis

1. A major in English must complete the following lower-division prerequisite hours:
a. English 111-112 (or equivalents) as prerequisites to all other English courses;
b. English 200, 250-251, 260-261;
c. Students planning to go on to graduate school in English are encouraged to take English 270-271 for elective credit.
2. A major in English must also complete 28 upper-division hours (300 and above), including the following:
a. English 485 and three additional hours in British literature (English 360, 365, 370, 375, 401, 460, 465, 470, 480, 490);
b. six hours in American literature (English 341, 343, 345, 440, 445);
c. three hours in theory, language and linguistics (English 320, 420, 425, 450);
d. English 305 and nine additional hours in writing (English 310, 311, 315, 325, 390, 494, 498);
e. one hour in capstone course (English 499).
3. A major may use English $350,380,385,395,435,475$, and $495,496,497$ if the topics are appropriate to substitute for courses above, in category 2 a and 2 b for three hours of the requirements.

## Concentration 3: Pre-Secondary English Education Emphasis

1. A major in English must complete the following lower-division prerequisite hours:
a. English 111-112 (or equivalents) as prerequisites to all other English courses;
b. English 200, 250 or 251, 260-261, and 270.
2. A major in English must also complete 28 upper-division hours (300 and above), including the following:
a. six hours in language and linguistics (English 425 and one of the following: English 320, 420);
b. three hours in writing and theory (English 305);
c. three hours in British literature to 1660 (English 360, 375, 460, 480, 490);
d. three hours in British literature from 1660-1900 (English 365, 370, 401, 465, 470);
e. three hours in Shakespeare (English 485);
f. three hours in American literature (English 341, 345, 355, 440, 445);
g. three hours in modern American, British, or World literature since 1900 (English 330, 335, 343, 380, 395, 475);
h. three hours in women's and minority literature (English 345, 350);
i. one hour in capstone course (English 499).

Students opting for Concentration 3 who intend to teach in secondary schools should consult the College of Education, Health, and Behavioral Sciences about meeting admission and licensure requirements.

## Concentration 4: Legal Studies 3+3

1. A major in English must complete the following lower-division prerequisite hours:
a. English 111-112 (or equivalents) as prerequisites to all other English courses;
b. English 250-251, or 260-261.
2. A major in English must also complete 12 upper-division hours (300 and above), including the following:
a. English 305 or 325;
b. Nine upper-division (300-level or above) hours in English;
3. A minor in Legal Studies (M-4176).

A student accepted into UT Law School prior to completing the requirements for a B.A. in English may receive the B.A. in English from UT Martin if the following requirements are met:

- The first year of study at UT Law School is satisfactorily completed.
- A minimum of 90 hours of college course work is completed, exclusive of those taken at the Law School.
- A minimum of 60 hours of course work is completed at an accredited four-year institution., exclusive of those taken at the Law School. At least $25 \%$ of the semester hours must be completed at UT Martin.
- All general education requirements for the B.A. degree are met
- Completion of the minor is met.


## Spanish

B.A. Curriculum. A major in Spanish (2620) consists of at least 24 semester hours in courses numbered 300 or above, taught in the target language, including $341,342,451$, three hours of culture and civilization, and three hours of literature. Completion of 341 or 342 is prerequisite to all other courses above 300. Additional non-foreign language requirements for the major are History 121-122 and International Studies 200. For majors intending to pursue advanced degrees in graduate school, English 450 is strongly recommended. All general education requirements for the B.A. degree must be met.

Majors in a foreign language are required to complete a language immersion experience as approved by the faculty adviser. The department will assist in placement appropriate to the student's needs, which might include residence in a foreign country, study abroad, exchange programs, international internships, or other experiences that assure intensive cultural and language experiences. In the semester prior to graduation, majors are also required to assemble a portfolio under the supervision of a faculty advisor. This portfolio will include writing samples from various advanced classes and the results of two tests designed to assess language knowledge, proficiency and cultural literacy: an Oral Proficiency Interview and a departmental exam in advanced Spanish grammar.

Majors in a foreign language are encouraged to enhance their education by completing, as appropriate, complementary programs of study in fields as diverse as English, political science, economics, travel and tourism, communications and education. Combining foreign language with training in such fields will better enable majors to pursue graduate studies and careers in various professions.

## Minors and Recognition of Proficiency

## English

A minor in English (M-2610) consists of six hours of English Composition; six hours comprising one complete sophomore sequence (250-251, 260-261, or 270-271); and 12 upper-division hours ( 300 or above) in English.

## French, German, Japanese, Spanish

A minor in French (M-2630), German (M-2640), Japanese (M-2660), or Spanish (M-2620) consists of at least 12 hours in courses numbered 300 or above.

Special recognition will be given to those students who have successfully completed 15 hours or more of upper-division coursework in the target language and attained an Intermediate-High level on the OPI in the respective language, thereby demonstrating their advanced proficiency.
Minors and Recognition of Proficiency are advantageous for students majoring in disciplines in the liberal arts, such as English, history and music, who intend to pursue advanced degrees in graduate school. They are also recommended for students majoring in professional fields, such as agriculture, business administration, engineering, travel and tourism, communications and social work, where knowledge of foreign languages and cultures is highly beneficial, given today's global economy.

## Placement and Credit

## Placement in First-Year English

Freshmen receive placement advice based on their high school grade-point average and on their ACT English score. Beginning students whose academic records and/or ACT scores show deficiencies in English are required to enroll in the English 105, 112 sequence; all other students will enroll in the English 111, 112 composition sequence. To verify placement, students will complete a writing sample during the first class period of each introductory course.

## Honors

Students who score 28 or above on the English portion of the Enhanced ACT may enroll in the freshman honors sequence $(111 \mathrm{H}-112 \mathrm{H})$, which offers enrichment and variety, collegial contact with other excellent students and an obvious designation of distinction on the academic transcript. A student earning an A in English 111 may enroll in English 112H if space is available and with the approval of the instructor.

## Placement of Students Who Are Not Native Speakers of English

1. Students who are not native speakers of English and who have at least a 500 (paper) TOEFL score, at least a 173 (computer) TOEFL score, at least an IBT score of 61, an IELTS score of 6.0, or have completed Level 6 in the Tennessee Intensive English Program may enroll in English 105 without taking an English placement exam. Those students who feel they can achieve a higher placement may take the English Writing Proficiency Placement Exam (administered by the Department of English and Modern Foreign Languages) at the scheduled time and will be placed in English 105 or 111, based on the results of this examination.
2. Students who are not native speakers of English and who are admitted to the university without TOEFL or ACT scores must take the English Placement Exam before enrolling in an English composition course.
3. Students who are not native speakers of English must be enrolled in or have completed Level 6 of the Tennessee Intensive English Program or have scored at least 500 (paper) or at least 173 (computer) on the TOEFL in order to take the English Writing Proficiency Placement Exam.
4. The required in-class writing sample taken during the first class meeting in all English 100 and 111 classes will continue to be an indicator of appropriate English placement for all students in those classes.

## Placement in Modern Foreign Languages

Students who entered with two or more high school units of Spanish or French and who wish to continue in the same language, will take the department's placement exam and, based on the results of that exam, will be advised to enroll in 115 or a more advanced class. Continuing students in German, Japanese and Portuguese may start with 122 or a more advanced class, depending on their score on the placement exam. The placement exams for French, German and Spanish are available online at the departmental website. College credit will not be given for courses used to remove high school entrance deficiencies.

## Credit for Foreign Language Proficiency

Students who enter with proficiency in a foreign language and who place into 122 or above will earn, upon completion of their entry-level class with a B or better, up to eight hours of credit (graded P for Pass), for the classes they have skipped (that is, the one or two classes immediately preceding their entry-level class). Students who earn a D in their entry-level class will receive credit for this class only.

Students can also earn up to 12 hours of credit (graded P) by taking a CLEP test, depending on their score on this nationally normed test. CLEP guidelines will be followed in assigning credit. Additionally, students can receive credit for passing an Advanced Placement test. College Board guidelines are followed in assigning AP credit. In no case will students be awarded more than a total of 12 hours of credit by departmental placement, CLEP, or Advanced Placement.

## Removing an Entrance Deficiency

An entrance deficiency in foreign languages can be removed by passing 111, the first semester of the elementary sequence of a foreign language, or 115 if continuing a foreign language begun in high school.

## Department Facilities

The Hortense Parrish Writing Center provides students with individualized tutoring and workshops in writing and the use of computers for composition. The department lounge is a place for informal communication with the faculty. The department offers students the opportunity to develop computer skills in first-year composition sections, many located in state-of-the-art computer classrooms.

The department also maintains a multi-purpose Language Resource Center which is supplied and equipped to provide for the following activities: listening to foreign language CDs/DVDs, recording one's own pronunciation, practicing with computerized foreign language software, viewing foreign language videos via the Internet, reading foreign language periodicals both in print and online and using modern technologies to both record and analyze pronunciation. The department maintains or oversees the distribution of an extensive catalog of these materials that are an integral part of the instructional program.

## Financial Aid, Scholarships and Awards

Students who plan to enroll in August should direct inquiries about financial aid to the Office of Financial Aid and Scholarships before the preceding March 1.

The Kellie Jones English Scholarship provides financial assistance to a rising junior or senior English or Secondary English Education major with an overall GPA of 3.0 and an English GPA of 3.5 (or higher). Applications are available in the department office; the deadline is late in the Spring semester.

The J. Paul and Myrtle Phillips Scholarship is awarded annually to an English major who is a Tennessee resident with an overall GPA of 3.0 and an English GPA of 3.5 (or higher). Applications are available in the department office; the deadline is late in the Spring semester.

The Muriel Tomlinson Scholarship Award is presented annually to an outstanding foreign language student who is finishing his or her junior or senior year.
The Stephen and Beatrice Mohler Scholarship Award is given annually to an outstanding Spanish student intending to study abroad.
Writing Awards of $\$ 150$ each are offered annually by the department for the best student-written personal essay, scholarly English paper, scholarly MFL paper, technical writing \& business communication, short story and body of poems.

## Student Organizations

The French, German, Japanese and Spanish programs sponsor clubs which provide students with extracurricular, cultural activities to enrich their academic programs.

Pi Delta Phi, French National Honor Society, recognizes outstanding achievement in the discipline.
Sigma Delta Pi, National Collegiate Hispanic Honor Society, recognizes outstanding achievement in the discipline.
Sigma Tau Delta, the International English Honor Society, recognizes outstanding English majors and minors.
BeanSwitch, sponsored by the department and the Office of Student Publications and staffed by students, is an annual publication featuring students' creative work: poetry, fiction, non-fiction, art and photography.

## Study Abroad and Internship Experiences

The department encourages students to take advantage of approved internships and study-abroad programs. The department has courses in French, German, Japanese and Spanish which allow for credit for study abroad and will advise students in arranging study and internships in foreign countries. Currently, the department has opportunities for summer immersion programs at some of the following universities: the University of Castilla-La Mancha (Toledo, Spain), the University of Orleans (France), the Technical University of Braunschweig (Germany), Hirosaki University, and Hiroshima Jogakuin University (Japan). Check with the department chair for further information.

## Internships and Study Abroad in French, German, Japanese and Spanish

Internships and study abroad in French, German, Japanese or Spanish are to be undertaken under the direction of a UT Martin faculty member or a faculty member from another institution. Prior approval is to be received from the Chair of the Department of English and Modern Foreign Languages. Students wishing to study abroad may do so under the following conditions.

1. Before departure, students must secure approval of their study-abroad program from their faculty adviser(s), and the Chair of English and Modern Foreign Languages and file their program with the Registrar.
2. Students must undergo appropriate language testing before departure and upon return.
3. Students must complete at least one course in the language studied abroad on the UT Martin campus after returning from the study-abroad experience and before graduating. Students also have the responsibility to make sure that the courses taken abroad do not put them in violation of university guidelines which mandate that at least $25 \%$ of their coursework be completed at UT Martin.

# Courses Offered by Department of English and Modern Foreign Languages 

English 105 English Composition (F, Sp, Su)
English 111-112 English Composition (F, Sp, Su)
English 111H-112H Honors English Composition (F, Sp)
English 113 English for Technical Writers (Sp -as needed)
English 200 Introduction to English Studies (F, Sp)
English 250-251 British Literary Tradition (F, Sp)
English 250H Honors: British Literary Tradition (F-even)
English 251H Honors: British Literary Tradition (Sp-odd)
English 260-261 American Literary Tradition (F, Sp)
English 260H Honors: American Literary Tradition (F-odd)
English 261H Honors: American Literary Tradition (Sp-even)
English 270 World Literature (F)
English 271 World Literature (Sp)
English 305 (505) The Art of the Essay (F, Sp)
English 310 (510) Fiction Workshop (F)
English 311 (511) Creative Nonfiction Workshop (as needed)
English 315 (515) Poetry Workshop (Sp)
English 320 (520) Introduction to Linguistics (Sp-even)
English 325 (525) Technical Communications (F, Sp)
English 330 (530) Topics in World Literature (as needed)
English 335 Holocaust Literature (as needed)
English 341 (541) Topics in American Literature before 1900 (F)
English 343 (543) Literatures of Contemporary America (F-even)
English 345 (545) Black Writers in America (Sp)
English 350 (550) Women Writers: Gender, Race and Class (F)
English 355 (555) Folklore (F-odd)
English 360 (560) Sixteenth-Century British Literature (Sp-even)
English 365 (565) Restoration and Eighteenth-Century English Literature (Sp-even)
English 370 (570) Romantic Prose and Poetry (F-even)
English 375 (575) Development of English Drama (F-even)
English 380 (580) Modern Drama (F-odd)
English 385 (585) Modern Poetry (Sp-even)
English 390 (590) Playwriting (Sp-odd)
English 395 (595) Literature and Film (Sp)
English 401 (601) Studies in British and Commonwealth Writers Since 1660 (F-odd)
English 420 (620) History of the English Language (Sp-odd)
English 425 (625) Practical English Grammar (F, Sp)
English 435 (635) Fantasy Literature (F-odd)
English 440 (640) Southern Literature (Sp-odd)
English 445 (645) The American Novel to Faulkner (Sp-even)
English 450 (650) Introduction to Literary Criticism (Sp-even)
English 460 (660) Early English Literature (Sp-odd)
English 465 (665) Victorian Prose and Poetry (Sp-odd)
English 470 (670) The British Novel to Joyce (Sp-odd)

English 475 (675) Modern Novel (F-even)
English 480 (680) Chaucer (F-odd)
English 485 (685) Shakespeare (F)
English 490 (690) Seventeenth-Century British Literature (Sp-odd)
English 493 (693) Seminar [title TBA] in Film Studies (as needed)
English 494 Internship in English (F, Sp, Su)
English 495 (695) Topics [title TBA] in Gender and Cultural Studies (as needed)
English 496 (696) Seminar [title TBA] in British Literature (as needed)
English 497 (697) Seminar [title TBA] in American Literature (as needed)
English 498 (698) Seminar [title TBA] in Rhetoric and Writing (as needed)
English 499 Critical Approaches to Literature: A Senior Capstone Course (F, Sp)
English 700-701 Graduate Studies in Language or Literature (as needed)
English 710-711 West Tennessee Writing Project Seminar (Su)
French 111 Elementary French (F, Sp)
French 115 Transitional French (F, Sp)
French 122 Elementary French (F, Sp)
French 222 Intermediate French (F, Sp)
French 250 France Today: The French People and Their Culture (as needed)
French 300 (500) Intensive Conversation in a Foreign Country (as needed)
French 311 (511) Introduction to French Literature and the Arts (as needed)
French 321 (521) Introduction to French Civilization and Material Culture (as needed)
French 341 (541) Advanced Conversation (F)
French 342 (542) Advanced Composition (Sp)
French 350 Masterpieces of French and Francophone Literature (in English Translation) (as needed)
French 360 (560) Studies Abroad (as needed)
French 370 (570) Travel Study (as needed)
French 381-382 (581-582) Survey of French Literature (as needed)
French 401 Foreign Language Internship (as needed)
French 451 (651) The Language of Business and the Professions (as needed)
French 491 (691) French Cinema (as needed)
French 495-496 (695-696) Topics in French Language, Literature, or Civilization (as needed)
French 498-499 (698-699) Independent Study (as needed)
German 111 Elementary German (F, Sp)
German 122 Elementary German (F, Sp)
German 222 Intermediate German (F, Sp)
German 250 Germany Today: The German People and Their Culture (as needed)
German 300 (500) Intensive Conversation in a Foreign Country (as needed)
German 321 Introduction to German Culture (Sp-even)
German 330 Twentieth-Century German Drama (as needed)
German 341 (541) Advanced Conversation (F-even)
German 342 (542) Advanced Composition (F-odd)
German 350 Masterpieces of German and Austrian Literature (in English Translation) (as needed)
German 360 (560) Studies Abroad (as needed)
German 370 (570) Travel Study (as needed)
German 381-382 (581-582) Survey of German Literature (as needed)
German 401 Foreign Language Internship (as needed)
German 451 (651) The Language of Business and the Professions (F-odd)
German 491 (691) German Cinema (as needed)

German 495-496 (695-696) Topics in German Language, Literature, or Civilization (as needed)
German 498-499 (698-699) Independent Study (as needed)
Japanese 111 Elementary Japanese (F, Sp)
Japanese 122 Elementary Japanese (F, Sp)
Japanese 222 Intermediate Japanese (as needed)
Japanese 250 Japan Today: The People and Culture of Japan (as needed)
Japanese 300 Intensive Conversation in a Foreign Country (as needed)
Japanese 315 Intensive Reading in Japanese (as needed)
Japanese 341 Advanced Conversation (as needed)
Japanese 342 Advanced Composition (as needed)
Japanese 360 Studies Abroad (as needed)
Japanese 370 Travel Study [Topic Title] (as needed)
Japanese 401 Foreign Language Internship (as needed)
Japanese 495-496 Topics in Japanese Language, Literature, or Civilization (as needed)
Portuguese 111 Elementary Portuguese (as needed)
Portuguese 122 Elementary Portuguese (as needed)
Portuguese 222 Intermediate Portuguese (as needed)
Portuguese 230 Portuguese for Speakers of Spanish (as needed)
Portuguese 341 Advanced Conversation (as needed)
Spanish 111 Elementary Spanish (F, Sp)
Spanish 115 Transitional Spanish (F, Sp)
Spanish 122 Elementary Spanish (F, Sp)
Spanish 222 Intermediate Spanish (F, Sp)
Spanish 250 Latin America Today: The Peoples and Cultures of Latin America (as needed)
Spanish 300 (500) Intensive Conversation in a Foreign Country (as needed)
Spanish 321 (521) Introduction to Spanish Civilization (as needed)
Spanish 322 (522) Introduction to Spanish American Civilization (as needed)
Spanish 330 (530) Advanced Spanish Grammar in Practice (as needed)
Spanish 341 (541) Advanced Conversation (F)
Spanish 342 (542) Advanced Composition (Sp)
Spanish 350 Masterpieces of Spanish and Span-American Literature (in English Translation) (as needed)
Spanish 360 (560) Studies Abroad (as needed)
Spanish 370 (570) Travel Study (as needed)
Spanish 381-382 (581-582) Survey of Spanish Literature (as needed)
Spanish 385-386 (585-586) Survey of Spanish American Literature (as needed)
Spanish 401 Foreign Language Internship (as needed)
Spanish 420 (620) History and Phonetics of the Spanish Language (Sp-even)
Spanish 451 (651) The Language of Business and the Professions (Sp-odd)
Spanish 481 (681) 19th-Century Spanish Literature (as needed)
Spanish 482 (682) Contemporary Spanish Literature (as needed)
Spanish 486 (686) Contemporary Latin-American Literature (as needed)
Spanish 491 (691) Spanish and Latin-American Cinema (as needed)
Spanish 495-496 (695-696) Topics in Spanish Language, Literature, or Civilization (as needed)
Spanish 498-499 (698-699) Independent Study (as needed)

# Department of History and Philosophy 

Dr. David Coffey, Chair<br>322 Andy Holt Humanities Building<br>731-881-7470<br>fax 731-881-7584

## Faculty

David Barber, Matthew Braddock, Christopher M. Brown, Merry E. Brown, Joshua A. Camper, Alice-Catherine Carls, David Coffey, James F. Fieser, Richard P. Garlitz, Benjamin M. Guyer, Nathan D. Howard, Renee LaFleur, Margaret B. Lewis, Daniel J. McDonough, Henry H. Parker, Timothy B. Smith

## Mission

The Department of History and Philosophy's mission is to provide an outstanding undergraduate education by offering an appealing and appropriate array of courses taught by devoted faculty who care deeply about students, individualized, one-on-one academic advising, and opportunities to enhance one's educational experience through internships, faculty-led travel-study, and advanced research and writing. The faculty embrace and model principles of academic integrity, equality and diversity, tolerance and inclusion, by exposing students to a variety of interpretations and specializations in the fields of history and philosophy. With challenging curricula designed to emphasize critical examination, informed expression, ethical awareness, and an advanced understanding of how people, events, and ideas of the past influence the present and future, the Department of History and Philosophy prepares students for life as productive, responsible citizens with skills integral to a broad range of careers and the ability to pursue a graduate education in the fields of history, philosophy, law, teaching, and theology.

## Student Learning Outcomes

History majors are expected to:

1. Identify major events, movements, people, and cultures in their historical context and how these relate to the present;
2. Analyze and differentiate between primary and secondary sources and understand the appropriate uses for both;
3. Develop research skills that promote the acquisition of historical knowledge and emphasize interpretation;
4. Apply critical analysis in the evaluation of competing interpretations and the development of informed argument;
5. Produce research-based writing projects that demonstrate historical methodology and proper documentation;
Philosophy major are expected to:
6. Identify classic philosophical theories in metaphysics and epistemology;
7. Differentiate diverse perspectives in ethical, political and aesthetic theories of value;
8. Apply the main rules of logic and argumentation;
9. Compare major people and movements within the history of philosophy;
10. Defend/refute philosophical positions verbally and in writing.

## Programs

The department offers majors and minors in history and philosophy. It is also responsible for minors in Afri-can-American Studies and Religious Studies. The department's majors offer students a wide range of career opportunities that come with a liberal arts education. The majors particularly prepare students for further education at the graduate level where they can specialize in a variety of sub-fields. Too, they are excellent for students interested in attending law school or seeking government employment upon graduation. Additional information on career opportunities and current careers of departmental alumni is available upon request.

## Majors

## History (2910)

B.A. or B.S. Curriculum. History 121-122 (or History 121H-122H) History 201-202, and History 299 are prerequisites to the major which totals 27 hours, consisting of History 499 and 24 additional hours of upper-division (300-400) courses divided among three areas of study and upper level history electives: a) United States History, b) European History, and c) World History. History 299 should be completed before commencing upper level studies. Majors must then complete at least six hours from each of the three areas of study:
United States History (at least six hours)
History 303, 310, 401, 403, 404, 434, 435, 444, 461, 462, 463, 464, 465, 466, 480, 494, 495, 496, 497, 498
European History (at least six hours)
History $305,339,340,341,342,343,414,415,420,421,425,448,490$
World History (at least six hours)
History 306, 320, 321, 323, 324, 325, 402, 441, 442, 445, 446, 459, 470, 484 and
Upper Level History Electives (at least six hours): Students may select any two upper level history courses from those listed above or the following special courses.*

History 302, 450, 460, 467, 468
*The combined total of coursework applied to the major from the following categories of special courses may not exceed nine hours and no more than six hours may be applied from any single category: Special Topics, Travel-Study, Internships, and Independent Study courses. All requirements for the B.A. or B.S. degree must be met, including completion of a minor or second major.

Portfolio Requirement
All history majors are required to maintain an electronic portfolio containing all major written assignments, beginning with History 299: History and Historians, and continuing through upper level coursework, culminating in History 499 Senior Seminar. The portfolio assignment will be evaluated in History 499 and will factor into the final grade in that course.

## Philosophy (2940)

B.A. of B.S. Curriculum. A major consists of 30 hours to include: Philosophy 160, 210, 314, and 315 and eighteen (18) additional hours of upper-division philosophy courses. Philosophy 110-120 are prerequisites to the major and may be used to meet general education requirements for the B.A. or B.S. Under the direction of their philosophy advisors, students should select philosophy electives based on their educational and career goals. Majors must take a major field examination and assemble a portfolio consisting of three writing samples at approximately 3,000 words each from advanced classes. One sample must be on the history of philosophy, one on value theory and a third on an elected philosophical topic.

## Ethics (M-2970)

The minor in Ethics consists of the required course Philosophy 160 plus an additional 15 hours to be selected from the following menu, where (a) at least 12 hours must be courses numbered 300 or higher and (b) a minimum of 3 hours and a maximum of 6 hours must be from non-Philosophy courses: Philosophy 130, 300, 330, 350, 355, 430; Animal Science 270; Business Law 201; Criminal Justice 302; Communications 491; Political Science 390; Sociology 386.
Philosophy majors are eligible to take a minor in Ethics. But the Philosophy courses they take for the minor in Ethics will not count towards their Philosophy major requirements, with the exception of Philosophy 160. For information about the minor in Ethics contact the Department of History and Philosophy.

## Minors

## African-American Studies (M-2030)

The 18 credit-hour minor consists of required courses: African American Studies 101, Philosophy 130, African American Studies 301, plus nine hours to be selected from the following menu: English 345; History 434, 435, 480, 484, 494, 495, 496, 497, 498; Philosophy 301, 440, 470; Political Science 432; Religious Studies 301; Social Work 220 and Sociology 304. For information about this minor contact professors Henry Parker or David Barber.

## History (M-2910)

History 121-122 (or History $121 \mathrm{H}-122 \mathrm{H}$ ) or History 201-202 are prerequisites to the minor which consists of 12 hours of upper-division history. The combined total of coursework applied to the minor from the following categories of special courses may not exceed six hours, and no more than three hours may be applied from any single category: Special Topics, Travel-Study, Internships, Independent Study and Undergraduate Research courses.

## Philosophy (M-2940)

The minor consists of the following courses: Philosophy 110-120 and an additional 12 hours of philosophy, at least nine hours of which must be courses numbered 300 or above.

## Religious Studies (M-2950)

The minor consists of the following courses: Religious Studies 201 and 15 hours of upper-division religious studies courses.

The Women's and Gender Studies Minor (2050) consists of Women's and Gender Studies 201 plus 15 hours selected from the following courses (excluding any courses used to satisfy general education or major field requirements) Sociology 307, Sociology 308, Sociology 341, Art History 350, Child and Family Studies 100, Child and Family Studies 303, Communications 311, English 350, English 495 (when
topic offered is on women's literature and issues), History 303, History 305, History 306, History 480 (when topic offered is on gender issues in history), Psychology 370, Fashion Merchandising 300, Women's and Gender Studies 450, Women's and Gender Studies 460. No more than six hours may be taken in a particular discipline.

## Scholarships

The department offers the following scholarships:
The H.B. Smith Freshman History Student Scholarship. This $\$ 1,000$ tuition scholarship goes to an outstanding high school senior from West Tennessee who plans to attend UT Martin as a freshman and major in History. Applicants are nominated by one of their school teachers or administrators based on scholastic ability and financial need. Recipients are chosen by a department committee.

The Wilma and Ernest Newby Scholarship. This substantial tuition award is made possible by Mr. Carl G. "Butch" Newby in honor of his parents, Wilma and Ernest Newby. It is granted to a junior or senior social science major. Possible military connection or career plans, financial ability and scholarship are main factors in the selection process. Recipients are chosen by a department committee.

The Patrick R. Taylor Scholarship. This $\$ 100$ award goes to the History, Political Science, or International Studies major with the best upper-division paper in European history.

The Langdon S. Unger Scholarship. This award goes to the junior History major with the highest overall GPA and the highest History GPA based on the greatest number of history hours. In the case of a tie, department activities will be considered as well.

The Bateman-Wyant History Scholarship. This annual scholarship award is open to any History major maintaining a 3.0 average or better. Students will compete for the award by writing a research article based upon some aspect of U.S. history. The person judged by the history staff as having written the best paper will be awarded the scholarship. Winners will be allowed to compete for a second time. The amount of the award will be $\$ 500$. Competition for the award and the deadline for submission of the completed article will be announced in the fall term of each school year. All articles submitted will have to comply with the style and length requirement set by the department.

## Student Organizations

## History

History Club. Open to any student interested in history, regardless of major or GPA. Members hear speakers on history-related topics and visit area historical sites.

Phi Alpha Theta. National history honor society. Open by invitation to students who have a minimum of 12 semester hours of history and a minimum GPA of 3.01, are in upper two-thirds of all remaining courses after history grades are removed and are in the upper $35 \%$ of their respective class.

Phi Sigma Tau, the International Honor Society in Philosophy, recognizes outstanding Philosophy majors and minors.

## Philosophy

Philosophy Forum. Membership open to all. Provides an opportunity for philosophical discussion and seeks to promote interest in philosophical studies, to provide an opportunity for the publication of works in philosophy, to encourage friendship among persons of philosophical temperament and to promote the ideals in philosophical education.

## Awards

History Club Award. A cash award of $\$ 150$ made to a History Club member selected for outstanding leadership in the club.

Langdon S. Unger Upper-Division History Award. This tuition or travel-study award goes to the outstanding upper-division History major.

Lonnie E. Maness History Award. An award of $\$ 100$ for the outstanding graduating senior History major.
Louis Mauldin Philosophy Award is presented annually to an outstanding freshman or sophomore Philosophy major.

Marvin L. Downing Lower-Division History Award. This tuition or travel-study award goes to an outstanding sophomore who has completed three semesters of lower-division history.
Norman S. Lillegard Philosophy Award. An award of $\$ 200$ goes to the outstanding junior or senior Philosophy major.

Tennessee Historical Commission Award. Cash and book award to graduating senior selected by the department as the outstanding history student.

The Coleman Family Legacy Award. This award recognizes an outstanding history major who demonstrates academic excellence and a commitment to service. Preference may be given to nontraditional students who plan to pursue a career in law. This $\$ 2,000$ award, the most prestigious presented by the History faculty, was established by UT Martin alumnus Martha Edinger in honor of her grandparents Lexie and Verna B. Coleman.

The Marvin and Sandra Downing Outstanding Service Award. This award recognizes an outstanding history major who has made notable contributions in service to the History Program and the Department of History and Philosophy. This $\$ 500$ award was established by Professor Emeritus Marvin Downing in memory of his wife Sandra. The recipient will be selected by the History faculty and staff.

## Courses Offered by Department of History and Philosophy

African American Studies 101 The African American Experience (as needed)
African American Studies 301 African American Leadership (as needed)
Greek 110-120 Elementary Greek (as needed)
History 121-122 Development of World Civilization II (F, Sp, Su)
History $121 \mathrm{H}-122 \mathrm{H}$ Development of World Civilization (F, Sp)
History 201-202 History of the United States II (F, Sp, Su)
History 250 History of Tennessee (as needed)
History 299 History and Historians (F, Sp)
History 302 (502) Introduction to Public History (as needed)
History 303 (503) Women in American History (Sp-even)
History 304 (504) Women in World History (F-even)
History 305 Women in European History (Sp-odd)
History 306 Women in East Asia (F-odd)
History 310 American Military History (Sp)
History 320 (520) Ancient Greece (F-odd)
History 321 (521) Ancient Rome (F-even)

History 323 (523) The Middle East, 500-1800 (F-odd)
History 324 (524) The Modern Middle East (Sp-even)
History 325 East Asia to 1600 (Sp-even)
History 339 Early Modern Europe (F-even)
History 340 (540) The Age of Enlightenment and Revolution, 1715-1815 (F-odd)
History 341 (541) Europe, 1815-1914 (F-odd)
History 342 (542) Europe From War to War, 1914-1945 (F-even)
History 343 (543) Europe, 1945-Present (Sp-odd)
History 401 Independent Study in American History (as needed)
History 402 Independent Study in World History (as needed)
History 403 (603) Social and Cultural History of the United States (F-odd)
History 404 (604) Sex and Gender in American History (Sp-even)
History 414-415 (614-615) History of England (Sp-odd)
History 420 (620) Late Antiquity and Medieval History (Sp-odd)
History 421 (621) Renaissance and Reformation (Sp-even)
History 425 Science and Superstition in Early Modern Europe (Sp-even)
History 434-435 (634-635) African-American History I, II (as needed)
History 441 (641) History of Latin America (F-odd)
History 442 (642) History of Mexico (as needed)
History 444 (644) Imperial America, 1877 to 1900 (F-odd)
History 445 China Since 1600 (Sp-odd)
History 446 Japan Since 1600 (F-even)
History 448 (648) Russia Since 1552 (Sp-even)
History 450 (650) Public History Internship (as needed)
History 459 The Twenty-First Century World (as needed)
History 460 (660) Topics in Diplomatic History: [Topics Title] (as needed)
History 461 (661) The Colonial Period and the Revolution (F-odd)
History 462 (662) The Constitution and the Rise of the Federation (Sp-even)
History 463 (663) U.S. Foreign Relations to 1920(F-even)
History 464 (664) U.S. Foreign Relations since 1920 (Sp-odd)
History 465 (665) American Thought to 1877 (F-even)
History 466 (666) American Thought since 1877 (Sp-odd)
History 467-468 (667-668) Travel Study [Selected Topics] (as needed)
History 470 (670) Topics in World History: [Topics Title] (as needed)
History 480 (680) Topics in U.S. History: [Topic Title] (as needed)
History 484 (684) History of Africa 1400 to Present (as needed)
History 490 (690) Topics in European History: [Topic Title] (as needed)
History 494 (694) Antebellum America, 1815-1850 (F-even)
History 495 (695) The Civil War and Reconstruction, 1850-1877 (Sp-odd)
History 496 (696) U.S. History, 1900-1945 (F-odd)
History 497 (697) U.S. History, 1945-Present (Sp-even)
History 498 (698) The Sixties (Sp-odd)
History 499 Senior Seminar: Historical Research and Writing (F, Sp)
History 701 Graduate Independent Study in American History (as needed)
History 702 Graduate Independent Study in European or Asian History (as needed)
History 770 Advanced Topics in History [Selected Topics] (as needed)
Philosophy 110 Adventure of Ideas: Historical (as needed)
Philosophy 120 Adventure of Ideas: Contemporary (as needed)

Philosophy 130 Ethics and Race (F, Sp)
Philosophy 160 Exploring Ethics (as needed)
Philosophy 305 Logic (as needed)
Philosophy 300 Questions of Right and Wrong (as needed)
Philosophy 301 Major Religions of the World (F)
Philosophy 310 Aesthetics (Sp)
Philosophy 314 The Ancient and Medieval Mind (as needed)
Philosophy 315 The Modern Mind (as needed)
Philosophy 316 The Contemporary Mind (as needed)
Philosophy 320 Traces of God (as needed)
Philosophy 325 What Do We Know? (as needed)
Philosophy 330 Love, Sexuality and Living (as needed)
Philosophy 340 Death, Suffering and Evil (as needed)
Philosophy 350 Bioethics (as needed)
Philosophy 355 Ethics and the Environment (as needed)
Philosophy 370 God and Human Happiness (as needed)
Philosophy 380 Topics in the Philosophy and History of Religion [Selected Topics] (F)
Philosophy 385 Topics in the History of Philosophy [Selected Topics] [topic title] (as needed)
Philosophy 395 Philosophy Goes to the Movies (as needed)
Philosophy 410 Political Philosophy (as needed)
Philosophy 430 Science and Human Values (as needed)
Philosophy 440 Topics in African-American and Feminist Studies (as needed)
Philosophy 450 Existentialism and Human Experience (as needed)
Philosophy 460 Mind, Knowledge and Reality (as needed)
Philosophy 470 Internship in Race Relations (as needed)
Philosophy 484 Public Philosophy Internship (as needed)
Philosophy 490 (690) Topics in Philosophy [Selected Topics] (F)
Religious Studies 201 Introduction to Religious Studies (F)
Religious Studies 301 Major Religions of the World (F)
Religious Studies 320 Traces of God (as needed)
Religious Studies 340 Death, Suffering and Evil (as needed)
Religious Studies 350 The Old Testament/Hebrew Bible (Sp)
Religious Studies 360 The New Testament and Early Christian Origins (Sp)
Religious Studies 370 God and Human Happiness (as needed)
Religious Studies 375 Church History (as needed)
Religious Studies 380 Topics in the Philosophy and History of Religion [Selected Topics] (F)

Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Music 

Dr. Julie A. Hill, Chair<br>108 Fine Arts Building<br>731-881-7402<br>fax 731-881-7415

## Faculty

Elizabeth R. Aleksander, Steven R. Barnett, Steven M. Darling, Joseph W. Frye, Kurt Gorman, Elaine A. Harriss, Julie Hill, Chan Mi Jean, Cbelsea T. Jones, Sbane M. Jones, Cbarles W. Lewis, Roberto Mancusi, John Oelrich, Douglas A. Owens, Mark Simmons, Jessica K. Thoman, Amy Yeung

## Mission

The mission of the Department of Music is to cultivate excellence in musical education, performance, and the liberal arts. The department works to support and enhance the cultural and intellectual diversity of the community, while also serving as model performers, educators, and scholars.

## Goals

1. Produce graduates who will promote and advance the art of music.
2. Enhance the quality of life on campus and in the region by presenting artistic musical events.
3. Pursue scholarship in music.
4. Support music educators and music programs through educational outreach.
5. Cultivate relationships with musicians, arts organizations, and alumni.

## Expected Outcomes

Music majors will be able to:

1. demonstrate a conceptual understanding of musical components and processes.
2. create, interpret, compose, present, analyze and evaluate music.
3. understand various musical cultures and historical periods.
4. integrate musical knowledge and skills.
5. demonstrate the capability for independent work in music professions.

## Admission to Degree Programs in Music

Degree programs in Music are open to all students who satisfy the entrance requirements of the university and the Department of Music. Students must audition for all degree programs offered by the Department of Music and for the minor in music. The audition will have one of three results: full admission to Music, provisional admission to Music, or declined admission to Music.

Full Admission to Music: The student has met the criteria defined by the Department of Music faculty and may begin coursework in their desired program of study.

Provisional Admission to Music: The student may begin coursework in the desired degree program, but due to deficiencies the student must re-audition at the end of the first semester of applied study. If supported by the applied teacher, a second semester or provisional admission may be granted. Students who successfully gain admission are still expected to meet the requirements of the Upper Division jury at the end of four semesters of study.

Students who are not fully admitted to the degree after two semesters of provisional admission will be declined admission.

- The student's applied lesson grade will not be considered as a part of the second audition to gain full admission.
- Provisional admission may be revoked during the course of study before full admission is granted.

Declined Admission to Music: A student may be declined admission to the Music degree program based on the student's performance ability and preparation. Students who have been declined admission may re-audition, but may not begin coursework in their concentration for which they have auditioned. Students declined admission to Music are eligible to pursue other academic majors at UT Martin.

## Special Requirements for Music Majors

## Enrollment in Upper-Division Music Courses

Music majors who have not passed the classes listed below may not enroll in upper-division (300-level and above) non-ensemble music courses without the permission of the department chair and the student's adviser.

Music 113 Survey of Western Masterpieces and World Music
Music 123-124 Aural Skills I, II
Music 131-132 Music Theory I, II
Music, Applied 101 Piano Class (if required)
Music, Applied 102 Piano Class (if required)
Required Private Study, two semesters
Required Large Ensemble, two semesters
Vocal Music Education Majors and Vocal Performance Majors must also complete:
Music 161-162 Diction for Singers I, II
Piano Performance and Piano Pedagogy Majors must also complete:
Music 161 Diction for Singers I
Exceptions will be made for:
Music, Applied 301, 302, 303, 304 (Class Methods courses)
Music 333, 334, 335, 336, 337, 338, 363, 364, 365, 366, 367 (Literature and Pedagogy courses)

## Successful Completion of a Degree in Music

Music majors must attend a minimum number of department-approved recitals as specificed below. Transfer students will receive credit for attendance at twelve (12) recitals for each semester of lessons in their primary applied area that is accepted via transfer credit. Students who do not meet the minimum recital attendance requirement will not be allowed to graduate with a degree in music.

Bachelor of Music - Performance Option
Bachelor of Music - Music Education Option. ..... 84
Bachelor of Arts in Music ..... 72

## Transfer Credit

If a student transfers credit in music courses other than ensembles, these courses may be validated by examination. Unsuccessful validation requires the student to take the course at UT Martin.

## Designation of a Minor

A music student may declare a minor in a non-music subject area and have the minor listed on the permanent record under the following conditions:

1. minors must be officially approved and described in the university catalog. No unofficial minors will be recognized.
2. courses taken to satisfy the minor may also be used to satisfy music degree requirements, provided that the courses are a part of the music degree requirements even if no minor were declared.
3. Students enrolled in the Bachelor of Music - Music Education Option $(2725,2728)$ are not eligible to pursue a minor.

## Bachelor of Music

The Bachelor of Music curriculum is designed to provide the gifted student with training and knowledge essential for teaching, graduate study and/or a career as a performer or studio teacher.

## Bachelor of Music - Performance Option Band and String Instrument Emphasis (2723)

## General Education (38-39 semester hours)

English 110 or 111, and 112 English Composition6-7
Communications 230 Public Speaking. ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities ..... 9
Mathematics ..... 3
Social and Behavioral Sciences ..... 6
Major Area (40 semester hours) Lower-division study. ..... 8
Four (4) semesters of one of the following:
Applied Music 144 Flute
Applied Music 154 Double Reed
Applied Music 164 Clarinet
Applied Music 174 Saxophone
Applied Music 184 Trumpet
Applied Music 194 French Horn
Applied Music 214 Trombone
Applied Music 224 Euphonium
Applied Music 234 Tuba
Applied Music 239 Guitar
Applied Music 254 Percussion
Applied Music 259 ViolinApplied Music 269 ViolaApplied Music 279 CelloApplied Music 289 Double Bass / Electric BassApplied Music 299 Harp
Upper-division study. ..... 4
Two (2) semesters of one of the following:
Applied Music 344 Flute
Applied Music 354 Double Reed
Applied Music 364 Clarinet
Applied Music 374 Saxophone
Applied Music 384 Trumpet
Applied Music 394 French Horn
Applied Music 414 Trombone
Applied Music 424 Euphonium
Applied Music 424 Baritone Horn
Applied Music 434 Tuba
Applied Music 439 Guitar
Applied Music 454 Percussion
Applied Music 459 Violin
Applied Music 469 Viola
Applied Music 479 Cello
Applied Music 489 Double Bass / Electric Bass
Applied Music 499 Harp
Applied Music 395 Junior Recital. ..... 2
Applied Music 495 Senior Recital. .....  2
Applied Music 101, 102, 201, 202 Piano Class ..... 4
Music 366 Instrumental Pedagogy ..... 2
Music Ensembles - Major (see list in course descriptions) ..... 6
Music Ensembles - Chamber (Homogeneous and/or Heterogeneous)
Music Ensembles 368 (see list in course descriptions) ..... 8
Music Ensembles - Independent (see list in course descriptions) ..... 4
Supportive Courses in Music ( 36 semester hours)
Music 108 Introduction to Technology in Music. ..... 1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music. ..... 12
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World. ..... 2
Music 301 Beginning Improvisation .....  1
Music 302 Orchestration ..... 2
Music 337, 338 Instrumental Literature ..... 4
Music 354 Instrumental Conducting and Literature I ..... 2
Music 371 Recording Technology and Entrepreneurship .....  2
Electives ( 7 semester hours)
Free Electives ..... 7
Minimum semester hours. ..... 120-121
Bachelor of Music - Performance Option Piano Emphasis (2726)
General Education (38-39 semester hours)
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities ..... 9
Mathematics ..... 3
Social and Behavioral Sciences ..... 6
Major Area (33 semester hours)
Applied Music 114 Piano ..... 8
Applied Music 314 Piano ..... 4
Applied Music 395 Junior Recital ..... 2
Applied Music 495 Senior Recital ..... 2
Music 363 Piano Pedagogy ..... 2
Music Ensembles - Major (see list in course descriptions) ..... 6
Music Ensembles - Chamber (Homogeneous and/or Heterogeneous) Music Ensembles 368 (see list in course descriptions) ..... 5
Music Ensembles - Independent (see list in course descriptions) ..... 4
Supportive Courses in Music (37 semester hours)
Music 108 Introduction to Technology in Music. .....  1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music ..... 12
Music 161 Diction for Singers .....  1
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World ..... 2
Music 301 Beginning Improvisation ..... 1
Music 302 Orchestration or Music 303 Choral Arranging. .....  2
Music 333, 334 Piano Literature ..... 4
Music 353 Choral Conducting and Literature I or Music 354 Instrumental Conducting and Literature I ..... 2
Music 371 Recording Technology and Entrepreneurship .....  2
Foreign Languages (12 semester hours)
French 111 or 115, 122 Elementary French ..... 6
German 111, 122 Elementary German. ..... 6
Minimum semester hours. ..... 120-121
Bachelor of Music - Performance Option Voice Emphasis (2729)
General Education (38-39 semester hours)
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking. ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities ..... 9
Mathematics ..... 3
Social and Behavioral Sciences ..... 6
Major Area (36 semester hours)
Applied Music 101, 102, 201, 202 Piano Class ..... 4
Applied Music 124 Voice ..... 8
Applied Music 324 Voice ..... 4
Applied Music 395 Junior Recital ..... 2
Applied Music 495 Senior Recital .....  2
Music 365 Voice Pedagogy ..... 2
Music Ensembles - Major (see list in course descriptions) ..... 8
Music Ensembles - select from Independent (see list in course descriptions) ..... 6
Supportive Courses in Music (37 semester hours)
Music 108 Introduction to Technology in Music. .....  1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music ..... 12
Music 161, 162 Diction for Singers I, II .....  2
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World. ..... 2
Music 303 Choral Arranging ..... 2
Music 335, 336 Vocal Literature ..... 4
Music 353 Choral Conducting and Literature I .....  2
Music 371 Recording Technology and Entrepreneurship ..... 2
Foreign Languages ( 12 semester hours)
French 111 or 115, 122 Elementary French ..... 6
German 111, 122 Elementary German. ..... 6
Minimum semester hours. ..... 123-124
Bachelor of Music - Performance Option
Band and String Instrument Pedagogy Emphasis (2724)
General Education (38-39 semester hours)
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities ..... 9
Mathematics ..... 3
Social and Behavioral Sciences ..... 6
Major Area (46 semester hours)
Lower-division study ..... 8
Four (4) semesters of one of the following:
Applied Music 144 FluteApplied Music 154 Double ReedApplied Music 164 ClarinetApplied Music 174 SaxophoneApplied Music 184 TrumpetApplied Music 194 French Horn
Applied Music 214 Trombone
Applied Music 224 Euphonium
Applied Music 234 Tuba
Applied Music 239 Guitar
Applied Music 254 Percussion
Applied Music 259 Violin
Applied Music 269 Viola
Applied Music 279 Cello
Applied Music 289 Double Bass / Electric BassApplied Music 299 Harp
Upper-division study6
Three (3) semesters of one of the following:
Applied Music 343 Flute
Applied Music 353 Double Reed
Applied Music 363 Clarinet
Applied Music 373 Saxophone
Applied Music 383 Trumpet
Applied Music 393 French Horn
Applied Music 413 Trombone
Applied Music 423 Euphonium
Applied Music 433 Tuba
Applied Music 438 Guitar
Applied Music 453 Percussion
Applied Music 458 Violin
Applied Music 468 Viola
Applied Music 478 Cello
Applied Music 488 Double Bass / Electric Bass
Applied Music 498 Harp
Applied Music 495 Senior Recital ..... 2
Applied Music 101, 102, 201, 202 Piano Class ..... 4
Music 366, 367 Instrumental Pedagogy ..... 4
Music 466 Practicum in Instrumental Pedagogy ..... 4
( 2 semesters at 2 credits each)
Music Ensembles - Major (see list in course descriptions) ..... 6
Music Ensembles - Chamber (Homogeneous and/or Heterogeneous)
Music Ensembles 368 (see list in course descriptions) ..... 8
Music Ensembles - Independent (see list in course descriptions) ..... 4
Supportive Courses in Music (36 semester hours)
1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music ..... 12
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World ..... 2
Music 301 Beginning Improvisation ..... 1
Music 302 Orchestration ..... 2
Music 337, 338 Instrumental Literature ..... 4
Music 354 Instrumental Conducting and Literature I .....  2
Music 371 Recording Technology and Entrepreneurship .....  2
Minimum semester hours ..... 120-121
Bachelor of Music - Performance OptionPiano Pedagogy Emphasis (2727)
General Education (38-39 semester hours)
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking. ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities ..... 9
Mathematics ..... 3
Social and Behavioral Sciences ..... 6
Major Area (36 semester hours)
Applied Music 114 Piano ..... 8
Applied Music 313 Piano ..... 6
Applied Music 495 Senior Recital ..... 2
Music 363, 364 Piano Pedagogy ..... 4
Music 463 Practicum in Piano Teaching ..... 4
( 2 semesters at 2 credit hours each)
Music Ensembles - Major (see list in course descriptions) ..... 6
Music Ensembles - Chamber (Homogeneous and/or Heterogeneous)
Music Ensembles 368 (see list in course descriptions) ..... 2
Music Ensembles - Independent (see list in course descriptions) ..... 4
Supportive Courses in Music (37 semester hours)
Music 108 Introduction to Technology in Music .....  1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music ..... 12
Music 161 Diction for Singers I .....  1
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World ..... 2
Music 301 Beginning Improvisation .....  1
Music 302 Orchestration or Music 303 Choral Arranging ..... 2
Music 333, 334 Piano Literature ..... 4
Music 353 Choral Conducting and Literature I or
Music 354 Instrumental Conducting and Literature I .....  2
Music 371 Recording Technology and Entrepreneurship ..... 2
Foreign Languages (12 semester hours)
French 111 or 115, 122 Elementary French ..... 6
German 111, 122 Elementary German. ..... 6
Minimum semester hours ..... 123-124
Bachelor of Music - Music Education Option
Instrumental K-12 Licensure Emphasis (2728)
General Education (38-39 semester hours)
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking. ..... 3
Music 113 Survey of Western Masterpieces and World Music ..... 3
Biological and Physical Systems ..... 8
Humanities (must include History 121, 122, 201, or 202) ..... 9
Mathematics ..... 3
Social and Behavioral Sciences .....  .6
(must include Psychology 101 or Psychology 101H)
Basic Musicianship and Performance (61 semester hours)
Lower-division study. ..... 4
Four (4) semesters of one of the following:
Applied Music 112 Piano
Applied Music 142 Flute
Applied Music 152 Double Reed
Applied Music 162 Clarinet
Applied Music 172 Saxophone
Applied Music 182 Trumpet
Applied Music 192 French Horn
Applied Music 212 Trombone
Applied Music 222 Euphonium
Applied Music 232 Tub
Applied Music 237 Guitar
Applied Music 252 Percussion
Applied Music 257 Violin
Applied Music 267 Viola
Applied Music 277 Cello
Applied Music 287 Double Bass / Electric Bass
Applied Music 297 Harp
Upper-division study. ..... 2Two (2) semesters of one of the following:
Applied Music 312 Piano
Applied Music 342 Flute
Applied Music 352 Double Reed
Applied Music 362 Clarinet
Applied Music 372 Saxophone
Applied Music 382 Trumpet
Applied Music 392 French Horn
Applied Music 412 Trombone
Applied Music 424 Euphonium
Applied Music 432 TubaApplied Music 437 GuitarApplied Music 452 PercussionApplied Music 457 ViolinApplied Music 467 ViolaApplied Music 477 CelloApplied Music 487 Double Bass / Electric BassApplied Music 497 Harp
Applied Music 495 Senior Recital1
Applied Music 101, 102, 201, 202 Piano Class ..... 4
Applied Music 103 Voice Class ..... 1
Applied Music 301 String Class ..... 1
Applied Music 302 Woodwind Class .....  1
Applied Music 303 Brass Class ..... 1
Applied Music 304 Percussion Class ..... 1
Music 108 Introduction to Technology in Music ..... 1
Music 123, 124, 223, 224 Aural Skills I, II, III, IV. ..... 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal Music ..... 12
Music 251, 252 Music History and Literature I, II ..... 6
Music 261 Music of the World. .....  2
Music 301 Beginning Improvisation .....  1
Music 302 Orchestration ..... 2
Music 354 Instrumental Conducting and Literature I. .....  2
Music 371 Recording Technology and Entrepreneurship ..... 2
Music 454 Instrumental Conducting and Literature II. .....  2
Music Ensembles - Major (see list in course descriptions) ..... 7
Music Ensembles - Chamber (Homogeneous and/or Heterogeneous) Music Ensembles 368 (see list in course descriptions) ..... 2
Music Ensembles - Independent (see list in course descriptions) .....  2
Professional Education (32 semester hours)
Human Learning 325 Educational Psychology ..... 3
Special Education 300 Children with Exceptionalities ..... 3
Music Education 260 Introduction to Music Education ..... 3
Music Education 310 General Music ..... 3
Music Education 405 Secondary Instrumental Methods ..... 3
Music Education 417 Marching Band Techniques .....  2
Music Education 450 Senior Seminar in Music Education ..... 3
Music Education 471 Student Teaching K-6 ..... 6
Music Education 472 Student Teaching 7-12 ..... 6
Minimum semester hours ..... 131-132

## Bachelor of Music - Music Education Option Vocal/General K-12 Licensure Emphasis (2725)

## General Education (38-39 semester hours)

English 110 or 111, and 112 English Composition .........................................6-7
Communications 230 Public Speaking............................................................... 3
Music 113 Survey of Western Masterpieces and World Music.............................. 3
Biological and Physical Systems ........................................................................ 8
Humanities (must include History 121, 122, 201, or 202) .................................. 9
Mathematics ................................................................................................... 3
Social and Behavioral Sciences .......................................................................... 6
(must include Psychology 101 or Psychology 101H)
Basic Musicianship and Performance (57-58 semester hours)
Applied Lessons 6-7
Piano principal:
Applied Music 112 Piano ...................................................................... 4
Applied Music 312 Piano ..................................................................... 2
Applied Music 122 Voice....................................................................... 1
Voice principal:
Applied Music 122 Voice....................................................................... 4
Applied Music 322 Voice...................................................................... 2
Applied Music 495 Senior Recital..................................................................... 1
Applied Music 101, 102, 201, 202 Piano Class................................................... 4
Music 108 Introduction to Technology in Music ................................................ 1
Music 123, 124, 223, 224 Aural Skills I, II, III, IV.............................................. 4
Music 131, 132, 231, 232, Music Theory I, II, III and Analysis of Post Tonal
Music........................................................................................ 12
Music 161, 162 Diction for Singers I, II ............................................................ 2
Music 251, 252 Music History and Literature I, II .............................................. 6
Music 261 Music of the World.......................................................................... 2
Music 303 Choral Arranging............................................................................. 2
Music 353 Choral Conducting and Literature I .................................................. 2
Music 365 Voice Pedagogy ............................................................................... 2
Music 371 Recording Technology and Entrepreneurship .................................... 2
Music 453 Choral Conducting and Literature II .................................................. 2
Music Ensembles - Major (see list in course description.................................... 7
Music Ensembles - select from Independent (see list of course descriptions) ...... 2
Professional Education ( $\mathbf{3 0}$ semester hours)
Human Learning 325 Educational Psychology .................................................... 3
Special Education 300 Children with Exceptionalities......................................... 3
Music Education 260 Introduction to Music Education ....................................... 3
Music Education 310 General Music .................................................................. 3
Music Education 406 Secondary Choral Methods ................................................ 3
Music Education 450 Senior Seminar in Music Education ................................... 3
Music Education 471 Student Teaching K-6........................................................ 6
Music Education 472 Student Teaching 7-12..................................................... 6
Total degree hours

## Bachelor of Arts in Music

The Bachelor of Arts in Music degree (2730) is designed for students who desire concentrated study in music as the central part of a broader education. The degree provides significant General Education and Musicianship/Performance components and a Supporting Elective Plan.

## General Education (38-39 semester hours)

English 110 or 111, and 112 English Composition ..........................................6-7
Communications 230 Public Speaking.............................................................. 3
Music 113 Survey of Western Masterpieces and World Music.............................. 3
Biological and Physical Systems........................................................................ 8
Humanities..................................................................................................... 9
Mathematics.................................................................................................... 3
Social and Behavioral Sciences.......................................................................... 6
Musicianship (28 semester hours)
Music 108 Introduction to Technology in Music................................................ 1
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ........................................ 4

Music 251, 252 Music History and Literature I, II .............................................. 6
Music 261 Music of the World........................................................................... 2
Music 302 Orchestration or Music 303 Choral Arranging................................... 2
Music 440 Senior Project in Music.................................................................... 1

## Performance and Music Electives (18-20 semester hours)

Applied Lessons .6
Six (6) semesters of one of the following. Upper-division study is permitted, but not required.
Applied Music 112, 312 Piano
Applied Music 122, 322 Voice
Applied Music 142, 342 Flute
Applied Music 152, 352 Double Reed
Applied Music 162, 362 Clarinet
Applied Music 172, 372 Saxophone
Applied Music 182, 382 Trumpet
Applied Music 192, 392 French Horn
Applied Music 212, 412 Trombone
Applied Music 222, 422 Euphonium
Applied Music 232, 432 Tuba
Applied Music 237, 437 Guitar
Applied Music 252, 452 Percussion
Applied Music 257, 457 Violin
Applied Music 267, 467, Viola
Applied Music 277, 477 Cello
Applied Music 287, 487 Double Bass / Electric Bass
Applied Music 297, 497 Harp
Applied Music 101, 102 Piano Class.................................................................. 2
Ensemble ..................................................................................................10-12
Band Instrument, String Instrument or Piano principal:
$\quad$ Music Ensembles - Major (see list in course descriptions) ...................... 8
Music Ensembles - select from Chamber and Independent ..... 4(see list in course descriptions)Voice principal:
Music Ensembles - Major (see list in course description ..... 8
Music Ensembles - select from Independent (see list of course descriptions) ..... 2
General Studies (37 semester hours)
Supporting Elective Plan ..... 37The Supporting Elective Plan must be developed in consultation with the academicadviser. The Department of Music Curriculum Committee must approve the Support-ing Elective Plan and any subsequent changes to it. The Plan must be submitted andapproved during the second semester of the freshman year; transfer students mustsubmit and receive approval for their Plan in their first semester. The Plan mustinclude at least 15 hours of upper-division courses and 3 hours from one of the fol-lowing: ART 110, DANC 110, THEA 110, or THEA 111. No more than 3 hours may bein courses from the following disciplines: Applied Music (MUAP), Music (MUS) and/or Music Education (MUED). Music Ensembles (MUEN) may not be used as part ofthe Plan.
Minimum semester hours ..... 121-124
Music Minor

The music minor at UT Martin is intended for students who possess a background in music and wish to continue their study while majoring in another discipline. This program is designed to enhance career opportunities, while increasing students' skills and knowledge in the area of performance, music theory, and music history.

Acceptance into the Minor in Music program is by audition.
The Minor in Music (M-2730) consists of the following:

## Core Classes ( $\mathbf{1 6}$ hours)

Music 108 Introduction to Technology in Music................................................. 1
Music 111 Masterpieces of Music or 112 Music in Our Time or
113 Survey of Western Masterpieces and World Music (Note 1)..................... 3
Music 123 Aural Skills I, 124 Aural Skills II, 120 Fundamentals of Music, 131
Music Theory I ...................................................................................... 8
Lower-division applied lessons ( 2 semesters of same instrument) ....................... 2
Ensemble (in applied lesson area) .................................................................... 2
Electives (8 hours selected from the following)
Courses with an MUAP, MUS, or MUED prefix other than private applied lessons.
Maximum of two semesters total additional credit in core applied lesson or ensemble.
Note 1: Students must take MUS 113 to use MUS 251 as an elective.
Total hours required: 24.

## 13 Hour Certification in Secondary Area Vocal Music Studies

The Certificate in Secondary Area Vocal Music Studies is intended as structured additional study for music majors seeking development of a skill set outside of their primary area. The certificate program
provides rudimentary and advanced preparation in additional instrumental training with the intention of preparing student for teaching or performance outside of their primary area of study. Students will study vocal pedagogy, take private lessons, experience vocal ensemble performing, gain awareness of appropriate vocal literature selection, and develop an understanding of related rehearsal techniques specific to the vocal music genre.
Courses in the certification: [MUEN 263; MUEN 265 ( 4 total semesters))] [MUAP 120 ( 4 semesters)] [MUED 406] [MUED 303]

## 13 Hour Certification in Secondary Area Instrumental Music Studies

The Certificate in Secondary Area Instrumental Music Studies is intended as structured additional study for music majors seeking development of a skill set outside of their primary area. The certificate program provides rudimentary and advanced preparation in additional instrumental training with the intention of preparing students for teaching or performance outside of their primary area of study. Students will study instrument pedagogy, take private lessons, experience instrumental ensemble performing, gain awareness of appropriate instrumental literature selection, and develop an understanding of related rehearsal techniques specific to the instrumental music genre.
Courses in certification: [MUEN 151; MUEN 358 (4 total semesters)] [4 semesters of lessons chosen from the following: MUAP $140,150,160,170,180,190,210,220,230$, or 250 [MUED 405] [MUS 302]

## 13-14 Hour Certification in Instrumental Performance

The Certificate in Instrumental Music Performance is intended as structured additional study for the Bachelor of Arts in Music and Instrumental Education majors. The certificate provides advanced performance skills in applied lessons, ensembles, and recitals, equipping students with a higher level of musicianship and musicality that will lead them to greater success in the global music industry. Students will study performance technique and pedagogy, instrumental literature, take part in ensembles, and give a full-length instrumental recital.

## Guidelines for Admission

1) The student must audition at the same level of a music performance major.
2) The student must earn B grades or better in all applied lessons.

Courses in the certification: [Two (2) total semesters of one of the following: MUAP`44, MUAP 154, MUAP 164, MUAP 174, MUAP 184, MUAP 194, MUAP 214, MUAP 224, MUAP 234, MUAP 239, MUAP 254, MUAP 289]; [Two (2) total semesters of one of the following: MUAP 344; MUAP 354, MUAP 364, MUAP 374, MUAP 384, MUAP 394, MUAP 141, MUAP 424, MUAP 434, MUAP 439, MUAP 454, MUAP 489] [MUAP 495] [4 ensembles from the following: MUEN 353, 356, 368, 372] [MUS 366] [MUS 354]

## 13-14 Hour Certification in Vocal Performance

The Certificate in Vocal Music Performance is intended as structured additional study for the Bachelor of Arts in Music and Vocal Music Education majors. The certificate provides advanced performance skills in applied lessons, ensembles, and recitals, equipping students with a higher level of musicianship and musicality that will lead them to greater success in the global music industry. Students will study vocal production, performance technique, standard vocal literature, and foreign languages(s), take part in an opera production, and give a full-length voice recital.
Guidelines for Admission

1) The student must audition at the same level of a music performance major.
2) The student must earn B grades or better in all applied lessons.

Courses in the certification: [MUAP 124 (4 total semesters); MUAP 324 ( 2 total semesters)] [MUAP 495] [MUEN 367] [MUS 335; MUS 336] [1 semester of language chosen from the following: FREN 111, FREN 122, GERM 111, GERM 122]

## Inclusion of Music Courses in Non-Music Degree Programs

Students receiving degrees other than the Bachelor of Music and Bachelor of Arts in Music may not earn more than 30 hours in courses that apply toward the degrees from the Department of Music, that is, courses in the following disciplines: Applied Music (MUAP), Music Education (MUED), Music Ensembles (MUEN), Music (MUS).

## Accreditation

UT Martin is an accredited member of the National Association of Schools of Music (NASM, 11250 Roger Bacon Drive, Suite 21, Reston, VA 20190-5248, telephone 703-437-0700) and all programs in music are nationally accredited by that organization. The degree program in Music Education is also accredited by the National Council on the Accreditation of Teacher Education (NCATE).

## Scholarships

Music scholarships are available for students majoring in Music and are awarded by audition on the basis of promising performance and academic success. These generally range from $\$ 200$ to $\$ 3,000$ per year and are renewable through the fourth year of study, provided that renewal criteria are met. The Harriet Fulton Scholarship is awarded annually to an outstanding music major.

Band scholarships are available to both Music majors and majors in other disciplines who participate in the band program. These scholarships range from $\$ 400$ to $\$ 2,000$ per year and are renewable.

Choral scholarships are available to both Music and non-Music majors by audition. They are approximately $\$ 300-2,000$ per year and are renewable.
Information and application materials may be obtained by contacting the Chair of the Department of Music, the Director of Bands, or the Director of Choral Activities.

## Student Organizations

Participation in performance organizations is open to all students regardless of academic major. Music ensembles include the University Singers, New Pacer Singers, Lyric Opera Theatre, Piano Ensemble, Skyhawk Marching Band, Symphonic Band, Pep Bands and Concert Jazz Band as well as Woodwind, Brass and Percussion Ensembles.

The department houses two chapters of national professional music fraternities: Phi Mu Alpha Sinfonia (men) and Sigma Alpha lota (women). These organizations emphasize professionalism, creativity and service in music. A student chapter of the National Association for Music Education (NAfME) is active in preparing students to enter the teaching profession in music by participation in state, regional and national conferences.

## Courses Offered by Department of Music

Music 108 Introduction to Technology in Music (F, Sp)
Music 111 Masterpieces of Music (F, Sp, Su)
Music 111H Honors Masterpieces of Music (F, Sp)
Music 112 Music in Our Time (F, Sp, Su)
Music 112H Honors Music in Our Time (Sp)
Music 113 Survey of Western Masterpieces and World Music (Sp)
Music 114 Historical Survey of Jazz (as needed)
Music 115 Historical Survey of Popular Music (as needed)
Music 120 Fundamentals of Music Theory (F, Sp)
Music 123 Aural Skills I (F, Sp)
Music 124 Aural Skills II (F, Sp)
Music 131 Music Theory I ( $\mathrm{F}, \mathrm{Sp}$ )
Music 132 Music Theory II (F, Sp)
Music 161 Diction for Singers I (F, Sp)
Music 162 Diction for Singers II (Sp)
Music 191, 192, 193 Topics in Music (as needed)
Music 223 Aural Skills III (F, Sp)
Music 224 Aural Skills IV (F, Sp)
Music 231 Music Theory III (F, Sp)
Music 232 Analysis of Post-Tonal Music (F, Sp)
Music 251 Music History and Literature I (F, Sp)
Music 252 Music History and Literature II (F, Sp)
Music 261 Music of the World (F)
Music 301 Beginning Improvisation (F, Sp)
Music 302 Orchestration (F, Sp)
Music 303 Choral Arranging (F, Sp)
Music 333-334 Piano Literature (as needed)
Music 335 Vocal Literature (as needed)
Music 336 Vocal Literature (as needed)
Music 337-338 Instrumental Literature (as needed)
Music 343 History of Church Music and Liturgical Practices (as needed)
Music 344 Hymnody, Sacred Repertoire and Church Music Techniques (as needed)
Music 353 Choral Conducting and Literature I (F)
Music 354 Beginning Instrumental Ensemble Techniques, Literature and Conducting (F)
Music 363-364 Piano Pedagogy (as needed)
Music 365 Voice Science and Pedagogy ( $\mathrm{F}, \mathrm{Sp}$ )
Music 366-367 Instrumental Pedagogy (as needed)
Music 371 Recording Technology and Entrepreneurship (F, Sp)
Music 391, 392, 393 Topics in Music (as needed)
Music 401 Independent Study (as needed)
Music 420 Form and Analysis (F, Sp)
Music 430 Internship in Church Music (as needed)
Music 435 Internships in Music (F, Sp)
Music 440 Senior Project in Music (F, Sp, Su)
Music 453 Choral Conducting and Literature II (Sp)
Music 454 Instrumental Conducting and Literature II (Sp)

Music 463 Practicum in Piano Teaching (as needed)
Music 466 Practicum in Instrumental Teaching (as needed)
Music 481-482 Piano Tuning and Technology (as needed)
Music, Applied 100 Piano (as needed)
Music, Applied 101, 201 Piano Class (F, Sp)
Music, Applied 102, 202 Piano Class (F, Sp)
Music, Applied 103 Voice Class (F, Sp)
Music, Applied 111, 112, 114, 312, 313, 314 Piano (F, Sp)
Music, Applied 120 Voice (as needed)
Music, Applied 121, 122, 124, 322, 324 Voice (F, Sp)
Music, Applied 140 Flute (as needed)
Music, Applied 141, 142, 144, 342, 344 Flute (F, Sp)
Music, Applied 150 Double Reed (as needed)
Music, Applied 151, 152, 154, 352, 354 Double Reed (F, Sp)
Music, Applied 160 Clarinet (as needed)
Music, Applied 161, 162, 164, 362, 364 Clarinet (F, Sp)
Music, Applied 170 Saxophone (as needed)
Music, Applied 171, 172, 174, 372, 374 Saxophone (F, Sp)
Music, Applied 180 Trumpet (as needed)
Music, Applied 181, 182, 184, 382, 384 Trumpet (F, Sp)
Music, Applied 190 French Horn (as needed)
Music, Applied 191, 192, 194, 392, 394 French Horn (F, Sp)
Music, Applied 210 Trombone (as needed)
Music, Applied 211, 212, 214, 412, 414 Trombone (F, Sp)
Music, Applied 220 Euphonium (as needed)
Music, Applied 221, 222, 224, 422, 424 Euphonium (F, Sp)
Music, Applied 225 Composition (as needed)
Music, Applied 226 Composition (as needed)
Music, Applied 227, 427 Composition (as needed)
Music, Applied 229, 429 Composition (as needed)
Music, Applied 230 Tuba (as needed)
Music, Applied 231, 232, 234, 432, 434 Tuba (F, Sp)
Music, Applied 235 Guitar (F, Sp)
Music, Applied 236, 436 Guitar (F, Sp)
Music, Applied 237, 437 Guitar (F, Sp)
Music, Applied 238, 438 Guitar (F, Sp)
Music, Applied 239, 439 Guitar (F, Sp)
Music, Applied 250 Percussion (as needed)
Music, Applied 251, 252, 254, 452, 454 Percussion (F, Sp)
Music, Applied 255 Violin (F, Sp)
Music, Applied 256, 456 Violin (F, Sp)
Music, Applied 257, 457 Violin (F, Sp)
Music, Applied 258, 458 Violin (F, Sp)
Music, Applied 259, 459 Violin (F, Sp)
Music, Applied 260, 261, 461 Harpsichord (as needed)
Music, Applied 265 Viola (F, Sp)
Music, Applied 266, 466 Viola (F, Sp)
Music, Applied 267, 467 Viola (F, Sp)

Music, Applied 268, 468 Viola (F, Sp)
Music, Applied 269, 469 Viola (F, Sp)
Music, Applied 270, 271, 471 Organ (as needed)
Music, Applied 275 Cello (F, Sp)
Music, Applied 276, 476 Cello (F, Sp)
Music, Applied 277, 477 Cello (F, Sp)
Music, Applied 278, 478 Cello (F, Sp)
Music, Applied 279, 479 Cello (F, Sp)
Music, Applied 285 Double Base/Electric Bass (F, Sp)
Music, Applied 286, 486 Double Base/Electric Bass (F, Sp)
Music, Applied 287, 487 Double Base/Electric Bass (F, Sp)
Music, Applied 288, 488 Double Base/Electric Bass (F, Sp)
Music, Applied 289, 489 Double Base/Electric Bass (F, Sp)
Music, Applied 295 Harp (F, Sp)
Music, Applied 296, 496 Harp (F, Sp)
Music, Applied 297, 497 Harp (F, Sp)
Music, Applied 298, 498 Harp (F, Sp)
Music, Applied 299, 499 Harp (F, Sp)
Music, Applied 301 String Class (F-odd)
Music, Applied 302 Woodwind Class (Sp-even)
Music, Applied 303 Brass Class (Sp-odd)
Music, Applied 304 Percussion Class (F-even)
Music, Applied 305 Topics in Applied Music (as needed)
Music, Applied 311, 313, 314 Piano (as needed)
Music, Applied 321 Voice (as needed)
Music, Applied 341, 343 Flute (as needed)
Music, Applied 351, 353 Double Reed (as needed)
Music, Applied 361, 363 Clarinet (as needed)
Music, Applied 371, 373 Saxophone (as needed)
Music, Applied 381, 383 Trumpet (as needed)
Music, Applied 391, 393 French Horn (as needed)
Music, Applied 395 Junior Recital (F, Sp)
Music, Applied 411, 413 Trombone (as needed)
Music, Applied 421, 423 Euphonium (as needed)
Music, Applied 431, 433 Tuba (as needed)
Music, Applied 451, 453 Percussion (as needed)
Music, Applied 495 Senior Recital (F, Sp)
Music Education 260 Introduction to Music Education (F)
Music Education 310 General Music (F)
Music Education 391, 392, 393 Topics in Music Education (as needed)
Music Education 401 Independent Study (as needed)
Music Education 405 Secondary Instrumental Methods (F)
Music Education 406 Secondary Choral Methods (F)
Music Education 417 Marching Band Methods (F, Sp)
Music Education 450 Senior Seminar in Music Education (Sp)
Music Education 453 Instructional Strategies in Music Education (F, Sp)
Music Education 461 Internship in Teaching Music (as needed)
Music Education 462 Seminar in Teaching Music (as needed)
Music Education 471 Student Teaching in Music - Grades K-6 (F, Sp)

Music Education 472 Student Teaching in Music - Grades 7-12 (F, Sp)
Music Ensembles 151, 351, 451 Marching Band (F)
Music Ensembles 160, 360 Piano Ensemble (F, Sp)
Music Ensembles 161, 361 Accompanying (F, Sp)
Music Ensembles 163, 363 Choral Society (F, Sp)
Music Ensembles 164, 364 Collegiates (F, Sp)
Music Ensembles 166, 366 Treble Choir (F, Sp)
Music Ensembles 305 Topics in Music Ensembles (as needed)
Music Ensembles 352, 452 Wind Ensemble (Sp)
Music Ensembles 353, 453 Concert Jazz Band (F, Sp)
Music Ensembles 356, 456 Percussion Ensemble (F, Sp)
Music Ensembles 358, 458 Concert Band (Sp)
Music Ensembles 362, 462 University Singers (F, Sp)
Music Ensembles 365, 465 New Pacer Singers (F, Sp)
Music Ensembles 367, 467 Lyric Opera Theatre (Sp)
Music Ensembles 368, 468 Chamber Ensemble (F, Sp)
Music Ensembles 371, 471 University Orchestra (F, Sp)
Music Ensembles 391, 491, Contemporary Music Group (F, Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Visual and Theatre Arts 

Carol A. Eckert, Chair

201 Fine Arts Building
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## Faculty

Tim Barrington, Carol A. Eckert, Sarab E. Haig, A. Melanie Hollis, Lane E. Last, Pbillip W. Male, David L. McBeth, Sarah V. McCormick, Kevin L. Shell, Jason T. Stout, Wendy Wang

## Mission

The mission of the Department of Visual and Theatre Arts is to provide educational, artistic and cultural opportunities for the students of the university and the people of West Tennessee. The faculty and students serve the area through a quality undergraduate professional arts program with performances and exhibits enhancing the aesthetic and cultural awareness of the campus and region while preparing students for careers in the arts, teaching and for advanced study. The department engages in scholarly activity that fosters artistic integrity, scholarship and an appreciation for continued learning.

## Student Learning Outcomes

In keeping with the Department of Visual and Theatre Arts' primary mission, the B.F.A. degree program in Fine and Performing Arts produces graduates who:

1. exhibit skill and depth of application in the primary emphasis: visual art, graphic design, art education, dance education, or theatre
2. integrate knowledge and practice of other arts disciplines into their primary emphasis;
3. apply critical and analytical methodologies in their primary emphasis;
4. demonstrate a broad understanding of the scope of the arts and their contribution to a global society;
5. construct a personal aesthetic perspective.

## Bachelor of Fine Arts with a Major in Fine and Performing Arts

The major in Fine and Performing Arts provides a Studio option and a Teaching option. The Studio option includes an emphasis in Visual Art (2111), Graphic Design (2116), or Theatre (2118). The Teaching option includes an emphasis in Art Education (2112) or Dance Education (2113).

## General Education (38-45 hours)

All BFA degree students with a major in Fine and Performing Arts are required to successfully complete university general education requirements.
All Majors:
English 110 or 111, and 112 English Composition ..... 6-7
Communications 230 Public Speaking .....  .3
Mathematics $110,130,140,160,185,210$, or 251 ..... 3-5
History 121-122 World Civilization or History 201-202 U.S. History .....  6
Literature Elective (English 250, 251, 260, 261, 270, 271) ..... 3
Social \& Behavioral Sciences Electives ..... 6
(Art Education and Dance Education emphasis students must take PSYC 101 and SWRK 220)
Foreign Language: completion of 111 or 115 or above. ..... 3
(may not be used to fulfill entrance deficiency in foreign language) Biological and Physical Systems Electives .....  8
(must meet university-wide general education requirements)
Studio Option:
Electives outside the Fine and Performing Arts Visual Art emphasis ..... 6
Graphic Design emphasis ..... 7
Theatre emphasis ..... 6
Major Courses (76-81 hours)
Arts Core:
Art History 210-211 The History of Art ..... 6
Dance 110 Understanding Dance ..... 3
Theatre 110 or 111 Understanding Theatre ..... 3
Studio Option:
Theatre 111 Understanding Theatre ..... 3
(Studio Option must take Theatre 110 and 111)
Fine Arts 310 Aesthetics or Fine Arts 410 Art Theory \& Criticism ..... 3
Teaching Option:
Art Education:
Art 110 Understanding Visual Art ..... 3
Art 310 Fibers or Art 441 Weaving ..... 3
Art 225 Printmaking or Art 327 Book Arts ..... 3
Art Education 211 Introduction to Teaching Art .....  2
Art Education 360 Teaching Art in the Public School ..... 3
Fine Arts 300 Computers and Media for the Arts or Human Learning 311 Technology Integration ..... 3
Fine Arts 310 Aesthetics or Fine Arts 410 Art Theory \& Criticism ..... 3
Dance Education:
Dance Education 211 Introduction to Teaching Dance. ..... 2
Dance Education 390 Dance Pedagogy ..... 3
Dance 415 Dance History and Contemporary Issues ..... 3
Exercise Science 305 Applied Kinesiology ..... 3
Fine Arts 300 Computers and Media for the Arts or Human Learning 311 Technology Integration ..... 3
Fine Arts 310 Aesthetics or Fine Arts 410 Art Theory \& Criticism .....  3
Area of Emphasis (31-43 hours)
(Choose appropriate area)
Students must receive the grade of C or better for all courses within the area of emphasis.
Visual Art: (required for Art Education: Teaching option)
Art 120 Two-Dimensional Design ..... 3
Art 130 Three-Dimensional Design ..... 3
Art 140-150 Drawing ..... 6
Art 200 Using Color ..... 3
Art 245 Sculpture ..... 3
Art 250 Painting or Art 330 Mixed Media ..... 3
Art 335 Ceramics ..... 3
Art 355 Figure Drawing ..... 3
FA 301 Gallery Practicum (Studio Option students only) .....  1
Art 450 Professional Practices in Visual Art (Studio Option students only) ..... 2
Art 460 Senior Thesis Exhibition ..... 1
Twelve hours selected from any upper-division art course ..... 12
(Studio Option students only)
Dance: (required for Dance Education: Teaching Option)
Dance 120, 320, 420 Contemporary Dance. ..... 8
Dance 130, 330, 430 Ballet I, II, Advanced ..... 6
Dance 150, 350 Dance Ensemble ..... 6
Dance 240, 440 Choreography I, II ..... 4
Dance 310 Jazz Dance ..... 2
Dance 360 Dance Production. .....  1
Dance 460 Senior Project ..... 1
Theatre 410 Lighting and Sound Design ..... 3
Graphic Design:
Art 120 Two-Dimensional Design ..... 3
Art 130 Three-Dimensional Design ..... 3
Art 140-150 Drawing ..... 6
Art 200 Using Color ..... 3
Graphic Design 210 Graphic Design ..... 3
Graphic Design 220 Graphic Design II ..... 3
Graphic Design 350 Typography and Page Layout ..... 3
Graphic Design 440 Professional Practices in Design ..... 3
Fifteen hours selected from the following:
Art History 320, Graphic Design 302, 340, 345, 391, 425, 435, 450 or 452 ..... 15
Theatre:
Theatre 150 Theatre Workshop ..... 6
Theatre 220-221 Acting .....  .6
Theatre 330 Costuming and Stage Makeup ..... 3
Theatre 360 Stagecraft ..... 3
Theatre 380 Play Interpretation and Direction ..... 3
Theatre 410 Lighting and Sound Design ..... 3
Theatre 420 Advanced Acting ..... 9
Theatre 430 Scene Design ..... 3
Upper-division Theatre Electives ..... 6
Theatre 460 Senior Project .....  1
Professional Enhancement (15-22 hours)
Studio Option:
Secondary Emphasis/Arts Electives15 hours
..... Electives selected from arts disciplines outside the area of emphasis includingArt; Art Education; Art History; Dance; English 310, 311, 315, 375, 380, 395, 485(Maximum nine hours English); Fine Arts; Graphic Design; Interior Design; Musicand Theatre. Theatre emphasis must include four hours of Dance 120.
Teaching Option: ..... 22 hours
Art Education:
Art Education 302 Integrated Teaching Strategies ..... 3
Special Education 300 Exceptional Child ..... 3
Art Education 400 Senior Seminar in Art Education ..... 4
Art Education 471-472 Student Teaching in Art ..... 12
Dance Education:
Teacher Education 302 Integrated Teaching Strategies ..... 3
Special Education 300 Exceptional Child ..... 3
Dance Education 400 Senior Seminar in Dance Education ..... 4
Dance Education 471-472 Student Teaching in Dance. ..... 12
Minimum hours required: ..... 120
Admission and Retention

Students are admitted to the B.F.A. must undergo a sophomore review and annual performance auditions (for students who choose Theatre or Dance Education as an area of emphasis) or a sophomore portfolio review (for students who choose Art, Graphic Design, or Art Education as their area of emphasis) by the appropriate faculty. Progress in the program will be monitored on an annual basis by the faculty. Only those students who make continuing and adequate progress (as defined by the faculty) in the Area of Emphasis (AOE) will be allowed to continue beyond the second year.

## Additional Requirements

1. Art, art education and graphic design AOE students will have a Capstone exhibit or present a Capstone portfolio of works during the senior level for jury by the faculty.
2. Theatre AOE students are expected to participate in productions of Vanguard Theatre and to achieve upper-division level skill in acting. A major production Capstone practicum or jury is required during the senior level by the faculty for graduation.
3. Dance Education AOE students are expected to participate in UTM Dance Ensemble concerts and to achieve upper-division level skill in dance prior to student teaching. A dance concert Capstone practicum or jury is required during the senior level by the faculty for graduation.
4. B.F.A. majors are required to participate in the enrichment opportunities which are available in the arts. These include the music, theatre and dance performances, art exhibits and other events presented by faculty and students.
5. In addition to Visual and Theatre Arts departmental advising, students interested in Art and Dance Education are asked to please see the Office of Educator Preparation Program in the College of Education, Health, and Behavioral Sciences' section for admission guidelines and licensure information.

## Minors

## Art (M-2111)

The minor in Art consists of Art 140, Art History 210-211 and nine hours selected from: Art 150 or any upper-division art course. Total hours required: 18.

## Art History (M-2119)

The minor in Art History consists of Art History 210-211; Fine Arts 410 and nine hours selected from: Art History 320, 330, 340, 350, 391, 410, or Fine Arts 310. Total hours required: 18.

## Dance (M-2114)

The minor in Dance consists of eight hours in a techniques core selected from Dance 120, 130, 320, 330 or 420. Additional requirements include Dance 110, 150, 240, 350 and 415. Total hours required: 20.

## Graphic Design (M-2116)

The minor in Graphic Design consists of Art 120, 140; Art History 320; Graphic Design 210, 220; and three hours selected from: Graphic Design 345, 425, or 435. Total hours required: 18.

## Theatre (M-2118)

The minor in Theatre consists of Theatre 110, 150, 220, 221 and three hours selected from: 330, 360, 410, or 430. Three hours selected from Theatre 320, 380, 390 or 420. Total hours required: 18.

## 18 Hour Certificate in Video Game Design

The Video Game Design certificate program is interdisciplinary and offered through the Department of Visual \& Theatre Arts and Department of Computer Science. The program combines artistic and technical coursework to teach students about the design process and gaming industry. This certificate program begins with the fundamentals of video game design, game systems and mechanics, game studio roles and development, programming and advances through hands-on experience and simulations. The program provides opportunities for creative and technical-minded students to explore multimedia tools, skills, and applications that are essential to staying competitive in today's gaming culture. It incorporates modeling, graphics, art, design, 2-D and 3-D imaging, scripting, and virtual reality into an abbreviated program that teaches students how to create and maintain video games.

Courses in the certificate: CSCI 220 or 221, Art 120, GDES 210 (All courses already offered), courses: GDES 302-3-D Modeling and Computer Graphics, GDES 340 Video Game Foundations, GDES 342 Video Game Design \& Development.

## Facilities

The Fine Arts Building is a recently renovated and redesigned facility which provides teaching, studio, and performance spaces for visual art, dance, theatre and music programs. Facilities for visual art include six spacious studios, a graphic design lab, an additional supplemental computer lab, the Fine Arts Gallery and a number of other teaching and support areas. Facilities for theatre and dance include the 350 -seat Harriet Fulton Performing Arts Theatre, the Vanguard Little Theatre, several support spaces, including a scene shop, costume shop, scenery and prop storage, and dressing rooms for the production of both theatre and dance performances as well as other sponsored cultural outreach.

In addition, a spacious dance studio is located in the Kathleen and Tom Elam Center and features a floating wood floor along with mirrored walls, lighting, and sound enhancements. It is the site of student recitals as well as dance workshops and informal ensemble presentations.

## Scholarships

There are seven scholarships available in the Department of Visual and Theatre Arts. Scholarships are awarded by audition or portfolio review and academic success. The Gala Scholarship is a one-year award of $\$ 1,500$ given to a promising art, dance or theatre student. The William H. Snyder Visual Arts Scholarship of $\$ 1,000$ is awarded to a student completing the Foundation Review. The William H. Snyder Dance and Theatre Freshman Scholarship is $\$ 1,000$ alternately awarded an incoming Theatre or Dance Education major. The William Snyder Scholarship is a $\$ 900$ award and the Joan Metheny McGraw Scholarship is a \$2,500 award given annually to an outstanding major in theatre. The League of Striving Artists Achievement Scholarship is a $\$ 500$ award given to an exceptional sophomore, junior, or senior art, art education, or graphic design student. The Nancy Eckert Scholarship is a $\$ 500$ scholarship awarded to deserving art education students to help defer the cost of student teaching.

## Student Organizations

Opportunities for membership in associated student organizations are an important part of student development. The League of Striving Artists (Art, Art Education and Graphic Design), Alpha Psi Omega (National Honor Society for Theatre), and the National Honor Society of Dance Arts support the efforts of the department and are important in the professional growth of students.

## Courses Offered by Department of Visual and Theatre Arts

Art 110 Understanding Visual Art (F, Sp)
Art 110H Honors Understanding Art (Sp-odd)
Art 120 Two-Dimensional Design (F, Sp)
Art 130 Three-Dimensional Design (F, Sp)
Art 140-150 Drawing I-II (F, Sp)
Art 200 Using Color (Sp)
Art 225 Printmaking (Sp-even)
Art 245 Sculpture I (F)
Art 250 Painting I (F)
Art 305 Photography (as needed)
Art 310 Fibers (F)
Art 325 Advanced Printmaking (Sp-even)
Art 327 Book Arts (Sp-odd)
Art 330 Mixed Media (Sp)
Art 331 Jewelry (as needed)
Art 335 Ceramics (F, Sp)
Art 345 Sculpture II (F)
Art 350 Painting II (F)
Art 355 Figure Drawing I (F)
Art 360 Clay Sculpture (Sp-even)
Art 365 Clay Sculpture II (Sp-even)

Art 370 Raku (F-odd)
Art 391 (591) Special Topics in Art (as needed)
Art 402 Research Topics in 2-D Studio (as needed)
Art 403 Research Topics in 3-D Studio (as needed)
Art 410 Fibers II (F, Sp)
Art 430 Advanced Mixed Media (Sp)
Art 431 Advanced Jewelry (F-even)
Art 435 Advanced Ceramics (F, Sp)
Art 441 Weaving (F, Sp)
Art 445 Clay Surface Design(Sp-odd)
Art 450 Professional Practices in Visual Art (Sp)
Art 455 Figure Drawing II (F)
Art 460 Senior Thesis Exhibition (F, Sp)
Art Education 211 Introduction to Teaching Art (F)
Art Education 302 Integrated Teaching Strategies (Sp-even)
Art Education 360 Teaching Art in the Public School (Sp)
Art Education 400 Senior Seminar in Art Education (F)
Art Education 471 Student Teaching in Art-Grades K-6 (F, Sp)
Art Education 472 Student Teaching in Art-Grades 7-12 (F, Sp)
Art History 210-211 The History of Art (F, Sp, Su)
Art History 320 History of Graphic Design (F-odd)
Art History 330 Visual Traditions of Non-Western Cultures (Sp-even)
Art History 340 Art of the Classical World and Western Traditions (as needed)
Art History 350 Women in the Arts (Sp-odd)
Art History 391 Special Topics in Art History (as needed)
Art History 410 Contemporary Art (F-even)
Dance 110 Understanding Dance (F, Sp)
Dance 110 H Honors Understanding Dance (as needed)
Dance 120 Contemporary Dance I (F)
Dance 130 Ballet I (Sp)
Dance 150 Dance Ensemble (F, Sp)
Dance 210 Music and Movement (as needed)
Dance 215 Movement for Performers (as needed)
Dance 240 Choreography I (Sp)
Dance 310 Jazz Dance (Sp-odd)
Dance 320 Contemporary Dance II (F)
Dance 330 Ballet II (F)
Dance 350 Dance Ensemble (F, Sp)
Dance 360 Dance Production (as needed)
Dance 401 Special Projects in Dance (as needed)
Dance 415 Dance History and Contemporary Issues (Sp-even)
Dance 420 Advanced Contemporary Dance (F)
Dance 430 Advanced Ballet (F)
Dance 440 (640) Choreography II (Sp)
Dance 460 Senior Project (as needed)
Dance Education 211 Introduction to Teaching Dance (F-even)
Dance Education 390 Dance Pedagogy (Sp-odd)
Dance Education 400 Senior Seminar in Dance Education (F-odd)

Dance Education 471 Student Teaching in Dance Grades K-6 (as needed)
Dance Education 472 Student Teaching in Dance Grades 7-12 (as needed)
Fine Arts 300 Computers and Media for the Arts (F-odd)
Fine Arts 301 Gallery Practicum (F, Sp)
Fine Arts 310 Aesthetics (F-odd)
Fine Arts 350 Fine Arts in Early Childhood (as needed)
Fine Arts 410 Art Theory and Criticism (Sp)
Fine Arts 467 Travel Study (Selected Topics) (as needed)
Graphic Design 210 Graphic Design (F)
Graphic Design 220 Graphic Design II (Sp)
Graphic Design 302 Modeling and Computer Graphics (Sp, odd)
Graphic Design 340 Video Game Foundations (F, odd)
Graphic Design 345 Digital Photography (Sp)
Graphic Design 350 Typography and Page Layout (F)
Graphic Design 360 Digital Illustration (Sp-odd)
Graphic Design 391 Special Topics in Graphic Design (as needed)
Graphic Design 425 Interactive Multimedia (Sp)
Graphic Design 435 Advertising Design (F)
Graphic Design 440 Professional Practices in Design (Sp)
Graphic Design 450 Internship in Graphic Design (F, Sp)
Graphic Design 452 Video Game Design and Development (Sp, even)
Theatre 110-111 Understanding Theatre (F, Sp, Su)
Theatre 110 H Honors Understanding Theatre (as needed)
Theatre 150 Theatre Workshop (F, Sp)
Theatre 201 Theatre Production (F, Sp)
Theatre 220-221 Acting (F, Sp)
Theatre 301 Theatre Production (F, Sp)
Theatre 320 Voice for the Actor (F-odd)
Theatre 330 Costuming and Stage Makeup (Sp-even)
Theatre 360 (560) Stagecraft (F-odd)
Theatre 380 Play Interpretation and Direction (Sp-odd)
Theatre 390 (590) Playwriting (F-even)
Theatre 391 Special Topics in Theatre (as needed)
Theatre 401 Independent Study (as needed)
Theatre 410 Lighting and Sound Design (F-even)
Theatre 420 Advanced Acting (F, Sp)
Theatre 430 (630) Scene Design (Sp-odd)
Theatre 460 Senior Project (F, Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

## Description of Courses



The University of Tennessee at Martin

## Description of Courses

Course descriptions are listed alphabetically by discipline name. The discipline abbreviation appears in parentheses immediately after the discipline name. The Schedule of Courses issued each semester by the Office of Academic Records lists courses alphabetically by discipline abbreviation, not discipline name. See the following table for a list of all disciplines listed alphabetically by discipline abbreviation.
Courses are offered in rotation. The frequency of course offerings is designated by (F) for fall semester, (Sp) for spring semester, (Su) for summer semester, or (as needed). If a course is offered only in odd or even numbered years, the designation will include -odd or -even. Frequency designations are located in Courses Offered by the Department at the end of each departmental section.

Courses taken for Graduate Credit (numbered 500 or above) have additional requirements for completion with graduate credit. Graduate students will be expected to perform at a more rigorous level. Additional content will be required. Graduate students will be expected to complete additional projects.

Modern Foreign Language courses designated as Elementary or Intermediate must be taken and passed in sequence. Placement tests are given in the Department Office, upon request, to students with prior experience with French, German, or Spanish in order to place them at an appropriate level.

| AAST | African American Studies | DSED | Driver Safety Education |
| :--- | :--- | :--- | :--- |
| ACCT | Accounting | ECED | Early Childhood Education |
| AGEC | Agricultural Economics | ECON | Economics |
| AGED | Agricultural Education | EDEV | Educational Evaluation |
| AGET | Agricultural Engineering Technology | EDFN | Educational Foundations |
| AGRI | Agriculture | EDLD | Educational Leadership |
| ANSC | Animal Science | EDST | Educational Studies |
| ART | Art | ELED | Elementary Education |
| ARTE | Art Education | ENGL | English |
| ARTH | Art History | ENGR | Engineering |
| ASTR | Astronomy | EXSC | Exercise Science |
| ATRN | Athletic Training | FASH | Fashion Merchandising |
| BADM | Business Administration | FA | Fine Arts |
| BCHE | Biochemistry | FCS | Family and Consumer Sciences |
| BIOL | Biology | FCSE | Family and Consumer Sciences Education |
| BLAW | Business Law | FIN | Finance |
| BOT | Botany | FREN | French |
| BUED | Business Education | FRP | Fellows Research Program |
| CFS | Child and Family Studies | FSCI | Food Science |
| CHEM | Chemistry | FSVC | Food Service Management |
| CIEG | Civil Engineering | FSMG | Food Systems Management |
| CJ | Criminal Justice | GDES | Graphic Design |
| COMM | Communications | GEDU | Geoscience Education |
| COUN | Counseling | GENS | General Studies |
| CRMG | Consumer Resource Management | GEOG | Geography |
| CSCI | Computer Science | GEOL | Geology |
| CTE | Career and Technical Education | GEOS | Geoscience |
| DANC | Dance | GERM | German |
| DNED | Dance Education | GERO | Gerontology |


| GREK | Greek | NURS | Nursing |
| :--- | :--- | :--- | :--- |
| HHP | Health and Human Performance | NUTR | Nutrition |
| HIST | History | PACT | Physical Activity |
| HLRN | Human Learning | PARK | Park Administration |
| HLTH | Health | PHIL | Philosophy |
| HNRS | Honors | PHYS | Physics |
| HONR | Honors | PLSC | Plant Science |
| HPED | Health and Physical Education | PORT | Portuguese |
| HPER | Human Performance | POSC | Political Science |
| HPMG | Hospitality Management | PSYC | Psychology |
| HSEM | Honors Seminar | READ | Reading |
| IDT | Instructional Design and Technology | RLST | Religious Studies |
| IDST | Interdisciplinary Studies | SEDU | Secondary Education |
| INST | International Studies | SOC | Sociology |
| INEG | Industrial Engineering | SOIL | Soil Science |
| INFS | Information Systems | SPAN | Spanish |
| JAPN | Japanese | SPED | Special Education |
| LDSP | Leadership | SPMG | Sport Management |
| LIBS | Library Service | STAT | Statistics |
| MATH | Mathematics | STEM | Science, Technology, Engineering, Math- |
| METR | Meteorology |  | ematics |
| MBIO | Microbiology | SUST | Sustainability Studies |
| MGT | Management | SWRK | Social Work |
| MKTG | Marketing | TCED | Teacher Education |
| MSL | Military Science and Leadership | TESL | Teaching English as a Second Language |
| MUAP | Applied Music | THEA | Theatre |
| MUED | Music Education | UNSC | University Scholars |
| MUEN | Music Ensembles | VET | Veterinary Health Technology |
| MUS | Music | WBIO | Wildlife Biology |
| NEUR | Neuroscience | WMST | Women's and Gender Studies |
| NRM | Natural Resources Management | ZOOL | Zoology |
|  |  |  |  |

## TBR Equivalents

Undergraduate UT Martin courses which have TBR system-wide common equivalents will be noted as follows: ART 110 (3) (TBR: ART 1030)

## Accounting (ACCT)

## 201 Accounting Information for Decision Mak-

ing I (3) This course is designed to help students appreciate the role of accountants in providing information helpful to decisions of investors, creditors, government regulators, management and others and understand how that information can be used. Emphasis is on comprehending the meaning and value of the balance sheet, income statement. Prereq: Sophomore standing and grade of C or better in MATH 110 or 140 or 160 or 185 or 210 or 251.

## 202 Accounting Information for Decision Mak-

 ing II (3) This course is designed to help students appreciate the role of accountants in providing information helpful to investors, creditors, and management in understanding the balance sheet, and income statement and statement of cash flows. In addition, uses of accounting information for managerial decision making includes planning and control activities of managers in business enterprises. Topics include methods for determining the costs of products and services, for assessing product and project profitability and for budgeting and monitoring of costs and profits. Prereq: Grade of C or better in ACCT 201 or ACCT 300.300 Accounting for Non-Business Students (3)
Survey course in financial and managerial accounting with heavy emphasis on managerial use of accounting information. May not be taken for credit by business students. Credit may not be counted both for ACCT 201-202 and ACCT 300. Prereq: Junior standing.
301 Intermediate Accounting I (3) A professional level study of financial accounting theory and practice, designed to prepare students for careers in all areas of accounting. Beginning with a review of the conceptual framework and the accounting cycle, the course provides a detailed examination of the recording and reporting issues encountered by financial accounting professionals. Prereq: Grade of C or better in ACCT 202.

302 Intermediate Accounting II (3) Continuation of ACCT 301. Prereq: Grade of B or better in ACCT 301.

305 Accounting Computer Applications (3) This course is a study of applications used to support communication, decision-making, and problem-solving in accounting. Emphasis is on word-processing, spread-
sheet, presentation, and database applications used in accounting-focused business problems. Prereq: Grade of "C" or better in ACCT 301.

313 Analysis of Financial Statements (3) An indepth study of current financial reporting practices; analysis and interpretation of corporate financial statements. The course includes an extensive review of financial accounting concepts. Credit may not be granted for both Accounting 313 and Finance 313. Prereq: Grade of C or better in ACCT 301 or concurrent enrollment in ACCT 301.

321 Cost/Management Accounting (3) Cost management emphasizing contemporary topics through an understanding of the underlying concepts and fundamental techniques involved in cost accounting for manufacturing and service enterprises. Job-order, process cost volume profit analysis, product pricing, budgeting, activity based costing and standard costing are examined. Prereq: Grade of $C$ or better in ACCT 202.

401 Auditing and Assurance Services (3) Introduction to auditing and assurance services. Course covers the auditing environment, the auditing process and the application of auditing concepts to various types of audits, including financial, operational and compliance. Prereq: Grade of C or better in MATH 210, grade of B or better in ACCT 301, and grade of C or better in ACCT 302 and grade of C or better in ACCT 461.

402 Financial Statement Auditing (3) Application of the auditing process to the auditing of financial statements. Prereq: Grade of C or better in ACCT 401.

## 421 Advanced Cost/Management Accounting

(3) A continuation of ACCT 321 with an emphasis on inventory management, just in time costing, supportservice costs, long-term capital investment decisions, performance analysis, pricing and incentive systems and performance measurement. Prereq: Grade of $C$ or better in ACCT 321.

431 Individual Taxation (3) Introductory course in taxation with emphasis on individuals, including the study of gross income, exclusions, business and non-business deductions, credits, property transactions, accounting periods and methods and deferred compensation. Prereq: Grade of C or better in ACCT
202.

## 432 Advanced Topics and Research in Tax (3)

Advanced course in taxation with coverage of corporations, partnerships, estates, trusts, gifts and developing research skills. Prereq: Grade of C or better in ACCT 431.

441 Advanced Financial Accounting (3) Accounting practices and theories for business combinations and partnerships. Prereq: Grade of B or better in ACCT 301 and grade of C or better in ACCT 302.
451 Governmental and Nonprofit Accounting (3) An introduction to accounting and financial reporting of state and local governments and nongovernmental nonprofit organizations. Account structure and accounting for various fund types in governmental entities and restricted and unrestricted funds in nongovernmental nonprofit entities are emphasized in the course. Prereq: Grade of B or better in ACCT 301.
461 Accounting Information Systems (3) An introduction to information systems with emphasis on concepts of analysis, design and implementation of accounting systems with attention to internal control and the audit trail. Students will be working with a computerized accounting software package. Prereq: Grade of B or better in ACCT 301 and grade of C or better in ACCT 305.

471 Research in International Accounting
Theory (3) An examination of international accounting concepts, standards, conventions, principles and practices with primary emphasis on the study of authoritative pronouncements comprising International Accounting Standards as established by the International Accounting Standards Board (IASB). Prereq: Grade of B or better in ACCT 301.
480 Internship in Accounting (1-9) Supervised accounting work experience in business establishments, institutions, or other organizations matched to the student's curriculum. (May not be used to meet upper-division accounting elective requirements.) May be repeated for up to a total of 9 hours internship credit. A maximum of 6 hours may be used to fulfill degree requirements. Pass/Fail. Prereq: Departmental approval required; at least junior standing.
490 Independent Study in Accounting (3) Special research projects undertaken individually under the
supervision of the accounting faculty. Students are required to write research reports and give oral presentations. Prereq: Senior standing and approval of department chairperson and accounting faculty.
491 Research in Accounting Theory (3) An examination of accounting concepts, standards, conventions, principles and practices with primary emphasis on the study of authoritative pronouncements comprising generally accepted accounting principles. Prereq: Grade of B or better in ACCT 301.
701 Advanced Topics in Auditing (3) In-depth study of auditing as it relates to financial statements of public companies and governmental agencies. Prereq: One course in auditing.
710 Business Analysis Using Financial State-
ments (3) Introduction to business analysis usments (3) Introduction to business analysis using financial statements. After a review of the basic statements, students are exposed to concepts and techniques of Financial Statement Analysis. Emphasis is on financial statement information to enhance decision making for a variety of users (management, corporate boards, equity investors, financial analysts, lenders and regulators). Prereq: ACCT 201 or 300 or 711.

711 Accounting for Managerial Decisions (4) Study of accounting as it applies to the managerial function. Includes both managerial input into the accounting system and managerial use of accounting information. This course may not be used to meet MAc degree requirements. Prereq: ACCT 201 or 300.

## 721 Advanced Topics in Cost Accounting (3)

Study of advanced topics in cost accounting with emphasis on recent developments in cost accounting and in application of quantitative methods in the cost area. Prereq: One course in cost accounting.
731 Advanced Topics in Tax (3) Intensified study of the tax laws with emphasis on the federal income tax. Heavy emphasis on research methodology. Prereq: One course in federal income tax.

741 Advanced Problems in Accounting (3) Study of advanced accounting problems, including standard setting, income determination and disclosure issues. Prereq: ACCT 301 or permission of instructor.
751 Accounting for Nonprofit Entities (3) Study of nonprofit accounting with emphasis on governmental entities, schools, hospitals and voluntary health
and welfare organizations. Prereq: ACCT 201 or ACCT 300 or ACCT 711.

## 790 Accounting Strategic Management and

 Business Policy (3) An advanced case study, integrating accounting, economics, finance, management and marketing of selected problems encountered in the management of typical organizations engaged in the production of goods and services. Problem analysis and decision-making skills are emphasized in the context of the existing international environment. MAc students must take this course during their last semester. Approval from the Graduate Coordinator is required before registering for this course. MBA students are not allowed to take this course for credit. Prereq: Students must have a 3.00 graduate cumulative GPA with no I grades while enrolled in ACCT 790.791 Accounting Theory (3) Study of effective or proposed promulgations of accounting standards setting bodies. Prereq: ACCT 301.

## 799 Individual Readings and Research in Ac-

 counting (3) Special advanced research projects undertaken individually under the supervision of the faculty. Prereq: Approval of faculty member and Coordinator of Graduate Studies in Business.
## African American Studies (AAST)

101 The African American Experience (3) A thematic introduction to African American Studies and the African American Studies minor, the course will address aspects of African American history, culture, and thought, with special emphasis on civil rights and social justice movements.

301 African American Leadership (3) An indepth study of significant African American leaders--men and women--in a wide range of fields. It focuses on leadership in the civil rights and political arenas as well as pressure groups, protest movements, and African American nationalist organizations.

## Agricultural Economics (AGEC)

## 110 Introduction to Agricultural Business (3)

An introduction to the field of agricultural business and some of the basic tools and concepts of decision-making. Concepts are illustrated in terms of selected current social and economic issues in the industry of production agriculture, agricultural business and the computer application of those concepts.

## 250 Introduction to Agricultural Sales (3)

Principles of selling food, agricultural, and other industrial/institutional products in wholesale and retail outlets. Topics include developing business-to-business selling techniques, farmers market, technical product distribution, wholesale and retail financing. Cooperative advertising, group selling, specification selling, personal selling and technical business plans.
271 Farm Management (3) Principles and procedures of farm management. Farm records, accounts, budgets and their uses. Farm tax law. Financing farm acquisition and expansion.

## 301-302 Special Problems [topic title] $(1,1)$

 Independent study projects for students exhibiting special interest in applied areas of agricultural economics. Topics may be chosen from, but are not restricted to, production, marketing, management, policy, finance and resource economics. Taught only by arrangement prior to registration.
## 311 Spreadsheet Analysis in Agribusiness (3)

Use of computer spreadsheets to analyze complex and unique problems facing the agricultural firm. Specific emphasis on financial, statistical, and logical spreadsheet functions will be addressed. Topics include linear programming, optimization techniques, risk analysis, simulation, and data organization and communication. Prereq: AGEC 110 or AGET 110.

## 312 Value Chain Management in Food and

 Agribusiness (3) Strategic links in agriculture value chains to enhance competitiveness and efficiency within the marketplace. Logistics and supply chain management as key components in agri-food value chains. Best practices in value chain management to support innovation in products and services.Understanding global issues and current trends in agricultural value chain managements. Prereq: AGEC 110

## 313 Special Topics in Agribusiness [Topic

title] Classes in one or more of the following areas: (a) interdisciplinary approaches to agribusiness issues and (b) specialized topics suitable for in-depth study. May be repeated for credit (with different topic). This course may be taught in conjunction with a travel study. Not regularly offered.

## 315 Scientific Writing and Communication

 for Agricultural Business (3) Introduction to scientific writing, research methods and practices, and presentations to diverse audiences in various environments within the context of agricultural business. Reading reports and analyzing presentation materials for style, content, and organization. Graphical arrangement of data and results, structural development of reports and analyses, and integration of analyses into multiple formats to meet broader project goals.
## 325 Agriculture and Natural Resource Policy

 (3) Participants, issues and the policy process. Historical development and current characteristics of commodity, credit, food, trade, environmental and natural resource policy. Relationship between domestic and international agricultural and environmental policy.335 International Agricultural Trade (3) Theory and practice in international trade in agricultural and food products. Trade policy, trade agreements, trade law, tariffs, customs practices, exchange rates and their impact on trade in U.S. and world agriculture. Prereq: AGEC 110 or ECON 202.
350 International Agricultural Marketing (3) Theory and practice of marketing agricultural commodities or international markets. Specific emphasis will be placed on the domestic and trade policies of the major agriculture producing countries as well as the economic impact of preferential trade partnerships on the agricultural and general economy. Factors impacting the mobility of agricultural products, labor, and inputs will be addressed. Prereq: ECON 201.

364 Agricultural Marketing (3) The American marketing system. Alternative market function of the
marketing system. Commodity futures problems. Current marketing problems and possibilities for improvement. Prereq: AGEC 110 or ECON 202.

370 Agricultural Price Analysis (3) Factors influencing the level of food and agricultural prices, including trends and seasonal variation. Supply, demand and price determination within various institutional environments of agricultural commodity markets. The roles provided by government intervention, marketing agreements, and cooperatives in agricultural markets. Ability to interpret graphical and statistical analysis of commodity market data. Prereq: ECON 202. Coreq: AGEC 311.

## 371 Advanced Farm and Ranch Management (3)

Development of problem solving and risk management skills needed on the modern farm or ranch operation. Use of spreadsheets to perform production planning and analysis of farm and ranch problems with linear programming, simulations, and other tools. Analysis of the acquisition of resources and the use of information systems in managing the individual farm or ranch business. A complete farm plan will be developed and presented by class participants. Prereq: AGEC 271. Coreq: AGEC 372.

## 372 Advanced Farm and Ranch Management

Lab(1) Application of principles learned in Advanced Farm and Ranch Management (AGEC 371). This lab is designed to give students practical experience in developing simulation and linear program optimal solutions for farm management decision analysis. One two-hour lab. Coreq: AGEC 371.
375 Environmental and Agricultural Law (3) Survey of law and its application to agricultural and natural resource management. Property, contracts, torts, drainage and water rights. Environmental law, land tenure, employment, forms of business organization, estate planning, regulatory law and other selected topics. (Same as NRM 375)

385 Agribusiness Market Planning (3) Preparation of an executive summary and presentation of an agribusiness marketing plan. The product can be used for competition at the local and national levels of the National Agri-Marketing Association. The agribusiness marketing plan involves a rigorous examination of a product, its market, the competition, the plan for market development and a financial analysis of the
plan's profitability. May be repeated for up to six hours of credit.

## 386 Advanced Agribusiness Market Planning

(3) Preparation of an agribusiness marketing plan and actual presentation in competition at the local and national levels of the National Agri-Marketing Association. Includes trips to Memphis and the National Convention. The presentation includes many hours of rehearsal and refinement and preparation for answering questions of Judges. May be repeated for up to six hours of credit.

390 Rural Economic Development (3) This course examines the use of economic principles and analytical concepts to help understand the theory and process of economic development in rural areas. By integrating historical and current information, the course will explore the driving forces behind public sector and private sector initiatives to induce, manage and forecast rural development. Practical problems such as poverty, population growth, urbanization, education and environmental concerns will be addressed. Prereq: AGEC 110.

395 Farm Real Estate Appraisal (3) Methods of valuing and appraising farm real estate, farm real property law and gathering appraisal data. Income capitalization, sales comparison or market value, inventory or cost approaches to farm valuation. Valuation of buildings, insurance, tax, farm loan and condemnation appraisals and estate planning.
401-402 (601-602) Research Participation $(3,3)$ Application of the scientific method and techniques of research to investigation of problems in major subject areas of agricultural economics. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. Only 401-402 may be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program.

## 405 Veterinary Small Business Management

(3) Emphasis on the management and operation of veterinary businesses in a changing business and regulatory landscape. All aspects of financial, managerial, marketing, and human resource management issues will be explored as they relate to veterinary
related businesses and non-profit entities. Prereq: AGEC 110.

415 Agricultural Futures and Options (3) Basic elements and principles of agricultural commodity marketing with emphasis on using futures market contracts and options to limit risk exposure to producers and agribusiness firms. Attention is focused on the study of market price determination, forecasting basis, technical analysis and on actual trading of futures and options through market simulation programs. Prereq: AGEC 110.

## 420 Current Issues in Agricultural Business

(3) Examination and discussion of current issues and events related to domestic and international agricultural business. Preparation of graduates to effectively and professionally discuss agribusiness and its strengths and weaknesses. Prereg: Junior or senior AGEC classification or written permission of the instructor.

440 Econometrics Applications in Agribusiness (3) The study of agribusiness research methodology using econometric tools. Basic econometric analysis, including simple and multiple regression analysis, hypothesis testing, model selection, and data collection techniques as they are applied to solving agribusiness problems. Emphasis on application and interpretation of data for firm level agricultural decision-making. Prereq: AGEC 311 and either MATH 160 or MATH 210.

444 Practicum in Agribusiness (3) Field research and/or work experience related to the agribusiness industry. Specific topics include agribusiness management, marketing, and financial management. Students are expected to make presentations to faculty, peers, and agribusiness professionals reflective of their research findings or develop a portfolio of experiential activities for presentation. An emphasis on problem solving and effectively communicating solutions to agricultural stakeholders will be practiced. Prereq: instructor's approval.

## 445 (645) Natural Resources Economics (3)

Economic, social and political factors involved in conservation and utilization of natural resources. Discussion of investment criteria including benefitcost analysis, multi-objective planning externalities and welfare economics. Impact of outdoor rec-
reation, aesthetics and other non-market considerations associated with resource development. Students are required to write reports and give oral presentations. Prereq: AGEC 110 or ECON 202.

465 (665) Agricultural Finance (3) Analysis of capital requirements and investments of farm and agribusiness firms. Evaluation of credit needs and repayment capacity. Leverage, liquidity and risk management. Sources and uses of credit. Agribusiness financial record keeping and interpretation of financial statements. Prereq: AGEC 110 and junior standing.

## 471 (671) Agribusiness Management (3)

Principles and procedures for determining most profitable farm organization and system of operation. Nature of managerial processes. Records and their uses and budgeting procedures. Operations of firms selling farm supplies and merchandising agricultural products. Application of microeconomic theory to the problems of resource allocation, enterprise selection and scale of operation of agricultural firms. Prereq: AGEC 110 and junior standing.
475 Managerial and Entrepreneurial Strategies for Agribusiness (3) Emphasis on entrepreneurial activity and business stability are essential for agribusiness survival at the local and international levels. Application of current management techniques to agribusiness problems will be developed with an emphasis on critical thinking skills. Focus on management from a systems approach utilizing all aspects of business and technology. Factors such as adoption of technology, risk analysis, policy changes and general world economic issues will be discussed. Prereq: Junior standing.
480 Agriculture and Applied Project Management (3) This course examines project management roles and environments, the project life cycle and various techniques of work planning, risk management and mitigation, project deliverables, project roles and responsibilities, and control and evaluation. Students will gain familiarity with various project management phases including project agreement, project planning, project execution and the various project management activities within each stage. Prereq: AGEC 271 or 471.

485 (685) Mathematical Economics for Agriculture (3) Optimization, including mathematical
programming, Lagrangean functions and existence of optimal solutions. Static economic models, including input-output analysis, constrained production sets, nonlinear models and general equilibrium models. Dynamic economic models, including balanced growth models, optimal growth models and stability analysis. Course may include some instruction in underlying mathematics for models. Emphasis will be applications in agriculture. Prereq: MATH 160, ECON 201 and 202.

## 705 Advanced Agricultural Marketing (3)

Analytical and empirical treatment of consumer behavior related to food and fiber commodities. Specific topics include creating customer value, market penetration strategies, product positioning, vertical and horizontal integration and market growth.

## 710 Commodity Futures and Options Markets

(3) Economic theory and methods for analyzing agricultural production decisions and the underlying relationship to futures and options markets. Specific topics include the institutional structure, price formation, producer and agribusiness strategies, and financial instruments associated with U.S. and international markets.
715 Advanced Farm Real Estate Appraisal (3)
Problems and advanced topics in valuing farm real estate, including theory of value, present market value, legal description, property and real estate law, rights and limitations in the use of property, methodology and techniques of appraisal, including the impact of GPS on gathering appraisal data. Analysis of income capitalization, sales comparison and inventory cost approaches to appraisal and how differences in such appraisals can be reconciled. Dealing with complications from valuing buildings and improvements. Ethical considerations in performing appraisals for a specific purpose.

## 735 Seminar in International Agricultural

 Trade (3) Theory and practice in international trade in agricultural and food products with emphasis on real-world problems. Trade policy, trade law, customs practices, exchange rates and their impact on trade in the U.S. and world agriculture. Developing real-world export marketing plans including research, pricing, distribution systems, financing and pro forma invoicing. Discussions of major global trade issues.
## 740 Advanced Econometric Applications in

 Agribusiness (3) The advanced study of agribusiness research methodology using econometric tools to solve agribusiness problems. Advanced statistical methods, including multiple regression analysis, Logit, Probit, and other estimation techniques for agribusiness analysis will be presented; estimation issues such as multicollinearity, autocorrelation, heteroscedasticity, and related problems will also be addressed.
## 745 Agricultural Production Economics (3)

Resource allocation, production selection, and scale of operation of agricultural firms, including risk and uncertainty associated with agricultural production.
Prereq: MATH 160 and ECON 202 or instructor's approval.

## 750 Agricultural Risk Analysis and Decision

Making (3) Application of current risk management techniques to issues specific to the U.S. agribusiness system. Elements include: production risk; crop insurance; diversification; contract production; integration of systems; market risk; futures and options; minimum price contracts; personal risk; estate planning; organizational concerns; interest rate risk; policy risk.

## 751 Strategic Management Issues in Agricul-

 ture (3) Application of current strategic management techniques to agribusiness problems. Emphasis on viewing management from a broad organizational perspective through an integrated approach. The ability to assimilate and analyze information from all aspects of the organization (i.e. management, marketing, information systems, production, finance, accounting, etc.) to analyze complex problems, develop plans and propose recommendations on a top-management perspective.780 Project Management Issues in Agriculture (3) Application of current project management techniques to agribusiness planning problems. Both the technical and social or human sides of the issues are emphasized and focus will be on how they can be integrated to achieve desired results. Skills developed will include abilities to understand different types of projects and their unique characteristics, the impact of new technologies and globalization on business practices, and inclusion of all organizational levels in clearly defined recommendations.

784 Applied Management Science in Agricultural Systems I (3) Mathematical programming and constrained optimization research methods for applied decision making in agriculture. Development of computer and writing skills necessary for finding optimal solutions to complex applied problems in addition to succinctly communicating results in the proper format and context. Theory, implementation and optimal solution sensitivity of linear and integer programming as well as network and project scheduling models are examined (same as AGET 784).

## 785 Applied Management Science in Agricul-

 tural Systems II (3) Probability concepts, decision making under uncertainty and forecasting or applied decision making in agriculture. Continued development of computer and writing skills necessary for finding and communicating results professionally. The theory and implementation of decision analysis and forecasting techniques as well as inventory, queuing, and simulation models are examined (Same as AGET 785). Prereq: AGET 784 or AGEC 784.
## Agricultural Education (AGED)

310 FFA and SAE Program Planning and Management(3) A course focused on development and management of school-based agricultural education experiential learning programs, including classroom instruction, Supervised Agricultural Experience programs (SAEs), management of agriculture laboratory facilities, and National FFA Organization programming. Requires travel to and from university approved cooperating school(s) for field experiences and membership in professional education organization. Course must be taken the fall semester immediately prior to the student teaching experience. Must be taken simultaneously with AGED 430. One one-hour lecture and one four-hour lab. Coreq: AGED 430. Prereq: Admission to Educator Preparation Program (EPP), TCED 302, TCED 305.

404 Student Teaching Grades 7-8 (6) First student teaching placement in a university supervisor approved cooperating school for a minimum of 7.5 weeks. Coreq: AGED 405. Prereq: Admission to Educator Preparation Program (EPP), TCED 302, TCED 305, AGED 310, AGED 430.

405 Student Teaching in Grades 9-12 (6)
Second student teaching placement in a university supervisor approved cooperating school for a minimum of 7.5 weeks. Coreq: AGED 404. Prereq: Admission to Educator Preparation Program (EPP), TCED 302, TCED 305, AGED 310, AGED 430.

430 Methods of Teaching Agriculture Subjects
(3) A course focused on instructional methodology, analyzing the principles of learning and teaching, and designing curriculum and instruction for teaching agriculture subjects in formal and non-formal settings. Course will assist pre-service agricultural educators with addressing professional development issues and teacher certification requirements. Requires travel to and from university approved cooperating school(s) for field experiences and membership in professional education organization. Course must be taken the fall semester immediately prior to the student teaching experience. Must be taken simultaneously with AGED 310. One one-hour lecture and one four-hour lab. Coreq: AGED 310. Prereq: Admission to Educator Preparation Program (EPP), TCED 302, TCED 305.

## 450-460 (650-660) Problems in Agribusi-

 ness and Natural Resources Education (3, 3) Registration in off-campus occupational experiences, short courses, or inservice programs. These courses will be conducted by the Agricultural Education staff on campus or at selected off-campus centers and will be offered at times convenient to the students.470 (670) Problems in Agricultural Education
[topic title] (1-3) A course providing experiential learning opportunities with issues and events related to planning and managing school based agriculture education programming. Students will complete university supervisor approved project(s) including, but not limited to, designing/developing new agricultural education curriculum; attending regional, state, and/ or national agricultural education events; successful attainment and completion of state or national agricultural education leadership positions; or other project(s) of appropriate scope and relevance. May be repeated for a maximum of 9 hours credit.

## 730 Designing and Delivering Nonformal

Education Programs (3) A course designed to provide an overview of learning theory and practice
applicable to teaching adults and youth in nonformal education contexts including: planning nonformal education programs, methods of instructional delivery, effective use of instructional technology, marketing educational programs, and evaluation of educational outcomes. Practice teaching and group presentations will be a part of the laboratory and out of class assignments.

## 740 Seminar in Vocational Agriculture for

 First-Year Teachers (3) Assistance in adjustment to situation in which employed. Seminars to be held in selected centers with visits by instructor to each student at his/her teaching station. Students to participate in special activities selected by the instructor. Prereq: Employment as a vocational agriculture teacher.741 Supervision of Student Teaching in Agriculture (3) A study of the objectives and techniques of supervising student teachers; experiences to be provided; rewards; facilities; relationships.

## 750 Team and Organizational Leadership (3)

Principles and practices in planning, developing, conducting, and evaluating leadership programs for agricultural groups. The course focuses on helping students better understand themselves and others; improving group communication; becoming effective leaders and members of groups; improving leadership and personal development skills; assessing leadership situations, determining and administering appropriate leadership strategies, and evaluating results.

## 770 Program Development for Agricultural

 Mechanics Instruction (3) Development of instruction and managerial competencies needed in conducting agricultural mechanics programs through an in-depth study of program components and activities related to each, including skills development for FFA contest.
## 771 Program Development for FFA Instruction

(3) Development of instructional and managerial competencies needed in conducting FFA (Future Farmers of America) programs including the related programs of Alumni and Young Farmers through an in-depth study of program components and activities related to each.

# Agricultural Engineering Technology (AGET) 

110 Introduction to Agricultural Engineering (3) Survey of basic engineering principles and terms. Engineering applications in agriculture including topics in soil and water engineering, power and machinery and farm structure building materials and design. Prereq: Students must have satisfied entrance requirements in mathematics.

119 Introduction to Agricultural Engineering Laboratory (1) Provides lab experience on basic principles of agricultural engineering. One two-hour lab. Coreq: AGET 110.

210 Internal Combustion Engines (3) Design features and performance characteristics of internal combustion engines for agricultural applications. Survey of factors affecting performance of spark ignition and compression ignition engines. Operation, adjustment and repair of single cylinder spark ignition engines emphasized in lab. Two one-hour lectures and one two-hour lab. Coreq: MATH 140.
220 Surveying and Soil and Water Engineering (3) Fundamentals of surveying to include measurements of angles and distances, leveling, topographic surveys and mapping. Application of surveying information to soil and water engineering. Integration of engineering hydrologic and agronomic information in planning facilities for soil and water conservation. Two one-hour lectures and one two-hour lab. Coreq: MATH 140.

## 250 Renewable Energy Technology (3)

Overview of renewable energy systems; including solar, wind, hydro and other renewable sources of power. Operation and design of renewable energy systems. Special emphasis placed on systems which have agricultural application. Prereq: MATH 140 or equivalent.
301-302 Special Problems [topic title] (1-3, 1-3) Independent study project in a special area of interest within agricultural engineering technology. Emphasis on application of engineering principles for solution of a problem or design of a project of special interest to the student. Preparation of a written project outline and report of results required. Taught only by arrangement prior to registration.

350 Agricultural Power and Machinery Management (3) Functional analysis of agricultural machines and power units. Selection of machines. Machinery system performance. Approaches and procedures for making machinery management decisions. Two one-hour lectures and one two-hour lab. Prereq: AGET 110; any university-wide general education for math course.

## 354 Advanced Land Surveying and Geomat-

ics (3) Principles of the Global Positioning Systems (GPS), mapping surveys, mapping, astronomical observations, control surveys and geodetic reductions, state plane coordinates, boundary surveys, surveys of public lands, construction surveys, horizontal curves, vertical curves, volumes, photogrammetry and an overview of geographic information systems. Two lecture hours and one three-hour lab. Prereq: ENGR 350 (Same as CIEG 354)
370 Agricultural Mechanics Shop (3) Organizing and planning agricultural shops. Tools, equipment and fabrication methodologies for wood, metals and other common materials. One two-hour lecture and one two-hour lab.

382 Precision Agriculture Technologies (3) Concepts of precision agriculture and the applications of these technologies to production agriculture. Major topics include: electronic sensors and controllers, variable rate technology, global positioning systems, geographic information systems, yield mapping, and interpretation of data collected with these systems. Two lecture hours and two-hour lab. Prereq: AGRI 270 or GEOG 270.

## 401-402 (601-602) Research Participation

 $(3,3)$ Application of the scientific method and techniques of research to investigation of problems in major subject areas of agricultural engineering technology. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports required. Taught only by arrangement prior to registration. Only 401-402 may be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program. Prereq: Senior standing and minimum GPA of 2.75 .420 Irrigation (3) Comprehensive overview of irrigation design practices including: applications,
materials selection, systems, and layout. Emphasis on systems of irrigation for crops, landscape and turf applications. Prereq: AGET 110, any universitywide general education for math course.
450 (650) Agricultural Structures (3) Functional planning of agricultural structures and utilities. Materials of construction and construction methods. Environmental control. Two one-hour lectures and one two-hour lab. Prereq: AGET 110; any universi-ty-wide general education for math course.

454 Land Surveying with GPS (3) Land surveying techniques and methodologies using survey-grade Global Positioning Systems (GPS). Topics include: the GPS signal, biases and solutions, GPS receivers and GPS surveying methods (static, differential GPS (DGPS), kinematic, pseudokinematic, rapid static, on-the-fly and real-time kinematic (RTK)), coordinates, planning a GPS-based survey, observing (equipment, reconnaissance, monumentation, logistics) and postprocessing. Techniques for proper utilization of RTK and DGPS. Two hours lecture and one two-hour lab. Prereq: ENGR 350. (Same as CIEG 454)

456 Boundary Control and Legal Principles
(3) Role of the surveyor in boundary establishment, creating GLO boundaries, creating nonsectionalized boundaries, locating easements and reversions, resurveying and retracing sectionalized lands, locating sequential conveyances, locating simultaneously created boundaries and locating combination descriptions and conveyances. Fundamentals associated with the ownership, transfer and description of real property; federal and state nonsectionalized land surveys; and riparian and littoral boundaries. Surveyor ethics, liability and professionalism. Prereq: ENGR 350. (Same as CIEG 456)

458 Subdivision Site Planning and Development (3) Physical elements of designing land subdivisions including: sustainability and site design, site analysis, site grading (soil properties, slope stability, erosion and sediment control), designing for people, street and parking lot design, infrastructure (cul-de-sac design, parking lot design, streets, etc.), landscape restoration (wetlands, streams, vegetative cover, erosion damage, brownfield redevelopment, etc.), site layout, vegetation in the site plan, project
management issues, historic landscapes and preserving the land and landscape and culture. Two lecture hours and two-hour lab. Prereq: ENGR 350. (Same as CIEG 458)

460 (660) Waste Management Technology (3) Systems for utilization or disposal of waste. Waste characteristics and treatment methods. Pollution control. Two one-hour lectures and one two-hour lab. Prereq: Any university-wide general education for math course.
470 Applied Pneumatics and Hydraulics in Agriculture (3) Fundamentals of power systems that use fluid or gases and how they generate, transmit, and control power. Emphasis on the use of these types of systems in agricultural practices. Prereq: AGET 110; any university-wide general education for math course; and PHYS 212.
480 Supervised Field Experience(3) Supervised study and experiential learning experience within operations for a business or agency with an emphasis on an aspect of agricultural engineering technology or related industry. Prior approval of arrangements with cooperating employer is necessary. Joint evaluation by on-the-job and academic supervisors.
Prereq: instructors' approval.

## 482 (682) Principles of GIS and GPS for Agricultural and Natural Resource Manage-

 ment (3) Principles and application of Geographic Information Systems (GIS) and Geographic Positioning Systems (GPS) technologies with emphasis on the use of GIS for collecting, storing and analyzing spatial data associated with agricultural and natural resource-based enterprises. Development of a GISbased map provides a capstone project for applying GPS and GIS knowledge. Students receiving graduate credit will complete an exhaustive literature review on a GIS or GPS topic in addition to undergraduate requirements. Two hours lecture and two hours lab. Prereq: consent of the instructor and AGRI 270 or GEOG 270 or GEOG 310.
## 492 Theoretical and Applied Computations

 in Geomatics (3) A comprehensive treatise of theoretical and applied computations associated with land surveying and geomatics. Topics include: mathematics (algebra, trigonometry, analytical geometry, probability and statistics), instrument calibration (refraction, optics, temperature and heat), fielddata analysis, plane survey calculations, geodesy and survey astronomy, cadastral and boundary law, business law, economics, finance, surveying planning procedures, land planning and development, photo/ image data analysis, mapping, specialty surveying areas (boundary, construction, and public lands), computer operations and programming, Geographic Information Systems and business management practices. A capstone course for student seeking professional licensure in land surveying and geomatics. Prereq: ENGR 350, AGET/CIEG 354, AGET/CIEG 454, AGET/CIEG 456.

710 Safety and Ergonomic Sciences in Agriculture (3) Designing, fitting, and adjusting equipment and tools to suit individuals so that agricultural tasks can be done safely, efficiently, productively and without discomfort, pain, injury and disability; includes comfort and well-being.

720 Advanced Soil and Water Conservation Engineering (3) Engineering principles for hydrologic analysis and design for small catchments including: hydrologic frequency analysis, rainfall runoff estimation, open channel hydraulics, hydraulics of control structures, sediment properties and transport, erosion and sediment yield, sediment control structures, groundwater, monitoring of hydrologic systems and hydrologic modeling. Students are required to complete a written term report on a current topic associated with soil and water engineering.
760 Comprehensive Nutrient Management Planning and System Design (3) Application of agronomic sciences and engineering technology for developing Comprehensive Nutrient Management Plans (CNMPs) for livestock production. Elements include: environmental law and regulatory policy; watershed planning considerations; animal waste characteristics; role of soils; role of plants; geologic and ground water concerns; facilities location; waste treatment systems design; land application of wastes; and agricultural waste management system design.
782 GIS for Agricultural and Natural Resources
Management (3) Principles and application of Geographic Information Systems (GIS) technologies with emphasis on the use of GIS for collecting, storing and analyzing spatial data associated with agricultural and natural resource-based enterprises. GIS software techniques are developed using an
interactive/inductive learning process. Students will collect and analyze data to complete a research project using GIS to answer questions related to an agricultural or natural resources topic.

## 784 Applied Management Science in Agricul-

 tural Systems I (3) Mathematical programming and constrained optimization research methods for applied decision making in agriculture. Development of computer and writing skills necessary for finding optimal solutions to complex applied problems in addition to succinctly communicating results in the proper format and context. Theory, implementation and optimal solution sensitivity of linear and integer programming as well as network and project scheduling models are examined (same as AGEC 784).
## 785 Applied Management Science in Agri-

 cultural Systems II (3) Probability concepts, decision making under uncertainty and forecasting or applied decision making in agriculture. Continued development of computer and writing skills necessary for finding and communicating results professionally. The theory and implementation of decision analysis and forecasting techniques as well as inventory, queuing, and simulation models are examined (Same as AGEC 785) Prereq: AGET 784 or AGEC 784.
## Agriculture (AGRI)

## 120 Science \& Technology of Agriculture and

Natural Resources (3) This course will provide an overview of career opportunities in agriculture and natural resources management; an identification of key principles of, and interrelationships between, agriculture and natural resources; and current science and technology applications within agriculture and natural resources management.
180 Topics in Agriculture [Topic title] (1-3)
Study of special topics, lab, or field experiences at an introductory level. Topics include, but are not restricted to: Agricultural Economics, Animal Science, Plant and Soil Science, Agricultural Education, Agricultural Engineering Technology, Natural Resources Management, Chemistry, Physics, Biology. This course may be repeated for credit with adviser's approval. The course is graded pass/fail. (Same as NRM 180.)

230 Travel Studies in Agriculture and Natural Resources (1-3) Travel course to study topics in Agriculture and Natural Resources either domestic or international. Requires travel to another region or country and presentation of oral and written reports. May be repeated one time for credit. Prereq: Instructor's approval. (Same as NRM 230)

240 History of American Agriculture (3)This course is a study of the main currents and developments in American agriculture from colonial times to present. Special emphasis will be on individuals, events, and legislation..

250 Issues in Alternative Agriculture (3) A study of alternative agriculture; including biofuels, organic agriculture, biotechnology, value-added agriculture and agri-tourism as they relate to the agriculture complex. Special emphasis will be given to the scientific and economic impacts to society. Students will be given a broad understanding of the relationships between agriculture and natural resource use.

270 Introduction to Geospatial Technology (3) An introduction to the principles, techniques, and software associated with Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remote sensing. Data collection, basic spatial analysis and interpretation, and multi-disciplinary applications are emphasized. Course material is taught through lecture presentations and a series of interactive projects. Two hours lecture and two hours of lab per week;. (Same as GEOG 270)

295 International Food and Fiber Systems (3) A study of the influence of food and fiber systems on the economy, environment, health, life style and political systems throughout the world. The impact of cultural differences, gender and institutions on international food and fiber systems is discussed. Course provides students with a global perspective on current issues related to international food and fiber.

390 Career Planning in Agriculture (2) Assessment of personal and academic potential for professional careers by the Agriculture graduate. Efforts directed toward preparing for, interviewing and securing a position. Critiques of related extra curricular events. Survey of the history, philosophy and ethics of Agriculture and crucial issues affecting agriculture. Students are required to write reports
and present professional oral presentations. Prereq: Junior standing.
399 Special Topics in Agriculture (3) Intensive treatment of selected topics not found in the regular Agriculture curriculum. Course content varies from semester to semester. Course may be repeated for credit in different topics. Prereq: Consent of the instructor.

401-402 Research Participation (3, 3) Application of the scientific method and techniques of research to the solution of problems in the field of agriculture. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program.

## 411 Fundamentals of Cooperative Extension

(3) History, philosophy and organizational structure of the Cooperative Extension Service, major areas of program emphasis, teaching methods used and relationships with other educational agencies. (Same as FCS 411)

415 Special Topics in Agriculture (1-3) Study of special topics through lectures, labs, or field experiences at an advanced level. Topics include, but are not limited to: Agricultural Economics, Animal Science, Plant and Soil Science, Agricultural Education, Agricultural Engineering Technology. May be repeated for credit (with different topic). This course may be taught in conjunction with a travel study. Not regularly offered. Prereq: Instructor's approval.

420 Supervised Field Experience (3, 4) Minimum of one semester (or two semesters for four hours credit) of supervised study and experience with a business or agency and/or a specific aspect of its operations is required. Prior approval of arrangements with cooperating employer is necessary. Joint evaluation by on-the-job and academic supervisors.

## 441 Interpretation of Agricultural Research

(3) Statistical techniques for analysis and interpretation of agricultural data. Descriptive statistics, inference, tests of hypotheses, confidence intervals, analysis of variance, mean separation, linear regression and correlation. Prereq: MATH 210.

450 (650) Dynamics and Development of Leadership in Agriculture (3) A study of the dynamics, strategies and parliamentary procedure skills needed by leaders of occupational, civic and social organizations. Practical approaches through group interactions and participation. A detailed examination of organizations and individuals within organizations. Students are required to write reports and give oral presentations. Prereq: Junior standing. (Same as NRM 450/650)
460 (660) Agroecosystems Analysis Field School (3) This course provides a field-based opportunity to develop a deeper conceptual and analytical framework for understanding agroecosystems in Tennessee and the mid-south region. The course is founded on the concept of community learning, providing interactive and experiential opportunities while expecting all participants to engage in the discussions and other activities as colleague learners. (Same as NRM 460/660)

475 Agricultural Communications (3) Application of communication theory and techniques to the field of agricultural communications. Course material will focus on journalism and public relations with a focus on programs, activities, careers, trends, publication development, layout, artwork, design and writing. Prereq: COMM 200 or 210.

480 (680) Applications of Molecular Biotechnology (3) Advances in computer science, information technology, biology and chemistry have given us the field of biotechnology. This course will explore the technological, cultural and personal aspects of this emerging field as related to the disciplines of agriculture and natural resources. Topics to be covered will include genetic selection as it applies to plant and animal breeding, ethical implications of cloning, metagenomics of ecosystems, forensic applications and industrial processes. Students are required to write reports and give oral presentations. (Same as NRM 480/680)

701-702 Master's Thesis (3, 1-3) Thesis proposal and research; thesis writing, presentation and defense. May repeat enrollment. P/N only.
732 International Travel Study (3) International travel course to study topics in agriculture or natural resources. Requires travel to another country, oral and written reports.

741 Statistical Methods in Agriculture and Natural Resources (3) Statistical techniques used in design and analysis of experiments in agriculture and natural resources management. T-tests, analysis of variance, mean separation, regression and correlation, experimental design and analysis, interpretation of research results, analysis and interpretation of survey information. Prereq: MATH 210 or equivalent or instructor's approval.

77- Topics in Agriculture (Selected Area) (1-6) Topics in selected areas of agriculture. For graduate students in the Master of Science in Agriculture and Natural Resources program. Can be used to meet requirements in the M.S.A.N.R. curriculum. The subject matter area is indicated by the third digit: 0 for Agriculture, 1 for Agricultural Economics, 2 for Agricultural Engineering Technology, 3 for Animal Science, 5 for Plant and Soil Science. May repeat enrollment up to six credit hours. Prereq: Graduate Coordinator and instructor's approval.

790 Scientific Writing and Presentations (3) A course designed to give graduate students the skills necessary to write a thesis, and to prepare other professional materials for presentation or publication. Topics covered in this course include: searching the scientific literature, scientific writing style; writing graduate level papers, proposals, projects, and thesis components; preparing scientific presentations, presentation of data; using visual aids; and using word processing, spreadsheet, and presentation software. (Same as NRM 790)

## 791 Master's Research Project in Agriculture

 (1-3) A major research project associated with agriculture. Research projects shall include: a review of literature, data collection methodology, data presentation and a final written report. May repeat enrollment. No more than three semester hours credit will be counted toward requirements for the M.S.A.N.R. degree. P/N only.
## Animal Science (ANSC)

110 Introduction to Animal Science (3) Fundamental principles of animal agriculture. Biological and scientific aspects of development, inheritance and feeding. Animal products and scope of the animal industry.

## 119 Introduction to Animal Science

Laboratory (1) Provides a lab experience for training students in the basic concepts of livestock production and husbandry. Students will identify major breeds of livestock, determine daily feed requirements, study basic principles of livestock anatomy and external part nomenclature and observe basic behavioral characteristics of animals produced for food, fiber and recreation. Includes principles of animal health and welfare. Field trips to commercial production facilities. One two-hour lab. Coreq: ANSC 110.

121 Western Horsemanship (3) A review of western horsemanship and horse safety. Includes instruction in handling, grooming, saddling, bridling and mounting. Development of basic riding skills at the walk, jog and lope.

210 Introduction to Horse Science (3) An introductory course that surveys the breeds of horses and scope of the industry. Course modules will focus on selection, feeding, disease control, breeding and reproduction, health and welfare, tack and equipment, facilities, transportation and fundamental management practices. Three one-hour lectures.
211 Horse Science Laboratory (1) An introductory horse science lab designed to give students some hands-on experience with horses. Students will travel to area horse farms to learn about diversity in the horse industry, and work with horses on the campus farm to develop basic skills related to safe handling, feeding, preventative health and foot care. Students will also learn to care for tack and other basic horse equipment. One two-hour lab.

## 230 Exotic and Companion Animal Manage-

 ment (3) A survey of the basic principles involved in the care and management of exotic and companion animal species. Particular emphasis will be on nutrition and feeding programs, breeding cycles, vaccination programs and diseases of exotic and companion animals generally regarded as household pets. Three one-hour lectures.
## 231 Companion Animal Laboratory (1) An

 introductory companion animal laboratory to give students hands-on experience with companion animals. Students will travel to local companion animal facilities and work in the companion animallaboratory which will focus on preventive healthcare, medication techniques, diagnostic testing and kennel maintenance. One two-hour lab.

## 240 Live Animal and Carcass Selection and

Evaluation (3) Evaluation and selection techniques for live animals based on economic merit. Principles of selection and grading of beef, swine and sheep. Relationship of live animal traits to carcass merit. Presentation of oral reasons. Students representing the university in the Spring Intercollegiate Livestock Judging Contests will be chosen from this course. Two one-hour lectures and one two-hour lab.

253 Small Scale Farm Animal Production (3) A look at small scale farm production with a focus on the meat animal production of sheep, goats, rabbit, and poultry including ratites, and wildlife ranching. Course will also look at wool/mohair and fur-animal production, raising of miniature pigs and horses and aquaculture systems. Students will look at how small scale animal production today has been influenced by producer and consumer attitudes related to sustainability, natural and organic production practices, opportunities for niche and farm fresh marketing, and cultural preferences for animal products.

## 260 Behavior of Farm and Companion Animals

 (3) An introduction to behavior of farm and companion animals. Behavioral topics will focus on the development of behavior, communication, learning, social structure, and sexual, maternal, feeding, agnostic, and stereotypic behaviors in domestic farm and companion animals. Students will look at behavior modification and training methods, and develop an understanding of how a knowledge of animal behavior can be used to care for, and ensure the health of, farm and companion animals. Three one-hour lectures.
## 270 Animal Welfare and Ethics (3) This

 course will begin with a look at the human-animal relationship, and examine the origins of people's beliefs and attitudes regarding domestic farm and companion animals. It will provide insight into the roles that government, organizations, businesses and key individuals play in influencing animal welfare laws and practices. Through interactive discussion, students will focus on contemporary welfare and ethical issues in areas of food animal production,animal research, and use of animals for recreation and companionship. Three one-hour lectures.

301-302 Special Problems [topic title] $(1,1)$ Individually supervised project for students showing special interest in some phase of animal science. Topics may be selected from nutrition, breeding or selection, physiology, management, or meat science. Written project outline required. Maximum of one hour applicable to concentration requirements. Taught only by arrangement prior to registration.
305-306 Practicum in Animal Science (2, 2) Application of principles of livestock management, animal nutrition and animal breeding in cooperation with the UT Martin Agricultural Experiment Station, the UT Martin Farm and local private farms. Students will be required to work a minimum of six (6) hours per week under supervision of instructor and cooperating farms. Written report required. May not be substituted for any required Animal Science course. Prereq: Junior standing and consent of instructor.

320 Farm Animal Health (3) Principles of etiology, pathology, symptomatology, diagnosis and suggested treatment as applied to common viral, bacterial and parasitic diseases of livestock. Topics to be emphasized include herd immunization programs, sanitation, quarantine, herd health programs and economic aspects of disease control.

350 Animal Nutrition (3) A comprehensive course in animal nutrition. The course will focus on basic concepts in anatomy, physiology and biochemistry as they relate to digestion, absorption and metabolism of nutrients and other compounds in animal feedstuffs; and the use of feed additives to enhance nutrient utilization, animal health and well-being. The course will also focus on applied concepts related to feedstuff identification, feed processing, analysis and use in practical diet formulation and feeding systems for livestock, horses and companion animals. Three hours lecture. Prereq: BIOL 110 or 140, and CHEM 112 or 122.

351 Animal Nutrition Laboratory (1) Application of principles learned in Animal Nutrition (ANSC 350). This is a lab based course designed to give students some practical experience in feedstuff identification and utilization, feed processing and analysis, feed formulation and feeding management
as it relates to feeding livestock, horses and companion animals. One two-hour lab. Coreq: ANSC 350.
360 Animal Genetics (3) The basic principles of heredity and gene action including Mendelian concepts, kinds of gene action, mutations, sex linkage and molecular techniques used in animal science research and modern livestock selection methodology. Course includes a brief introduction to quantitative and population genetics involving inbreeding, outbreeding, and heritability. Prereq: BIOL 110 or 140, or equivalent.

## 371 Anatomy and Physiology of Domestic

Animals (4) The study of the anatomy and physiology of domestic animals. Basic principles of physiological and functional organization of nervous, endocrine, muscular, respiratory, circulatory, renal and immune systems. Control, regulation and manipulation of organ development and function in domestic animals will be studied as it relates to improving production efficiency, maintaining health and improving animal welfare. Written reports will be required. Three one-hour lectures and one twohour lab. Prereq: BIOL 110 and 120, or BIOL 130 and 140, or permission of instructor.
372 Applied Animal Reproduction (3) Anatomy and physiology and reproduction including: endocrinology, reproductive cycles, fertilization, gestation, fetal development, parturition and lactation. Techniques for improving reproductive efficiency include: semen evaluation, artificial insemination, synchronization of ovulation, pregnancy diagnosis and embryo transfer. Three one-hour lectures. Prereq: BIOL 110 and 120, or BIOL 130 and 140, or permission of instructor.

## 374 Applied Animal Reproduction Laboratory

(1) Application of principles learned in Applied Animal Reproduction (ANSC 372). The lab will give students experience with estrous synchronization, artificial insemination, ultrasound, pregnancy diagnosis and embryo transfer. One two-hour lab. Coreq: ANSC 372.
400 International Studies in Animal Agriculture (3) A study of the relationship of American animal agriculture to similar enterprises in other countries around the world. Particular emphasis on marketing strategies for red meat and poultry
products and differences in consumer attitudes. Includes field trips to production farms, processing facilities, markets and governmental agencies. Opportunity to experience and visit historical sites of interest, especially the origin of common breeds of food animals. Investigations into the influence of cultural and geopolitical attitudes toward animal welfare practices and diet-health issues. Requires a study abroad experience for completion and credit. Enrollment by permission of instructor only. May be repeated once for credit.

## 401-402 (601-602) Research Participation

 $(3,3)$ Application of the scientific method and techniques of research to investigation of problems in major subject areas of animal science. Restricted to students with demonstrated ability to conduct a supervised research problem. Maximum of three hours applicable to concentration requirements. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. Only 401-402 may be used for Agriculture, Geosciences, and Natural Resources Fellows Research Project. Prereq: Senior standing and minimum GPA of 2.75 .405 Current Issues in Animal Agriculture (3) Examination and discussion of current issues and events related to animal agriculture. Preparation of graduates to effectively and professionally discuss animal agriculture and its strengths and weaknesses. Prereq: Junior or senior ANSC classification or written permission of the instructor.
410 Beef Cow-Calf Production (3) Basic principles involved in managing the cow-calf herd focusing on nutrition, herd health, and reproduction practices. Emphasis will also be placed on production records, marketing technology and consumer affairs. Two one-hour lectures and one three-hour lab. Prereq: Junior or senior classification in Animal Science or Veterinary Science or permission of instructor.
413 Stocker and Feedlot Cattle Production (3)
Basic principles involved in managing and marketing of stocker and feedlot beef cattle. Focus will be on animal nutrition and health programs, marketing systems, and management practices. 5-7 day field trip required as part of this course. Prereq: ANSC

350 and junior or senior classification or permission of instructor.

421 (621) Swine Science (3) Focus on principles of breeding, feeding, health care, growth, environmental management, and marketing practices used in purebred and commercial pig production. Review trends in production, processing, consumption and swine research. Students will visit swine farms and pork processing facilities. Highlight career opportunities in swine industry. Three one-hour lectures.
Prereq: Junior standing in Animal Science or permission of instructor.
430 Stable Management (3) Integration of principles of anatomy and physiology, nutrition, genetics, reproduction and ethology into a comprehensive, advanced program of horse production and stable management. Aspects of stable management will relate to practical horse care, management strategies for different equine enterprises, record keeping, equine insurance and legal issues and business promotional strategies. Course will include visits to, and analysis of, regional equine businesses. Two hours of lectures and one two-hour lab. Prereq: Junior standing or permission of instructor.

## 440 (640) Sheep and Goat Production (3)

Principles of nutrition, management, genetics, reproduction and health of sheep and goats. Emphasis on production records, marketing technology and consumer affairs. Information on current sheep and goat research, social concerns and industry practices will be used along with trips to sheep and goat farms and related industries. Two one-hour lectures and one two-hour lab. Prereq: Junior standing in Animal Science or Pre-Vet options or permission of instructor.

## 441 Advanced Meat Animal Evaluation and

 Livestock Selection (3) Techniques of evaluation of market swine, beef cattle and sheep. Selection of breeding animals for functional efficiency. Selection of working horses for function. Use of performance records in selection of breeding stock. Keep/cull selection and live animal evaluation and pricing. Field trips and presentation of oral reasons. Two one-hour lectures and one three-hour lab. Prereq: ANSC 240 and instructor's approval.442 Advanced Meat Animal Evaluation and Livestock Selection (3) Advanced techniques of
evaluation of market swine, beef cattle and sheep. Selection of breeding animals for functional efficiency. Use of performance records in selection of breeding stock. Livestock judging team coaching techniques and techniques used in judging livestock shows will be discussed. Preparation for the National Intercollegiate Livestock Judging Contest. Field trips and presentation of oral reasons. Two one-hour lectures and one three-hour lab. Prereq: ANSC 441 and instructor's approval.
444 High-Impact Educational Practice in Animal Science (1-3) Participation in a high-impact educational practice including, but not limited to, those defined by the Association of American Colleges \& Universities. Instructor approval is required prior to enrollment. May repeat enrollment up to six credit hours.

## 451 Equine Selection and Evaluation (2)

Techniques related to the selection and evaluation of working and pleasure horses. Includes analysis for functional efficiency and presentation of oral reasons. Requires numerous field trips and participation in Intercollegiate Horse Judging Competitions. One three-hour lab. May be repeated one time. Prereq: Permission of instructor and eligibility for intercollegiate competition.

## 471 Commercial Poultry Production (3)

Principles of production and management in commercial broiler, turkey and egg industries. Focus on incubation and hatchery management, brooding and rearing, houses and equipment, feeding, health care, processing and marketing and environmental management. Look at trends in poultry production, consumption marketing and research. Trips to poultry integrator to experience all segments of production and processing. Three one-hour lectures. Prereq: Junior standing in Animal Science or permission of instructor.

## Art (ART)

## 110 Understanding Visual Art (3) (TBR: ART

 1030) An introduction to the aesthetic principles of visual art as exemplified in selected masterpieces.110H Honors Understanding Art (3) An introduction to the visual arts through studying terminology, history, theory and criticism. For students in good standing in Honors Programs.

120 Two-Dimensional Design (3) Application of basic design elements and principles as defined in effective two-dimensional compositions.

130 Three-Dimensional Design (3) Studio projects are concerned with the elements and composition of form and mass in three-dimensional space.

140 Drawing (3) Placement, scale, perspective, composition and other problems involved in representing forms and objects in two dimensions.
150 Drawing II (3) Advanced study of placement, scale, perspective, composition and other problems involved in representing forms and objects in two dimensions. May be repeated for credit. Prereq: ART 140.

200 Using Color (3) Effective use of color in two- and three-dimensional design. Interaction of color as well as historical and psychological aspects. Prereq: ART 120.

225 Printmaking (3) An introduction to basic concepts and techniques of printmaking. Prereq: ART 120 and 150.

245 Sculpture (3) Compositional study of threedimensional form with emphasis on basic sculptural concepts, terminology and techniques. Prereq: ART 120 and 130 or instructor's approval.

250 Painting (3) Skills and techniques in the use of oils, acrylics and water colors. Prereq: ART 120, 140, and 200.

305 Photography (3) Introduction to camera and darkroom techniques for small format, black and white photography. Lecture and lab.
310 Fibers (3) Introduction to a variety of fibers techniques including paper making, felting, hand looms and basic floor loom weaving. Creativity, experimentation of design and quality of craftsmanship are emphasized.
325 Advanced Printmaking (3) Advanced studio exploration in various printmaking media to include working beyond the printed image. Prereq: ART 225.
327 Book Arts (3) A studio exploration into structural techniques of making books and of book contents. Fundamental printmaking concepts and techniques are included. Prereq: ART 120 and ART 150.

330 Mixed Media (3) Development of wet and dry mixed media techniques to include collage, painting, printmaking and other methods of combining media to expand the student's conceptual and technical abilities. Prereq: ART 200.
331 Jewelry (3) Techniques in jewelry design and finishing.

335 Ceramics (3) Methods of structuring clay objects including hand-build and wheel-throwing techniques, glazing and firing methods.

345 Sculpture II (3) Advanced study of three-dimensional form with emphasis on refining an understanding of sculptural concepts, terminology and techniques.
May be repeated for credit. Prereq: ART 245.
350 Painting II (3) Advanced skills and techniques in the use of oils, acrylics and water colors. May be repeated for credit. Prereq: ART 250.

355 Figure Drawing (3) Drawing from live human models in charcoal, pencil and other materials. Prereq: ART 140 and 150.
360 Clay Sculpture (3) Exploration of various clay sculpture processes. Advanced hand-building techniques, glaze and surface techniques. Makes use of slab roller extruders. Students will participate in kiln firing and glaze mixing.
365 Clay Sculpture II (3) Advanced study of sculptural concepts, terminology and techniques as related to clay. Focus on mold-making and figurative work. May be repeated for credit. Prereq: ART 360.

370 Raku (3) Exploration of Raku ceramic techniques, history, and contemprary practices. Primary focus on handbuilding skills.

391 (591) Special Topics in Art (3) Selected media and/or genre for intensive study. Topics and prerequisites to be announced. May be repeated for credit.

402 Research Topics in 2-D Studio (3) This course provides the upper-level studio art student the opportunity to explore directions in 2-D art disciplines to develop a body of work in preparation for senior exhibit, graduate studies, and/or moving forward in the profession. May be repeated for credit. Permission from the primary 2-D studio instructor must be given before students may enroll in this course.

403 Research Topics in 3-D Studio (3) This course provides the upper-level studio art student the opportunity to explore directions in 3-D art disciplines to develop a body of work in preparation for senior exhibit, graduate studies, and/or moving forward in the profession. May be repeated for credit. Permission from the primary 3-D studio instructor must be given before students may enroll in this course.

410 Fibers II (3) Advanced studio exploration of fibers and their use in art making. This class provides upper level art students with the opportunity to develop a body of fiber art work in preparation for senior exhibits, graduate studies and/or moving forward in the discipline. May be repeated for credit. Prereq: ART 310 and 441 and instructor's approval.
430 Advanced Mixed Media (3) Advanced techniques to express the student's intent. Media may include wet and dry media, collage, construction, installations and performance. Prereq: ART 330.
431 Advanced Jewelry (3) Advanced techniques in jewelry design, materials, and finishing. May be repeated for credit. Prereq: ART 331.
435 Advanced Ceramics (3) Advanced studio work in specific ceramics skills involving handbuilding, throwing, glaze techniques, calculations and firing. Research in ceramics history and criticism. May be repeated for credit. Prereq: ART 335.
441 Weaving (3) Understanding the weaving process including threading a loom, winding a warp, draft reading, loom assembly and the weaving of experimental patterns.

445 Clay Surface Design (3) Glaze formulation and chemistry. Exploration of slips, stains, stencils, embossments, and other surface design applications. Prereq: ART 335.

## 450 Professional Practices in Visual Art (2)

 Professional aspects of art and the pursuit and management of a career in art. A study of galleries, museums and art fields dealing with aspects of exhibiting and selling work and portfolio development. Prereq: ART 200; 250 or 300; and 335. ART 450 and ART 460 may not be taken concurrently. May be repeated for credit.455 Figure Drawing II (3) Advanced study of drawing from live human models in charcoal, pencil and other materials. Prereq: ART 355.

460 Senior Thesis Exhibition (1) The preparation for and exhibition of works produced as a culmination of the student's studies at UT Martin, focusing on their area of emphasis. The exhibit will be scheduled during the senior year under the supervision of the art faculty. ART 450 and ART 460 may not be taken concurrently.

## Art Education (ARTE)

## 211 Introduction to Teaching Art (2) A

comprehensive view of art teaching as a profession including requirements, challenges and opportunities. The stages of children's development in art will be covered, as well as lesson plan writing. Includes eight (8) clock hours of clinical lab experiences, directed observations and limited participation in classroom settings.

302 Integrated Teaching Strategies (3) A framework for students' understanding of instructional strategies and their effective application in the art/ dance classroom. This course focuses on developing future art/dance teachers' professional disposition, content knowledge and teaching skill. Included in this course will be: effective strategies for teaching art/dance and cultivating a positive learning environment; differentiated instructional and assessment strategies for art/dance learners, planning and material preparation for art/dance teaching; classroom management of instruction; and motivational concepts. This course will also emphasize oral expression and written communication, and requires a minimum of 25 hours of field experiences, directed observations of art/dance teaching, and participation (one-hour teaching practice) in a public school art/ dance classroom setting.
360 Teaching Art in the Public School (3) Approaches to art studio experiences appropriate for both elementary and secondary students, including work developing an art curriculum. Includes 12 clock hours of clinical lab experiences, directed observations and limited participation in classroom settings. Prereq: ARTE 211.

400 Senior Seminar in Art Education (4) Current issues in the profession of art education, review
of national standards and the relationship of aesthetic education to the overall development of young people. Historical, philosophical, psychological and social aspects of art in the curriculum. Measurement and evaluation of art instruction. Includes 10 clock hours of clinical lab experiences, directed observations, limited participation in classroom settings, and student teaching preparation. Prereq: ARTE 360 and admission to Educator Preparation Program (EPP).
471 Student Teaching in Art - Grades K-6 (6)
Supervised student teaching of art in grades K-6 in off-campus centers for a minimum of 7.5 weeks. (Normally taken concurrently also with ARTE 472.) Prereq: Admission to Educator Preparation Program (EPP), TCED 301-302, and all other required courses in the Professional Education core.

472 Student Teaching in Art - Grades $\mathbf{7 - 1 2}$ (6) Supervised student teaching of art in grades 7-12 in off-campus centers for a minimum of 7.5 weeks. (Normally taken concurrently also with ARTE 471.) Prereq: Admission to Educator Preparation Program (EPP), TCED 301-302, and all other required courses in the Professional Education core.

## Art History (ARTH)

## 210-211 The History of $\operatorname{Art}(3,3)$ (TBR: ART

 1010-1020) These two courses provide a global perspective in the development of visual art, through a survey of representative cultures, styles, artists and works. 210: Paleolithic era through the 16th Century. 211: 17th Century to the present.320 History of Graphic Design (3) Studies in the Development of Visual Language and Communication through Graphic Arts and Design. This course will concentrate on Graphic Design through various historical periods.

## 330 Visual Traditions of Non-Western Cul-

 tures (3) An examination of the visual traditions of numerous historical and contemporary non-Western cultures. Primary attention will be paid to the art of Africa, Asia and the Americas.
## 340 Art of the Classical World and Western

Traditions (3) An investigation of the European classical tradition beginning with the ancient Greeks and Romans. This course will also look at the revival
of the classical in 18th century and 19th century Europe and the United States.

350 Women in the Arts (3) A specialized study of women artists and their work in a historical context. Issues impacting the role of women artists, women as art subjects and the question of a feminine aesthetic will be analyzed. (Same as WMST 350)
391 Special Topics in Art History (3) Selected topics for intensive study. Topics and prerequisites to be announced. May be repeated for credit.
410 Contemporary Art (3) This course will provide an exploration of contemporary art, artists and art movements of the 20th and 21st centuries. Modernist and Postmodernist styles/movements will be investigated in the context of the art world from a global perspective.

## Astronomy (ASTR)

201-202 Astronomy (4, 4) An introduction to astronomy with a lab to illustrate data collection and analysis in astronomy. 201: theories of the solar system from models for ancient calendars to data from recent space probes and an introduction to the optics of the eye and telescope. 202: evolution of main sequence stars, neutron stars, black holes, structure of the galaxy and theories of cosmology. It is recommended that the courses be taken in sequence. Three hours lecture and two hours lab.

## Athletic Training (ATRN)

200 Basic Principles of Athletic Training and
Taping (3) This course is an introduction to prevention and care techniques from the profession of athletic training. The student will develop the skills to perform taping wrapping, and splinting procedures, properly fit protective equipment, monitor vital signs, and provide emergency care. Other topics include environmental considerations, concussions, nutrition and supplements.
207 Athletic Training Techniques (3) This course is an introduction to prevention and care techniques from the profession of athletic training. The student will develop the skills to perform taping, wrapping and splinting procedures, be exposed to protective equipment, monitoring vital signs, wound care and application of modalities.

300 (500) Prevention of Athletic Injuries (3) Development of a basic understanding of athletic injuries to include pre-participation examination guidelines, risk factors, strength, endurance, body composition, environmental conditions, protective devices, maintenance of athletic equipment and facilities. Prereq: Admission to the Atbletic Training Education Program; Z0OL 201 or 251 or permission of the instructor. Taught only in the fall.
301 Evaluations of the Lower Body (3) Evaluation of injuries that occur to the lower body, to include a review of the associated anatomy, etiology, special tests for differential assessment, immediate action plan and a referral plan. Prereq: ATRN 302, ZOOL 201 or 251 or permission of instructor. Taught only in the fall.
302 Evaluations of the Upper Body (3) Evaluation of injuries that occur to the upper body to include a review of the associated anatomy, etiology, special tests for differential assessment, immediate action plan and a referral plan. Prereq: ATRN 300, ZOOL 201 or 251 or permission of instructor. Taught only in the spring.
400 (600) Therapeutic Exercise (3) Development of the knowledge and the application of programs and techniques for rehabilitation of injuries to physically active people. Prereq: ATRN 301 or permission of instructor. Taught only in the spring. 401 Therapeutic Modalities (3) Development of knowledge and use of therapeutic modalities in the treatment of injuries to physically active people. Prereq: ATRN 301 or permission of instructor. Taught only in the spring.

## 402 Health Care Administration/Professional Development and Responsibility (3) This

 course is geared toward athletic training health care administration; includes medical records and documentation, legal and ethical issues, OSHA guidelines, organizational structure, drug testing and protocols, purchasing equipment, inventory, insurance, certification examination preparation, NATA background and information. Prereq: ATRN 400 or permission of instructor. Taught only in the spring.700 Advanced Sport Medicine (3) An in-depth study of the prevention of injury, including physical preparedness, equipment and playing fields, full
scope of emergency medical plans and environmental hazards. Study of catastrophic and life threatening injuries and recognition of signs and symptoms.

## Biochemistry (BCHE)

411-412 (611-612) Cellular and Comparative Biochemistry $(3,3)$ Structure and function of biomolecules, properties of enzymes, enzyme kinetics, energy transformations, intermediary metabolism, biosynthesis of macromolecules and the regulation of cellular processes and functions. Must be taken in sequence. Prereq: CHEM 341, 342 and an introductory course in biology with grades of C or better.

419 (619) Biochemistry Laboratory (1) Lab exercises related to topics covered in BCHE 411. Prereq: CHEM 320 and BCHE 411 with grades of C or better.

422 Biochemistry 2 (1) An abbreviated coverage of the molecular aspects of replication, transcription, translation and relate topics. Prereq: BCHE 411

## Biology (BIOL)

## 110 Introductory Cell Biology and Genetics

(4) (TBR: BIOL 1010) An introductory course that emphasizes plant and animal cell structure, cellular processes and genetics. Three one-hour lectures and one two-hour lab. Students may not receive credit for both BIOL 110 and BIOL 140.

## 120 Introductory Plant and Animal Biology

(4) (TBR: BIOL 1020) A course in organismal biology with emphasis on the structure and function of plants and animals, including an introduction to the principles of ecology and evolution. This course requires field work involving physical activity. Three one-hour lectures and one two-hour lab. Students may not receive credit for both BIOL 120 and BIOL 130.

## 130 Foundations of Biology: Ecology, Evolu-

 tion and Diversity (4) (TBR: BIOL 1120) An introductory course designed for science majors that investigates the ecology, evolution and diversity of form and function of the organisms primarily in the Kingdoms Animalia and Plantae. Lab experiences include the collection, analysis and interpretation of zoological and botanical data. This course requiresfield work involving physical activity. Three one-hour lectures and one two-hour lab. Students should not attempt BIOL 130 unless the results of mathematics testing indicate placement in MATH 140 or a higher level course. Students may not receive credit for both BIOL 130 and BIOL 120.

## 140 Foundations of Biology: Cell and Mo-

 lecular (4) (TBR: BIOL 1110) An introductory course designed for science majors that investigates cell and molecular biology including biochemical processes, cellular function, genetics and the biology of microbes. Lab experiences include the collection, analysis and interpretation of cellular and molecular data. Three one-hour lectures and one two-hour lab. Students should not attempt BIOL 140 unless the results of mathematics testing indicate placement in MATH 140 or a higher level course. Students may not receive credit for both BIOL 140 and BIOL 110.180 Special Topics in Biology [topic title] (14) Lectures, field and/or lab work, discussions and readings in restricted topics in biology. Topics to be announced. Prereq: permission of instructor.

300 Medical and Scientific Vocabulary (2) The study of word derivations, especially as it relates to technical terms. The use of common prefixes, suffixes and combining forms to understand and effectively use scientific vocabulary. Prereq: Completion of at least one lab science sequence and Junior standing.
331 (531) General Ecology (3) The study of the interactions of organisms with their physical environment and with each other. Students will be required to use standard word processing, spreadsheet and presentation software in course assignments. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better.

336 (536) Introductory Genetics (3) Basic concepts of Mendelian and molecular genetics. Prereq: BIOL 130-140 with grades of C or better.
337 (537) Cell Biology (3) Study of the internal and external dynamics of eukaryotic cells, their physical and chemical properties, structures, functions and interactions with other cells. Students are familiarized with advanced cellular features/properties of membrane structure and function, compart-
mentalization, protein processing, cell energetics, cell signaling, cytoskeleton and transport, cell cycle regulation, and apoptosis. Three one-hour lectures. Prereq: Grades of C or better in the following courses: BIOL 130-140 and CHEM 122.

338 (538) Cell Biology Laboratory (2) Experiments using current techniques to study different aspects of the cell and its function. Techniques include basic tissue culture, centrifugation, spectrophotometry, hemocytometry, RNA/DNA isolation, reverse transcription, quantitative PCR, investigation of the scientific literature, practice in experimental design, data collection, analysis and presentation. Two twohour labs. Coreq/prereq: BIOL 337 with grade of C or better and a grade of C or better in CHEM 341 or (CHEM 310 and CHEM 319).

## 355 (555) Introduction to Environmental

Health (3) An introduction to the study of environmental impacts on human health. Topics include the effects and control of natural and man-made pollutants and carcinogens; major groups of biohazards, microbial pathogens, and disease vectors; ionizing and non-ionizing radiation; water treatment and waste treatment. Three one-hour lectures. Prereq: Grades of $C$ or better in the following courses: BIOL 130-140 and CHEM 122.

391 (591) Evolutionary Biology (3) The history of evolutionary thought, the evidence for evolution and the nature of evolutionary processes. Students will be required to use standard office suite software including word processing, spreadsheet and presentation programs in course assignments. Three one-hour lectures. Prereq: BIOL 110-120 and instructor's approval or BIOL 130-140 with grades of C or better; BIOL 336 recommended.

## 410-411 Seminar in Biological Sciences

[topic title] $(1,1)$ Presentation of selected topics in advanced biology. Subject determined by the instructor. Active student participation including oral presentation of papers. Students will be required to use standard office suite software including word processing, spreadsheet and presentation programs in course assignments. Prereq: Junior standing, BIOL 130-140 with grades of C or better, major in Biology or major in Secondary Education with endorsement in biological sciences, or instructor's approval.

418 (618) Limnology (3) An introduction to the study of freshwater ecosystems: physical, chemical, biological and ecological aspects. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better, and CHEM 111-112 or 121-122.

420 (620) Human Virology (3) The fundamental principles of virology, classification, general characteristics and diseases of human viruses. Three one-hour lectures. Students may not receive credit for both BIOL 420 and MBIO 420. Prereq: BIOL 336 or BIOL 337 with grade of C or better or instructor's permission.

432 (632) Developmental Biology (3) Principles and concepts of fertilization, embryogenesis, organogenesis, prenatal development and postnatal development. Emphasis is on animal systems. Three one-hour lectures. Prereq: Grades of C or better in the following courses: BIOL 130-140 and CHEM 122.

436 (636) Molecular Biology (3) Molecular mechanisms and controlling elements of replication, transcription and translation as they relate to gene expression in prokaryotic and eukaryotic organisms. Special emphasis will be placed on the biological and social implications of technology, including the identification, cloning and recombination of genes. Prereq: CHEM 341 or CHEM 310 (and 319), and BIOL 336 with grade of C or better.

437 (637) Molecular Biology Lab (2) Experiments designed to illustrate some of the basic principles of molecular biology, including sterile techniques for the handling of bacteria and bacteriophages, replica plating, DNA restriction analysis, bacterial transformation and recombination, purification of plasmid and bacterial DNA. Two two-hour labs. Prereq or Coreq: BIOL 436 with grade of C or better.

439 (639) Cancer Biology (3) Current concepts in molecular medicine using cancer in its many forms as a model. Topics include oncogenes, tumor suppression, cellular transformation and mutagenesis, cell cycle dysregulation, pathogenesis, angiogenesis and metastasis, as they relate to the initiation, progression, pathways and drug design strategy for specific categories of malignancy. Practice in reading
and discussing the primary scientific literature on cancer and its treatment, as well as popular literature. Prereq: BIOL 337 with a grade of C or better or MBIO 401 with a grade of C or better.
443 (643) Ecological Methods (3) Introduction to common field techniques used to collect and analyze ecological data in terrestrial and aquatic ecosystems. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better; BIOL 331 with grade of C or better, BOT 431 with grade of C or better, or ZOOL 441 with grade of C or better.

444 (644) Conservation Biology (3) An interdisciplinary introduction to conservation biology focusing on ecosystem conservation and restoration. This course will incorporate information from many areas in science including genetics, organismal biology, ecology and biogeography. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better.

451-452 Research Participation (2, 2) Experience in active research projects under the supervision of faculty members. Taught by arrangement. Prereq: Junior or Senior standing, minimum average grade of 3.00 and research supervisor's approval prior to enrollment.

453-454 Research Participation (2, 2) Experience in active research projects under supervision of faculty members. Taught by arrangement. Prereq: Junior or Senior standing, minimum average grade of 3.00, and research supervisor's approval prior to enrollment.
462 Special Topics in Biology [Title of topic] (1-3) Intensive lectures and/or lab work on special topics in biology. May be repeated for credit for different Titles of topic. Prereq: BIOL 130-140 with grades of $C$ or better and either Junior standing or instructor's approval.

464-465 Directed Studies in Biology [title] (12, 1-2) Directed studies in current topics in biology, as directed by a faculty member. May be repeated for a maximum of two (2) hours credit. Prereq: Junior standing and instructor's approval prior to enrollment.

475 (675) Field Investigations in Biology (3) Field work in selected environments with emphasis placed upon the interaction of the flora and fauna within that environment. Extended field trip utilizing facilities such as the Gulf Coast Research Laboratory. This course requires field work involving physical activity. Prereq: BIOL 110-120 and instructor's approval or BIOL 130-140 with grades of C or better.

700-701 Special Topics in Botany (3, 3) Intensive lectures and/or lab work on special topics in botany. Prereq: At least one course in the area of the special topic or approval of the instructor.

703-704 Research Participation (3, 3) Experience in active research projects under the supervision of a faculty member. Taught by arrangement. Prereq: At least one course in the area of the special topic or approval of the instructor.

710-711 Special Topics in Zoology (3, 3) Intensive lectures and/or lab work on special topics in zoology. Prereq: At least one course in the area of the special topic or approval of the instructor.

720-721 Special Topics in Ecology (3, 3) Intensive lectures and/or lab work on special topics in ecology. Prereq: At least one course in the area of the special topic or approval of the instructor.

730-731 Special Topics in Evolution (3, 3)
Intensive lectures and/or lab work on special topics in evolution. Prereq: At least one course in the area of the special topic or approval of the instructor.
740-741 Special Topics in Microbiology ( 3,3 ) Intensive lectures and/or lab work on special topics in microbiology. Prereq: At least one course in the area of the special topic or approval of the instructor.

750-751 Special Topics in Genetics (3, 3)
Intensive lectures and/or lab work on special topics in genetics. Prereq: At least one course in the area of the special topic or approval of the instructor.
760-761 Special Topics in Cell Biology (3, 3)
Intensive lectures and/or lab work on special topics in cell biology. Prereq: At least one course in the area of the special topic or approval of the instructor.

## 770-771 Special Topics in Molecular Biology

 $(3,3)$ Intensive lectures and/or lab work on special topics in molecular biology. Prereq: At least onecourse in the area of the special topic or approval of the instructor.

## Botany (BOT)

301 (501) Foundations of Botany (3) A study of the structure, function, diversity and significance of photosynthetic organisms from the cyanobacteria through the vascular plants, as well as major representatives of the fungi. Two lecture hours and two hour lab. Prereq: BIOL 130-140 with grades of C or better.

302 (502) Plant Morphology (3) A study of the major groups of photosynthetic organisms with respect to comparative anatomy, reproductive patterns, development and phylogenetic relationships. Two lecture hours and two hour lab. Prereq: BIOL 130-140 with grades of C or better.
303 (503) Plant Taxonomy (3) Principles of plant taxonomy. Classification of selected vascular plant families and the use of keys to identify common Tennessee species of vascular plants. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better.

305 (505) Freshwater Algae (3) A study of the identification, classification, diversity and ecology of freshwater algae; taught during the summer at the Reelfoot Lake Environmental Field Station. This course requires field work involving physical activity. Prereq: BIOL 130-140 or instructor's approval.
306 (506) Aquatic and Wetland Plants (3) A field course designed to introduce students to the biology, ecology, and taxonomy of aquatic and wetland plants, with an emphasis on sight recognition and identification of species using diagnostic keys. Brief coverage of the natural history of aquatics will be developed in lecture and lecture/discussions. This course is taught during the summer at the Reelfoot Lake Environmental Field Station and requires field work involving physical activity. Prereq: BIOL 130-140 with a grade of C or bigher or instructor's approval.

421 (621) Plant Physiology (3) A study of vascular plant function focusing on plant-specific topics including nutrition; transport; photosynthesis; molecular, hormonal, and environmental controls
of reproduction, development, and senescence; and effects of stress and disturbance. Two one-hour lectures and one two-hour lab. Prereq: Grades of $C$ or better in the following courses: BIOL 130-140 and either CHEM 112 or 122.

431 (631) Plant Ecology (3) Relations of plants to their environment with emphasis on climate and biotic factors influencing their structure, growth, behavior and distribution. Prereq: BIOL 130-140 with grades of C or better.
432 (632) Plant Ecology Laboratory (1) Lab and field studies in the methods and principles of plant ecology. This course requires field work involving physical activity. One two-hour lab. Coreq: BOT 431.

## Business Administration (BADM)

444 Practicum in Business (3) Field research of such topics as ongoing accounting system evaluation, financial management and control, personnel evaluation and administration and market and market analysis. Students are expected to diagnose organizational problems and recommend a business plan of action. Prereq: Senior or graduate standing.

480 Internship in Business Administration (19) Supervised experience in business establishments, institutions, or other organizations matched to the student's curriculum. Prereq: Dean's approval; at least Junior standing. May be repeated for up to a total of nine (9) bours internship credit. A maximum of six (6) hours may be used to fulfill degree requirements.

490 Senior Seminar (1) This course is an overview of various current topics which are essential in preparing for a successful career in business. The objective of this course is to prepare graduates for integration in the workforce or graduate studies as well as to assess the overall preparedness of these students for business related employment. Students will be required to engage in both written and oral communication. Resume building, interviewing skills, ethics, leadership, and teamwork will be addressed. This class may be taken only by students majoring in business disciplines, and all students will be required to take an exit exam in their specific major(s). This is a required course for the business core and must be taken in the students' final semester of undergraduate
coursework. Prereq: ACCT 201, 202; BLAW 201 or 301; ECON 201, 202; FIN 301; INFS 310 or ACCT 461; INFS 351; MGT 300, 310; MKTG 301. Coreq: MGT 490.

495 Executive Seminar (1) A study of current social and economic issues related to business. The course is taught by a company executive or high ranking official of an organization.

701 Research Methods and Communications (3) A project-oriented course focusing on philosophy, practical research methods and effective communication techniques. Includes qualitative and quantitative communication.

705 Sales and Marketing Research for the Financial Services Industry (3) A study of selected topics and their contemporary application primarily within banks and other businesses in the financial services industry. Topics include the selling process and its relationship to buying centers and the buying process, sales orientation, marketing research process, scale design, and survey development. These classic topics are introduced and then discussed within the framework of current events and issues within the financial services industry. The course includes a required "hands-on" research project.

710 International Study (3) A travel study course emphasizing the problems and decisions facing managers of international businesses, the environment in which these businesses operate and ways of integrating the coordinating programs in diverse markets. Particular emphasis is placed upon recognition of relevant cultural factors which affect the manager's decisions.

721 Critical Thinking (1) This course introduces the student to the view that critical thinking results from an understanding of the subtleties of language and logic. Knowledge from disciplines as diverse as Communications, English, and Philosophy will be consulted to help students develop a deep and abiding appreciation for the importance of sound reasoning in all dimensions of their personal, public and professional lives. Moreover, students will develop and refine their written communication abilities in order to demonstrate advanced reasoning and critical thinking skills. Effective use of support for arguments in written form will allow students to demonstrate mastery of course objectives.

722 Leadership, Group Dynamics and Teamwork (1) This course introduces the student to the view that leadership, group dynamics and teamwork are important facets of human performance in social systems. Through readings, conversations and exercises, students will develop skills necessary for the higher-risk environment of the world after the MBA, in the relatively low-risk environment of the classroom.

## 724 Administrative Affairs: Critical Thinking, Leadership, Teamwork, Innovation and Design

 (3) This course introduces the student to areas of critical thinking, leadership and teamwork, as well as innovation and design that are central to organizational administration. Students explore how each is integral to career and organizational development.
## 790-798 Special Topics in Business [Topic

 title] (1-6) An intensive study of selected topics of contemporary interest in the field of business. Maximum credit available for this course is six hours.799 Independent Study in Business Administration [Topic title] (1-6) Special advanced research projects undertaken individually under the supervision of the faculty. Maximum credit available for this course is nine hours.

## Business Education (BUED)

430 (630) Instructional Strategies in Business Subjects (3) Materials, methods and evaluation procedures in accounting, basic business, data processing and office technology. Prereq for 430: TCED 302 and admission to Educator Preparation Program. Prereq for 630: TCED 705 and 780 and admission to Educator Preparation Program. Must make a C or better.

## Business Law (BLAW)

201 Legal Environment of Business (3) A survey of law comprising the legal environment of the business community. Legal ethics, constitutional and administrative law, anti-trust law, product liability law, labor law, environmental law and international law.

301 Business Law I (3) Basic principles of the law of contracts, including the elements of a valid contract, performance and remedies for breach of
contract. The law of agency. The law of partnerships. Emphasis on the Uniform Commercial Code.

302 Business Law II (3) Fundamental laws and concepts relating to corporations, sales of property, secured transactions, commercial paper and bankruptcy. Relevant provisions of the Uniform Commercial Code. Prereq: minimum grade of C in BLAW 201 or BLAW 301.

311 Employment and Labor Law (3) Analysis of the many federal, state and local laws which regulate the recruitment, selection, employment, promotion, pay and dismissal of employees.

401 Real Estate Law I (3) Legal nature of property and rights therein. Real estate contracts, deeds, leases, mortgages and other real estate instruments. Testate and intestate transfers of property. A comprehensive course covering all common legal problems involved in real estate ownership and various phases of the real estate business. Excellent in preparing for state licensing examinations.

471-479 Topics in Business Law [Topic title]
(3) Selected topics in business law offered on an occasional basis for qualified students. Prereq: Instructor's approval.

701 Advanced Business Law (3) Advanced study of legal concepts and the legal environment governing business organizations and professional firms. Includes material concerning governmental regulation, business ethics, professional liability, licensing requirements and fiduciary relationships.

711 Legal and Ethical Environment of Business (3) Today's managers are expected to make decisions that comply with legal and ethical principles. This course increases awareness of ethical, legal and regulatory controls, problems and responsibilities that impact business dealings with government agencies, consumers, employees, competitors, investors and society. Students will develop the ability to identify and address major legal and ethical issues so as to avoid potential liability and to maintain ethical integrity in a competitive global marketplace.

## Career and Technical Education (CTE)

290 Effective Instructional Strategies and Managing the Environment (3) This course is designed to introduce instructional strategies aimed at fostering a classroom environment which promotes student success and achievement through the integration of educational theory, classroom management techniques, as well as assessment. Topics presented in this course will address lesson and unit plan construction, differentiated instruction to diverse learners, mastery of content knowledge, along with the importance of ongoing reflection and its relationship to professional learning. Disciplinespecific literacy skills and strategies will be introduced. Course fulfills three credit hours toward an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.

300 Students with Exceptionalities (3) An introductory course designed to provide an overview of the field of special education. Principles, characteristics, programs, special needs, legal requirements and instructional strategies, related to the education of students with exceptionalities. A deeper understanding of discipline-specific literacy skills and strategies will be covered, as well as, acronyms used in the state and region that are unique to the special education field. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.
303 Diagnosis and Evaluation (3) Designed to develop skills in selecting, constructing, administering and interpreting instruments appropriate for assessing differing needs and achievement of students in the classroom. Criterion-based assessment and their classroom relevance will be reviewed. Instructor will continue to promote the use of academic and discipline-specific vocabulary. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.

311 Technology Integration (3) Overview of methods for integrating technology into the classroom. Emphasis is on the application of technologybased strategies to support student learning and classroom management. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.

325 Educational Psychology (3) Introduction to the psychology of learning, motivation and social development. The course focus will be on the development of learning theory, psychological and environmental factors that influence learning and the validity of various learning paradigms. Academic and discipline-specific vocabulary will be covered. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.

## 440 Selected Problems in Education: Directed

Internship (3) A study of selected problems and issues affecting education. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permission of the department; may also require additional coursework.

## Chemistry (CHEM)

101 Fundamentals of Chemistry (4) Introduction to chemical principles and extensive practice working with fundamental concepts in chemistry. Four hours of combined lecture/recitation.

111 Introduction to Chemistry I: General and Inorganic Chemistry (4) (TBR: CHEM 10101011) Fundamental laws of chemistry including topics such as atomic and molecular structure, stoichiometry, chemical bonding, reaction equilibria, acids and bases, kinetics and nuclear chemistry. Experimental techniques in general and inorganic chemistry comprise the lab component. Thee hours lecture and one three-hour lab. A student should be registered for or have completed MATH 110 or 140 or a higher numbered mathematics course before registering for CHEM 111. CHEM 111 does not
fulfill prerequisite requirements for any upperdivision chemistry courses.
112 Introduction to Chemistry II: Organic and Biochemistry (4) (TBR: CHEM 1020-1021) Basics of organic and biological chemistry, including topics such as the study of functional groups, amino acids, lipids, carbohydrates, nucleic acids, enzymes and biochemical pathways. Experimental techniques in organic and biochemistry comprise the lab component. Three hours lecture and one three-hour lab. Prereq: CHEM 111, or CHEM 121 and the consent of instructor. A student should have completed MATH 140 or higher numbered mathematics course before registering for CHEM 112. CHEM 112 does not fulfill prerequisite requirements for any upper-division chemistry courses.

## 121-122 General Chemistry (4, 4) (TBR: CHEM

 1110-1120) This sequence is primarily for students majoring in sciences, math, or engineering. Topics include: 121-atomic theory, atomic structure, chemical nomenclature, stoichiometry, aqueous reactions, gases, thermochemistry, periodic properties, bonding, intermolecular forces and states of matter, properties of solutions; 122-kinetics, equilibrium, acid-base and solubility equilibria, thermodynamics, oxidation-reduction and electrochemistry, nuclear chemistry, molecular geometry and orbital hybridization, introduction to organic chemistry. Three lecture hours and one three-hour lab. CHEM 121 Prereq: MATH 110 or 140 or a bigher numbered mathematics course, or placement in MATH 251 or (ACT Math $\geq 24$ and coreq: Math 140, 170, or 185). CHEM 122 Prereq: either CHEM 111 with grade of $A$ or $B$ and the consent of instructor or CHEM 121.122H Honors General Chemistry II (4) Course is open to students who have demonstrated superior ability in chemistry. See CHEM 122 above for general course description. The Honors course is characterized by an enhanced lab experience in which students will work with a greater degree of independence and will utilize more advanced chemical instrumentation. (Same as CHEM 122 but for Honors credit. May not be taken in addition to CHEM 122.) Prereq: Departmental approval and CHEM 121 with grade of $A$ or $B$.

## 201-202 Introduction to Forensic Science

$(3,3)$ This course, intended for both science and non-science majors, will examine selected topics in forensic science. The objectives of this course are to provide the student with a general overview of forensic science including the role of science in solving crimes. Topics may include careers, analytical analysis methods, trace evidence, drug identification, toxicology, serology, DNA, arson, firearms, documentation, polygraph, and legal and ethical issues in forensic science. Case studies will be used to explore the scientific validity of examining evidence. Students who receive credit for CHEM 201 may not have credit for CHEM 200 applied toward their degree requirements. Two lecture hours per week and one two-hour lab per week. Prereq for CHEM 202: CHEM 201.

280 Special Topics [title] (1-3) Lectures and/or lab work on special topics in Chemistry. Course may be repeated with total credits not to exceed three hours. Topics and prerequisites will be announced.

310 Organic and Biochemistry (3) Elements of organic chemistry, biochemistry, and metabolism. CHEM 310 may not be counted toward either a major or a minor in chemistry and may not be substituted for CHEM 341. Prereq: CHEM 121 and 122.
319 Organic and Biochemistry Laboratory (1) Lab exercises related to topics covered in CHEM 310. Lab includes typical food analyses. CHEM 319L may not be counted toward either a major or a minor in chemistry and may not substitute for the lab portion of CHEM 341. Coreq: CHEM 310.

320 (520) Quantitative Analysis (4) Theory and applications of stoichiometry, equilibria and oxidation-reduction. Fundamentals of spectrophotometry and separations. Three lecture hours and one three-hour lab. Prereq: CHEM 121 and 122 with grades of C or better.

## 341-342 (541-542) Organic Chemistry (4, 4)

 (TBR: CHEM 2010-2020) A study of the compounds of carbon. Three lecture hours and one three-hour lab. Must be taken in sequence. Prereq CHEM 341: CHEM 121 and 122 with grades of C or better. Prereq: CHEM 342: CHEM 341 with a grade of C or better.343 Advanced Organic Chemistry (3) Advanced Organic Chemistry is a mechanism-based lecture focusing on preparing chemistry majors for graduate level organic chemistry courses. Topics covered may include rearrangements, cyclizations, molecular orbital discussions involving Woodward-Hoffman rules, neighboring group effects, organometallic reactions, and named reactions, among others. Prereq: CHEM 342 with a grade of C or better.

350 Medicinal Chemistry (3) Fundamental principles of structure/activity relationships, design considerations, physiochemical properties of drugs, drug metabolism and disposition. Prereq: CHEM 342 with a grade of C or better.

## 351-352 (551-552) Physical Chemistry (3, 3)

351: Behavior of gases. First, second and third laws of thermodynamics. Chemical and phase equilibria. Introduction to electro-chemistry. 352: Kinetic theory of gases. Kinetics of chemical reactions. Introduction to quantum mechanics and spectroscopy. Prereq: MATH 252 and CHEM 320 with grades of C or better.

## 359 (559) Physical Chemistry Laboratory (2)

Experiments and computer utilization to study topics listed in CHEM 351 and CHEM 352. Preparation of written technical reports and oral presentation of experimental findings. Two three-hour labs. Prereq: CHEM 320 with a grade of C or better and credit for CHEM 351 or 352 with a grade of C or better, or registration in CHEM 352.

365 Green Chemistry and the Environment (2)
Green chemistry, the design of chemical products and processes that reduce or eliminate the use and generation of hazardous substances, addresses the need to produce the goods and services that society depends on in a more environmentally benign manner. The emphasis is on atom economy and reduction of chemical resource and energy consumption at the source rather than subsequent pollution remediation. The practice of green chemistry as applied to aspects of analytical, biological, inorganic, organic and polymer chemistry in real-world cases will be investigated. Prereq: CHEM 320 and 341.
390 Internship in Chemistry (1-3) Application of chemical skills and knowledge in a supervised workplace environment. Student may or may not be paid.

Evaluation by both supervising instructor and on-thejob supervisor. Course may be repeated with total credits not to exceed three hours. Prereq: CHEM 342 and CHEM 320 with grades of C or better. Cannot be counted toward upper-division hours required for a chemistry minor.

399 Chemistry Seminar (1) A course directed toward Junior or Senior chemistry majors who wish to pursue a career in chemically related fields. Topics will include learning to write a resume, honing interview skills, applying for graduate school, and learning about job opportunities with a chemistry degree. Prereq: A student enrolling in this class must have completed a minimum of 60 hours and be a chemistry major, or have permission from the instructor.

## 410 (610) Physical Inorganic Chemistry (3)

 Inorganic chemistry, systematic chemistry of the elements and chemical periodicity considered in the context of modern theories of atomic structure and chemical bonding. Includes written and oral presentations by students of summaries and analyses of contemporary research in and applications of inorganic chemistry. Prereq: CHEM 320 with grade of C or better.420 (620) Analytical Methods (4) Advanced theory and practice of analytical chemistry including instrumental approaches to separation and analysis. Three lecture hours and one three-hour lab. Prereq: CHEM 320 with grade of C or better.
422 Forensic Chemistry (3) The applications of chemistry to the analysis of physical evidence. Topics include procedures to collect, preserve, maintain custody, analyze, validate data and report conclusions from the analysis of crime related samples. Included among the topics will be serology, analysis of arson debris, drugs, explosive residues, gunshot residues, papers and inks, paint chips, fingerprint identification, hairs and fibers, document examination and DNA. Laboratory techniques will include gas chromatography, mass spectroscopy, atomic absorption spectroscopy, electrophoresis, infrared spectroscopy, liquid and thin-layer chromatography, fluorescence spectroscopy, and ultraviolet and visible spectroscopy. One lecture hour and two threehour laboratory periods per week. Prereq: CHEM 320 and 420 with grades of C or better.

430 (630) Spectrometric Methods (3) Modern physical and chemical methods for the isolation and identification of compounds and mixtures. Spectrometric techniques available include IR, NMR and GC/ MS. One lecture hour and two three-hour labs. Prereq: CHEM 320 and 342 with grades of C or better.

440 (640) Polymer Chemistry (3) Chemistry of synthetic polymers including mechanisms of polymerization and relations of molecular structure to bulk properties of polymers. Credit may not be received for both CHEM 440 and CHEM 441. Prereq: CHEM 320 and 342 with grades of C or better.
441 Introduction to Polymer Chemistry (1) An introduction to the chemistry of polymers including: synthesis, stereochemistry, characterization, and structure-property relationships. Credit may not be received for both CHEM 440 and CHEM 441. Prereq: CHEM 320 and 342 with grades of C or better.
450 (650) Advanced Physical Chemistry (3) A further study of the application of quantum mechanics to simple systems, studies of molecular spectroscopy and molecular structure, statistical mechanics, linear and non-linear dynamics, and computational chemistry. Prereq: CHEM 352 and MATH 320 with grades of C or better.

## 455 (655) Applied Nuclear Chemistry (2)

Nuclear structure, terminology and reactions. Emphasis on applications including energy from fission and fusion, dosimetry, tracer techniques, gamma spectroscopy, x-ray fluorescence, neutron activation analysis and related topics. One-hour lecture each week at UT Martin with 2-1/2 days of intensive instruction and lab work utilizing facilities of Oak Ridge Associated Universities. A final written report is required. Prereq/Coreq: CHEM 352 with grade of C or better.

460 (660) Advanced Synthesis (3) Lab course in the application of modern experimental techniques to the synthesis and characterization of organic and inorganic compounds. One lecture hour and two three-hour labs. Prereq: CHEM 320 and 342 with grades of C or better.

## 470 Introduction to Research in Chemistry

(1) Introduction to conducting laboratory research, searching literature, maintaining laboratory research notebook, and writing research report. Students will
be expected to spend at least three hours per week in the laboratory. Course may be repeated for a total not to exceed three credits, but only one credit may be counted toward the major. Prereq: approval of supervising faculty member and department chair.

480 Special Topics [topic title] (1-3) The courses will consist of intensive lectures and/or lab work on special topics in chemistry. Course may be repeated with total credits not to exceed three hours. Topics and prerequisites will be announced.

490 Research in Chemistry (1-3) Course in conducting laboratory research. Students will be expected to devote at least three hours per week per credit hour to laboratory work. Students are required to submit a formal written research report in order to receive credit. May be repeated for credit, with no more than three hours counting towards requirements for the major. Prereq: CHEM 470 and approval of supervising faculty member and department chair.
700 Directed Studies in Chemistry (3) Survey of chemical principles including their applications to the development of experimental activities for elementary school students.

710 Selected Topics in Chemistry [topic title] (1-3) Topics to be announced. May be repeated for a maximum of three credit hours. Prereq: departmental approval.

## Child and Family Studies (CFS)

100 Lifespan Human Development (3) Study of human needs and developmental processes across the lifecycle. Examination of individual and family wellbeing using a systems perspective.

## 200 Early Childhood Curriculum (3) Study

 of developmentally appropriate practices and the teacher's role in supporting development of young children ages birth through eight. Emphasis on curriculum planning including goals, environment, roles of teachers and parents, materials and settings. Includes classroom experience.205 Safe, Healthy Learning Environment (3) Study of the basic principles and practices of safety, health and nutrition as they relate to the early childhood setting, home and community for children ages birth through eight. Includes principles of creating appropriate learning environments for young children. Includes classroom experience.
210 Family Dynamics and Community Involvement (3) The course focuses on the role of the family and community in the physical, cognitive, social, and emotional growth of the child in a diverse society. Benefits of and strategies for developing positive, reciprocal relationships with families in an early childhood setting ages birth through eight are included. Field experiences are required.

211 Child Growth and Development (3) Growth and development of children from birth to adolescence in the context of family life. Includes lab observations.

215 Initial Practicum (3) This course is a supervised practicum with a minimum of 30 clock hours in seminar and 45 clock hours in early childhood practical experiences. The course includes a study of the physical and human qualities that combine to create an environment that is safe and healthy and promotes optimum learning for young children ages birth through eight. Two hours lecture, two one-hour labs.

303 Family Relationships (3) Factors affecting relationships within families throughout the life cycle. Focus on current lifestyles, changing family forms, cultural diversity and theoretical perspectives.
311 Developmentally Appropriate Activities
(3) Planning, implementing and evaluating activities for infancy through adolescence. Emphasis on physical, cognitive, social, emotional and creative activities.

## 312 Parenting Fathers, Mothers and Chil-

 dren (3) Parent-child relationships. Emphasis on the uniqueness of parent-child relations at different stages of the life cycle, implications for child guidance and current issues related to parenthood. Prereq: CFS 100 or instructor's approval.313 Child Guidance and Discipline (3) Principles of guidance applicable to family and group situations involving children (all ages into adolescent
years, with emphasis on early childhood years). Creating a desirable environment conducive to learning and behavioral development of the child as an individual member of the family and society. Prereq: CFS 100 or instructor's approval.

400 (600) The Hospitalized Child (3) A study focused on the development status and needs of medically involved children and their families with an emphasis on the professional preparation for a medically-related career in Child Life.

402 (602) Housing Across the Lifespan (3) Housing across the lifespan including planning for and analysis of interior spaces for human needs. Examination of physical, social, and economic housing environments affecting individuals, families, and communities.

411 Preschool Laboratory Practicum (4) Student guidance of children in preschool setting under supervision of the program director. Development of teaching techniques, planning, implementation and evaluation of creative group activities. Prereq: CFS 211.

412 Early Childhood Program Administration
(3) Developmentally appropriate administration and management of programs for young children. Prereq: CFS 100 or instructor's approval.
421 (621) Adult Development (3) Development from early through late adulthood, using a human systems perspective. Prereq: CFS 100 and 303 or permission of instructor.

442 (642) Developmental Disabilities in Children (3) Etiological factors affecting young children with developmental delays. Cultural, familial, educational and legal implications. Behavioral characteristics of children observed in early intervention programs. Prereq: Six (6) hours in child development. (Same as SPED 490/690 when title is the same)

## 443 (643) Community Care and Curricu-

 lum Planning for Developmentally Disabled Preschool Children (3) Resources available for community care of children and families, differentiating individual needs, curriculum planning for home and center based intervention, lab experience. Prereq: Six (6) bours in child development. (Same as SPED 490/690 when title is the same)740 Ecology of Human Development (3) An examination of human development through the life cycle utilizing an ecological approach.

## 742 Administration of Programs for Chil-

 dren (3) Organization, curriculum development and implementation of standards, assuring quality care of children.
## 744 Theories in Child and Family Studies

(3) Selected theories concerning the development of children and families. Historical views, current research and applications to family life.

## 751 Resources in Family Life Education

(3) Resources useful in developing curriculum content in child and family studies.

## 753 Assessment in Child and Family Studies

(3) Applications of measurement techniques and evaluation methodologies to children and families.

## 755 Advanced Laboratory Practicum in

 Child Development (3) Guidance of children, program development, implementation and evaluation.
## Communications (COMM)

100 Survey of Mass Media (3) A survey of the various fields of mass communications with emphasis on their structure, function, responsibilities, development and impact on society.

110 Language Competency (1) A modulebased overview of grammar, punctuation and word usage intended to build comprehensive language skills for use in the professional world. Must be successfully completed before taking any Communications writing courses. May not be repeated for credit.

200 Introduction to Media Writing (3) An examination of the nature of news, criteria for determining news, organization of factual information and changes in delivery methods of information in the news industry. Discussion and practice in writing leads, organizing stories, overcoming grammatical and spelling deficiencies, avoiding libel and writing a variety of news stories for converged news media outlets. This course is a prerequisite
to all other journalism courses. Prereq: Minimum grade of C in ENGL 111 and ability to type.
220 Voice and Diction (3) Study of the production of vocal tone and the articulation of vowels, consonants and diphthongs, with individual attention to developing an awareness and control of one's own voice and language habits. Prereq: Communications majors/minors or permission of instructor.
229 Public Communication (3) Study and application of communication theory through the preparation and delivery of video presentations utilizing appropriate technology and visual aids. Includes research and analysis of data and information addressing key communication presentation topics. This course is equivalent to COMM 230 and is for students seeking online degree completion only. Instructor approval required. Prereq: Minimum grade of C in ENGL 110 or 111.
230 Public Speaking (3) Study and application of basic communication theory in the preparation and delivery of extemporaneous informative and persuasive speeches and in critical listening. Prereq: Minimum grade of C in ENGL 111.
230H Honors Public Speaking (3) An introduction to public discourse for students in good standing in Honors Programs. The course will include the intensive study and application of communication theory in the preparation and delivery of extemporaneous informative and persuasive speeches and in critical listening. Limited enrollment. Prereq; Minimum grade of C in ENGL 111 or 111H.
240 Introduction to Media Design and Public
Relations (3) Introduction to the fundamentals of media design and public relations. The course includes instruction and practice in using media design and public relations to communicate with targeted audiences in a converged media environment. It includes an introduction to basic visual design skills and public relations writing styles for print, broadcast and the Web.
250 Introduction to Broadcasting (3) Introduction to radio and television fundamentals with lab experience in writing, performance and production for broadcast media. Lecture and lab.

300 Advanced Media Writing (3) Practicing lessons learned in COMM 200 Introduction to Media Writing, producing investigative stories, solving problems in ethics and learning methods of news coverage in a converged news media environment, covering meetings of various levels of campus and community government and discussing/ covering issues and events. Prereq: COMM lower-division core.

305 Copy Editing and Design (3) Instruction and practice in editing copy for print and online media, including content and style, headline writing, picture editing and basic principles of layout and design.
Prereq: COMM lower-division core.
311 Interpersonal Communication (3) Study and practical application of principles of communication in face-to-face human interactions. General communication, self-awareness, perception, conflict, listening and interviewing.

315 Broadcast Media Writing (3) Strategic and applied practical application of writing for broadcast media. Emphasis will be placed on content creation for news, commercials, public service and promotional announcements. Writing projects will be assigned for radio, television and multimedia delivery. Prereq: COMM lower-division core.

320 Writing Features (3) Techniques for writing feature articles for newspapers and magazines, both print and online. Study of markets and submission of students' articles for publication. Photo ideas to accompany feature stories will also be discussed. Prereq: COMM 200.
321 Principles of Media Design (3) Introduction to the basic theories and practices of media design as it applies to both informative and persuasive media. This course will explore the processing of visual messages, basic theories of design and applications of media design. Prereq: COMM lower-division core.

322 Basic Print Design (3) Pre-professional, hands-on experience in basic print design with a major emphasis on producing fliers, brochures, newsletters and other print media used by communications and media practitioners. Graphics, design and layout considerations are stressed. Prereq: Communications majors/minors or permission of instructor.

323 Basic Web Design (3) Introduction to Web design and development within mass communication. Also discussed are media-related topics and the use of the World Wide Web and the Internet by broadcasters, journalists and public relations and marketing communication practitioners.

326 Principles of Public Relations (3) Basic theories and practice in public relations as a communications tool of business, government and nonprofit corporations. Prereq: COMM lower-division core.

327 Public Relations Techniques (3) Examination of skills and techniques used in the practice of public relations, with particular attention given to writing for public relations, copy dissemination, media use and media network design. Techniques range across internal and external media, print, electronic and audiovisual media.

328 Public Relations Research (3) Study of the process of public relations research for planning and evaluating programs of action, including programs of communication. Included: the role of evaluative research methodologies in public relations management. Prereq: COMM 326.

329 Public Relations Strategy and Implementation (3) Examination of strategic planning and implementation in public relations administration, with case studies utilized in an effort to place the student in a managerial, decision-making role. Prereq: COMM 326 and 328.

332 Small Group Communication (3) Study of systematic group communication with practical application through group participation. Communication theory and its application to small groups, small group theory, special discussion techniques and methods, group problem solving and decision making and parliamentary procedure.
334 (534) International Public Relations (3)
A study of the dynamics of international public relations, including the infrastructure of international companies and organizations and the management of their global reputations. It also analyzes the barriers involved in global business and processes involved in carrying out crisis and catastrophe communications at an international level. The course provides
an opportunity for observation and field study in an international setting through visits to PR firms and organizations in other countries. Prereq: Junior standing or permission of instructor.
336 Advanced Web and Multimedia Design (3) This course focuses on advanced Web design techniques including layout, graphics production, navigation, content management and the mobile Web. The course will also include an introduction to interactive and timeline-based multimedia applications. Prereq: COMM 323 or instructor's approval.

337 Argumentation and Debate(3) A perfor-mance-based course that focuses on critical thinking in which students are taught the basic theory and skills of argumentation and debate, argument assumption and design, and argument evaluation. It includes the use of reason and evidence, cross-examination, refutation, ethics and practice in academic debate. Prereq: COMM 230 or instructor's approval.

337H Honors Argumentation and Debate (3) An intensive, performance-based course that focuses on critical thinking in which students are immersed in the theory, practice and skills of argumentation and debate, argument assumption and design, and argument evaluation. It includes the use of reason and evidence, cross-examination, refutation, ethics and participation in an in-class academic debate tournament. For students in good standing in Honors Programs. Prereq: COMM 230 or instructor's approval.

338 Non-Profit Public Relations (3) A study of the pragmatic application of Public Relations strategies and tactics as they apply to the non-profit (NPO) and non-governmental sectors (NGO). This course will include applied topics in relationship management with boards, employees and volunteers (internal), as well as external relationship management with donors and community stakeholders. Course may also include the study of applied PR strategies to NPO governance and management. Course includes regular travel to local and regional NPO offices.
Taught in seminar format every other year. Prereq:
Junior standing and COMM 326 and COMM 327 or instructor's approval.

339 Crisis Communication (3) A study of theories and research related to the management of risks
and crises, with particular attention paid to the role of communication in crisis prevention, preparation, recognition, response and recovery. The course will include extensive examination of case studies as well as crisis simulations and exercises. Taught in seminar format each spring semester. Prereq: COMM 326 or instructor's approval.
340 Film Appreciation (3) A study of the development of the motion picture as a business and an art form from its earliest stages to the present. Particular emphasis on the technical, social and economic factors which have influenced motion picture development. Lecture and lab.

341 Photojournalism (3) Introductory and intermediate instruction in photographic techniques, digital darkroom workflow and caption-writing. Also includes an overview of film development and printing. Photographic assignments will give students experience in reporting with a still camera. Lecture and lab. Prereq: COMM 200 or permission of instructor.

350 Radio Production (3) Designed to provide advanced study in radio production. Emphasis on production of various types of radio programming, study of radio formats and advanced production techniques. Lecture and lab. Prereq: COMM 315.
355 Broadcast Performance (3) Application of techniques to improve vocal processes, as it relates to broadcast delivery, to include practice in reading broadcast copy. Concentrated study of phasing, timing, vocal modulation, pronunciation, diction, articulation and resonance. The study of broadcast styles and integration of announcing and performance into both studio and remote broadcast productions. Special emphasis on vocal delivery in both radio and television performance. Prereq: COMM lower-division core and COMM 230.
356 Communication in Professional Environments (3) Study and practical application of voice and diction, interpersonal communication, group dynamics, and public communication in business and professional settings. Prereq: COMM 230.
360 Television Production (3) An experienceoriented course based on the accepted theory and technique of television production. Emphasis on camera operation, audio, videotape, lighting, artistic
design and special effects. Practical experience in entertainment, public affairs and sports programming. Lecture and lab. Prereq: COMM 250 and 315.

363 Documentary Storytelling (3) This course explores the documentary genre, its artistic characteristics, storytelling effectiveness, and social/cultural themes related to this style of filmmaking. Students will focus on identifying and developing story ideas and implementing creative storytelling techniques into their projects. Each student will pitch, research and develop a topic for a short documentary ( 5 to 8 minutes) that he/she will fully produce. These films will be presented at a screening event on campus toward the end of the semester. Prereq: COMM 360 or instructor's approval.
365 Electronic Field Production (3) A study of and practical experience in the various aspects of small-format videotape and audio recording and editing procedures. Additionally, a survey of the applications of audio and video field production for commercial, corporate and noncommercial broadcast industries. Lecture and lab. Prereq: COMM 315, 350 and 360 or permission of instructor.
370 Broadcast News (3) Writing, reporting and producing stories and newscasts for radio and television. Intensive field and lab work with electronic news gathering (ENG) cameras and editing equipment (both audio and video). Lecture and lab. Prereq: COMM 315, 350, and 360 or permission of instructor.

381 Practicum in Radio (1) A lecture/lab providing supervised experience in radio. May be repeated for a maximum of three hours credit. Prereq: COMM 350 or permission of instructor.

382 Practicum in Television (1) A lecture/ lab providing supervised experience in television. May be repeated for a maximum of three hours credit. Prereq: COMM 360 or permission of instructor.
383 Practicum in Journalism (1) A lecture/lab providing practical, supervised experience in editing, editorial writing, feature writing, newswriting, photojournalism, reporting and sports writing. Pass/Fail. May be repeated for a maximum of 3 hours credit. Prereq: COMM 200.

399 Special Topics in Communications (3) Intensive treatment of selected topics not found in the regular Communications curriculum. Course content
varies from semester to semester. Course may be repeated for credit in different topics. Prereq: Completion of all Communications Department lower-division requirements or consent of instructor.

405 (605) Social Media Management (3)
This course uses hands-on learning to examine the process of creating, implementing, and evaluating engaging social media programs; to learn current tools for managing social media; and to discuss factors involved in creating social media policies for organizations.

410 Advanced Media Design (3) Advanced preprofessional, hands-on experience in media design. This project-related course will include instruction in the production of print and multimedia products. Students will use computer-authoring applications to prepare advanced publications, infographics and interactive multimedia presentations. Prereq: COMM 321, 322, 323, and 341.

420 Broadcast Management and Sales (3) A study of the operation and management of radio and television stations and analysis of station management techniques, departmental organization and personnel practices. An examination of the sales process, the development of presentations and the role played by sales in broadcast stations. Prereq: Junior standing, COMM 350 and COMM 360.
425 (625) Strategic Communication Campaigns (3) Examination and application of the principles of strategic communication campaign design. Students plan and design communication campaigns for a real client as a major component of the course. Topics cover the integrated use and design of traditional advertising, public relations, social, and non-traditional media to accomplish communication objectives. Prereq: COMM lower-division core or permission of instructor.

## 455 (655) Digital Media Production for

Corporate Environments (3) Advanced production techniques in videography, sound recording, photography, and related media technology, including practical experience in producing, editing and distribution of media content. Students will learn to use digital production tools to produce work for professional purposes in public relations, journalism or broadcast that can be shown to audiences through multiple formats.

460 Broadcast Producing and Directing (3) Theory and practice related to producing and directing television and radio programming. Emphasis on accepted directing methodology and the producer's role in developing broadcast and corporate programming. Program development from initial concept through the completed program. Lecture and lab. Prereq: COMM 315, 350, and 360 or permission of instructor.

470 Intercultural Communication (3) Examines the relationships between culture and communication in local, national, and international contexts by focusing on group values, practices, and communicative behaviors as influenced by culture. Prereq: COMM 230 or consent of instructor.
471 (671) Independent Study (3) In-depth study of advanced communication principles or applied theory chosen by the student and approved by the instructor. Prereq: Senior standing.

475 Internship in Communications (3) Application of communication skills in a supervised assignment with a broadcast, print, public relations, corporate communications, media design, or other organization employing these skill sets. Student may or may not be paid. Prereq: Senior standing and $B$ average in communications.
491 Communication Law and Ethics (3)
Examination of the constitutional underpinnings of freedom of expression and the limitations on such freedoms as enunciated by the U.S. Supreme Court. Students will focus particularly on libel, privacy, intellectual property, source protection, information gathering, obscenity, government regulation and the conflict between a free press and a fair trial. Students will also analyze and apply the ethical standards necessary for media integrity and credibility. Prereq: Senior standing.

## 492 Senior Seminar in Communications (3)

Examination of communication issues, theories, and world communication systems through research, discussion, writing and speaking. Each student will prepare a senior portfolio. Prereq: Communications majors only. This capstone course must be taken during senior's final semester.
595 Introduction to Social Media for Strategic Communication (3) This course provides a broad
overview of the role media play in the strategic communication process, examines decisions an organization must make when using social media, and introduces students to current social media and social sharing sites.

## 700 Seminar in Strategic Communication (3)

 Intensive treatment of selected topics not found in the regular Strategic Communication curriculum. Course content varies from semester to semester. Course may be repeated for credit in different topics. Topics will vary and will examine topics related to mass media, media design, specialized areas of strategic communication.701 Professional Seminar I (1) An introduction and orientation to the Master's in Strategic Communication program, including exploration of resources supporting the program, instruction in academic research and writing skills. Students are required to attend one Saturday on-campus meeting at the beginning of the semester.

702 Professional Seminar II (1) Seminar focusing on strategic communication and professional practice. Introduction to portfolio or capstone requirements. Includes one on-campus weekend. Prereq: Earned grade of B or bigher in COMM 735 or permission of instructor.
703 Professional Seminar III (1) Completion of written comprehensive exams and portfolio at the culmination of coursework for the M.A. in Strategic Communication program. Prereq: Earned grade of B or higher in COMM 701, 702, 710, 720 and 12 hours of graduate-level elective courses.

## 705 Advanced Copywriting and Editing (3)

Advanced instruction and practice in writing and editing copy for a wide variety of internal and external publics. Through case studies, class discussion and individual exercises, students will learn to outline audience needs; master technical skills in vocabulary, grammar and style; and develop/edit appropriate messages and content for traditional mass media, online/mobile media, and corporate publications.

706 Independent Readings and Research (1-3) An in-depth study of a strategic communication topic approved and supervised by a member of the graduate faculty. May be repeated for up to 3 hours credit.

Prereq: Approval of the instructor and MASC Graduate Advisor.

## 710 Applied Research Methods for Profes-

 sionals (3) Students will learn about the research process and examine qualitative and quantitative research methods with a focus on application of the techniques in the professional environment. Prereq: Earned grade of B or higher in COMM 720 or permission of the instructor.715 Technical Communication (3) This course examines the role of verbal, nonverbal, and written communication within the framework of organizations and corporations. It applies grounded theory in studying message formation covering areas such as the use of communication audits in identifying information channels between internal and external publics, report writing, message formation, presentations, proposal writing, document preparation, importance of social media tools, and application of applied skills in enhancing the work environment.

## 720 Media and Communication Theory for

 Professionals (3) This course examines a wide range of media and communication theories that help professionals understand communication processes and strategies used to develop strategic communication initiatives in the workplace.730 Organizational Communication (3) A study of theories of organizational communication and their application to the workplace. Students will analyze communication challenges in organizations from various perspectives, including supervisors, subordinates, and peers.

## 735 Introduction to Strategic Communication

(3) An introduction to strategic communication concepts, processes, and practices. This course will provide students with an overview of the historical development of strategic communication and the ways in which individuals and organizations use strategic communication to achieve goals.

740 Leadership Theory and Practice (3) This course is designed to engender understanding of various theoretical approaches and conceptualizations of leadership, as well as promote and develop interpersonal communication strategies for practical application in professional environments.

745 Crisis Communication (3) An introduction to crisis communication providing insights into key concepts, theoretical perspectives, essential critical thinking and planning skills necessary for effective crisis management within organizations. Topics will include issues management, risk management, relationship management, crisis planning and preparation, case studies, and development of crisis communication management plans. In addition to traditional methods, the class will engage in simulations, field trips and individual research to master the content area.

750 Media Management (3) Examination of key responsibilities and problems faced by management teams in media organizations and related fields. Topics include media ownership, ethics, financial responsibilities, personnel management, audience analysis and content delivery.
760 Media Programming and Analytics (3)
Interpreting quantitative audience research, such as Neilsen and Arbitron ratings, syndicated program/ analyses and SRDS tables. Students utilize this data to successfully program a fictional broadcast station. Station and Network program strategies, tactics and program development are discussed.

## 765 Persuasive Communication Techniques

 and Strategies (3) This course examines the theories and techniques of persuasion as they apply to strategic communication contexts.766 Propaganda (3) The examination of how propaganda differs from persuasion; the history, theory, and practice of propaganda; and, the methods used to analyze propaganda.

767 Public Communication (3) This course is designed to engender understanding of various theoretical approaches and conceptualizations of public communication including the following topics: the foundations of public communication theory, the communicator, the message, the medium, the relationship, and culture of communication.

770 Communication and the Global Audience (3) The study of theoretical concepts pertaining to intercultural communication and its application to interpersonal, workplace, public and mediated communication practices. Prereq: COMM 720.

775 Professional Ethics in Strategic Communication (3) This course uses case studies to explore and take a systematic approach to solving real-world ethical dilemmas related to strategic communication. Those case studies will come from ethical issues that students will research in the workplace. The course will also explore the philosophical foundation of ethics.

780 Media Ecology (3) The study of how media technologies shape significant cultural institutions, whether political, social, economic, educational, or religious. In addition to studying the cultural influences of media technologies, students will also consider how media affect their own lives with regard to multiple commitments and communities.

785 Communication Law for Professionals (3) Examination of the constitutional underpinnings of freedom of expression and the limitations on such freedoms as enunciated by the U.S. Supreme Court. Students will focus particularly on libel, privacy, intellectual property, source protection, information gathering, obscenity, and government regulation.

## 790 Capstone Professional Project (1-3)

Required independent study whose purpose is to allow the student to develop substantial expertise in an area related to strategic communication. All MASC students are required to complete a capstone professional project during their last semester in the program. May be repeated for credit for a total maximum of 6 hours. Prereq: Earned grade of B or bigher in COMM 702 or permission of the instructor.

## Computer Science (CSCI)

115 Cyber Literacy (3) An introduction to the basic terms and background needed for further cybersecurity study, intended for those with a less technical background. Identity Theft, Malware Attacks, Privacy Essentials, Social Engineering, Safe Browsing, Hardware Exploits.

## 201 Introduction to Computer Applications

(3) Concepts of computer systems and procedures including software applications, input and output, data storage, communications and networks, Internet and World Wide Web and operating systems and system software. Emphasis on using integrated
software tools on the microcomputer which include word processing, spreadsheet, database, presentation graphics, communications, web browsers, electronic mail, personal information management and multimedia authoring. Credit does not apply to computer science minor requirements.

211 Introduction to Computer Programming (3) Introduction to principles of computer science, information systems and beginning programming techniques in Visual BASIC.net. Includes the use of Visual BASIC for Applications to customize application software such as Microsoft Office.

215 Cybersecurity Analysis (3) A hands-on introduction to the techniques and tools needed to detect and respond to cybersecurity threats. Virtual Machines, Data Tampering, Network Traffic Analysis, Threat Detection and Mitigation, Vulnerability Assessment. Prereq: Placement in OR completion of CSCI 115 or CSCI 221 or equivalent coursework.

220 Introduction to Computer Science (3) An introduction to the field of computer science and a survey of computing-related topics intended for non-majors and Computer Science majors, who are not ready for CSCI 221. Topics include the history of the discipline, programming in a modern high-level programming language, logic, computer architecture, operating systems, software applications, web development, and select high-level topics in Computer Science.

## 221 Programming Concepts and Problem Solv-

 ing I (3) An introduction to programming in the C++ language. Types and representations, arithmetic, strings, arrays, control structures, basic algorithm design, and problem solving. Prereq: placement in OR completion of MATH 110 or MATH 140 or above, OR Grade of C or better in CSCI 220.
## 222 Programming Concepts and Problem Solv-

 ing II (3) A programming intensive continuation of CSCI 221 and introduction to the object oriented paradigm. Multidimensional arrays, structs, classes, inheritance and polymorphism, pointers and dynamic memory management, recursion, templates, and operator overloading. Prereq: Grade of C or better in CSCI 221.226 Intermediate Programming in a Second Language (3) Detailed study of programming in
a language other than that studied in CSCI 221. Emphasis placed on competent programming in the selected language, understanding the language's main application areas, history, basis for creation, advantages and disadvantages. May be repeated one time for a total of six (6) hours credit with a different programming language. Prereq: CSCI 221.

250 COBOL Programming (3) Introduction to Common Business Oriented Language using structured methodology. Problem solving directed toward business applications. Prereq: CSCI 211 or 201 or 221.

260 RPG Programming (2) Report Program Generator with applications and programs oriented to commercial fields. Prereq: CSCI 201 or 211 or 221.

## 290 Lower Division Special Topics: [Topic title]

(1-3) Lectures and/or special projects related to various specialized topics. Possible topics include programming languages, operating systems, and additional software packages. Course may be repeated for a maximum of six (6) hours credit. May be offered on a pass/fail basis. Prereq: Departmental approval required.

## 301 Discrete Structures for Computer Science

I (3) Applications of mathematics fundamental to the science and technology of Computer Science, providing an appropriate theoretical background for advanced courses. Topics include: propositional logic, predicate logic and quantified statements, proof techniques sequences, recursion, and set theory. Prereq: CSCI 221 AND MATH 251 or permission of instructor.

## 302 Discrete Structures for Computer Science

 II (3) A continuation of CSCI 301. Applications of mathematics fundamental to the science and technology of Computer Science. Topics include: functions, relations, counting and combinatorics, probability, graphs, trees, basic algorithm analysis, regular expressions, and finite-state automata. Prereq: CSCI 301 or permission of instructor.310 System Administration (3) Introduction to tools and techniques related to system administration. Command line tools, scripting, network administration, routing, security, user administration, and application support.

320 Assembler Language and Computer System
Organization (3) Structure of digital computers,
introduction to machine language, number representations, symbolic coding and assembler language, register sets, instruction types, addressing modes, input-output subroutines, segmentation, paging and introduction to operating systems. Prereq: CSCI 222.
325 Data Structures and Algorithms (3) Detailed study of data structures and their implementations. Strings, lists, queues, stacks, graphs, trees, sparse arrays, and file structures. Algorithms involving iteration, recursion, sorting, searching, hashing and basic complexity analysis. Prereq: CSCI 222.

335 Mobile and Web Development (3) Design and implementation of full stack (front and back end) systems with a focus on mobile and web development. Emphasis on integrating modern frameworks, languages, APIs, and technologies with a focus on team-based project development. Prereq: CSCI 325.

340 (540) Numerical Analysis (3) Formulation of numerical problems for solution on a digital computer. Error analysis and control, nonlinear equations, differentiation, integration, systems of equations, differential equations, curve fitting and eigenvalue problems. Prereq: CSCI 221 and MATH 252; CSCI 301 or MATH 310. (Same as MATH 340/540.)

350 Advanced COBOL (3) Business programming applications using advanced features of COBOL with emphasis on programming style, techniques, and structured programming. Prereq: CSCI 250.

## 351 Object-Oriented System Analysis and De-

sign (3) Study of the systems development life cycle system, various types of systems including business and government. Methods of designing systems, data management, input and output design, hardware selection and methods of information processing. Prereq: CSCI 221 or 250.

352 Software Engineering (3) Techniques, methodologies, and tools related to the planning, development, and maintenance of large software systems in a contemporary development setting. Focus on teambased development practices. Prereq: CSCI 222.
360 Introduction to Computer Networks (3) Fundamentals of networking connectivity and communications. Local and wide area network basics, networking architecture, layers, standards, and
security. Network protocols including TCP/IP family of protocols. Techniques and projects on routing simulations, encryption and digital signatures, and client-server programming. Prereq: CSCI 325.

371 Competitive Programming Seminar (1) The application of a broad range of theoretical topics in computing to the construction of software systems and solutions. Focus will be given to environments of programming under pressure where programming speed, computational complexity, and correctness are imperative. Multi-paradigm programming, mathematics, data structures, dynamic programming, graph/path algorithms, network flow, computational geometry, string algorithms and techniques/strategies related to competitive programming. Course may be retaken for up to three (3) hours of credit as an upper division computer science elective. Prereq: CSCI 222 and permission of the instructor.
380 Artificial Intelligence (3) History, intelligent agents, classical search, game-playing, declarative programming, reasoning under uncertainty, and planning. Programming assignments will incorporate techniques covered in lecture and programming in languages appropriate to A.I. Prereq: CSCI 302 and 325.

385 Distributed Systems (3) Introduction to Distributed Systems. An introduction to the field of distributed systems, and the fundamental problems related to their design and construction. Concurrent programming, thread pools and safety, non-blocking I/0, scalable sever design, file system design, distributed mutual exclusion and deadlock detection, pipelining schems, and MapReduce. Prereq: CSCI 325.

410 Database Management Systems (3) Design and implementation of relational database systems. Topics include relational data models, ERD, normalization, SQL programming, transaction management and concurrency control, and object-oriented DBMS. Prereq: CSCI 325.

## 415 Web-Based Client-Server Programming

(3) Design and implementation of interactive clientserver web-based applications and systems. Topics include client technologies, web server technologies, database storage, communication protocols, design patterns, and security. Prereq: CSCI 325.

420 Computer Organization and Architecture (3) A study of the hardware and low-level software organization typical of a modern computing platform. Boolean Algebra, digital logic, instruction sets, assembly languages, representations of data, computer arithmetic, memory and processor architectures, pipelining, input-output systems, alternative architectures, and evolution of computing hardware.
Prereq: CSCI 301 AND CSCI 325.
430 Algorithm Design and Analysis (3) Introduction to algorithm design principles, techniques for the analysis of algorithms, problem-solving methodologies, and advanced data structures. Topics include searching and sorting, divide and conquer, greedy algorithms, dynamic programming, graph algorithms, asymptotic analysis of algorithms, proofs of correctness, and advanced data structures. Prereq: CSCI 302 and 325.

435 Theory of Computation (3) A theoretical treatment of formal languages, classical models of computation, and related issues including complexity and computability. Topics include formal languages and the relationship among classes of languages; models of computation including regular expressions, grammars, finite state machines, and Turing machines; complexity classes (specifically P , NP, and NP-Complete) with connections to classical problems in computing; and the nature of decidable and undecidable problems. Prereq: CSCI 302 and 325.

445 Computer Graphics (3) Frame buffers, display files, graphics primitives, transformations of two-dimensional spaces, windows, viewports, clipping, covering, transformations of three-dimensional space, parallel and perspective projections, stereoscopic views, hidden line algorithms. Prereq: CSCI 325. Coreq: MATH 310.

455 Data Mining and Information Retrieval (3) An introduction to data mining and information retrieval concepts, algorithms, and techniques. Data preprocessing, association rule mining, classification models, clustering, text mining, retrieval models, indexing, relevance ranking, link analysis, PageRank, recommender systems, and evaluations. Prereq: CSCI 325. Coreq: MATH 210.
458 Autonomous Mobile Robotics (3) A
laboratory-style introduction to hardware and
software issues related to the design and application of autonomous mobile robots. The course will cover fundamental concepts in robotics from a computational standpoint. Topics include sensors and actuators, and development of software for control, obstacle avoidance, planning and navigation, interaction with and manipulation of the physical world. Prereq: CSCI 325.

460 Bioinformatics (3) Introduction to bioinformatics, emphasizing application of computational tools and methodology in genomics, analysis of protein functions and structures, and DNA sequencing. Use of a high-level programming language such as Python and software tools such as BLAST to solve bioinformatics problems. Prereq: CSCI 325.
470 Comparison of Programming Languages
(3) Syntax and basic characteristics of grammars, language constructs, storage allocation, binding times, and lexical analysis of programming languages. Families of programming languages studied include imperative (procedural), object oriented, functional, and logical languages. Prereq: CSCI 302, CSCI 325.

## 475 Compilers, Interpreters and Language

Translators (3) Theory of compilable languages, construction of software for compiling, interpreting and translating computer languages. Study of various types of translators, implementation of a translator for a language. Prereq: CSCI 302 and 325.

## 480 Internship in Computer Science (1-6)

Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. May be repeated for up to a total of six (6) hours internship credit. A maximum of three (3) hours may be used to fulfill upper-division computer science electives. Prereq: Departmental approval is required; at least Junior standing.
485 Computer Operating Systems (3) A study of operating systems, processing of $1 / 0$ and interrupt service, buffering, spooling and memory management services, security and error protection, systems accounting and resource allocation, multiprogramming and multi-processing, inter-process communication, includes the study and use of several operating systems. Prereq: CSCI 325.
490 Advanced Topics in Computer Science
[Topic title] (1-3) Lectures and/or special projects
related to specialized advanced topics in computer science. Course may be repeated for a maximum of six (6) hours credit. May be offered on a pass/fail basis.

## Prereq: CSCI 325 and instructor approval.

495 Senior Design Project (3) Selected topics in computer science including trends, ethics, employment, and graduate school opportunities. Small teams will complete senior design projects. Teams will present results at a local conference and summarize work in a technical report. Prereq: CSCI 302 and 325, computer science major, senior standing, and permission of department faculty.

## Consumer Resource

 Management (CRMG)
## 202 Consumers and the Market (3) Consum-

 ers as purchasing agents in a complex marketplace. Buyer-seller relationship, effective decision making and consumer protection practices.205 Cultural Etiquette (3) Protocols and strategies integrating modern lifestyles with the proprieties of social and business conduct, interactions within multicultural and international settings.
210 Leadership Roles in Resident Settings (3) Assessment of leadership styles and skills applicable to resident settings. Development of personal competencies essential for leadership roles among persons in resident groups.
302 Personal and Family Finance (3) Financial planning for attaining individual and family goals. Individual and household management of resources and private measures to reduce economic risks. Federal tax system, investments and estate planning.
403 (603) Housing and Home Equipment (3)
Analysis of home equipment needs, selection, use and care. Evaluation of recent developments. Space planning to maximize effective use of equipment. Two one-hour lectures and one two-hour lab.

413 (613) Resource Management for Special
Groups (3) Allocations and adaptations of personal and family resources for special groups: physically and mentally handicapped, aged, low-income, single heads of household and social re-entries from institutions. Prereq: Six hours of courses in family and consumer sciences or instructor's approval.

711 Consumption and Standards of Living (3) Economic and welfare aspects of consumption. Analysis of factors associated with changes in the standard of living. Review of major consumption studies. Prereq: CRMG 202 or consent of instructor.

712 Housing Programs and Policies (3) Analysis of private and public programs and policies designed to promote realization of suitable homes and living environments for households. Economic and social problems related to national housing objectives.
713 Environmental Design (3) Examination of major research and theory development. Application to user needs in residential, commercial and social institutional settings. Prereq: INTD 303 or consent of instructor.

722 Management and Family Resources (3) Examination of current trends and research. Focus on effects of change in family resources on structures and heads of households.

723 Consumer Economics (3) Consumer functions in the economy; structure of consumer markets; government action relating to consumer; factors affecting prices of consumer goods. Prereq: CRMG 202 and 302 or consent of instructor.

## Counseling (COUN)

## 420 (620) Introduction to Counseling (3) An

 orientation to counseling, guidance skills and principles including sociological, historical and philosophical foundations of pupil personnel services; informing students and parents of the purposes of the guidance program, confidentiality, ethics in the counseling relationship and the profession, gender and multicultural issues in counseling and contemporary trends or issues in counseling.710 Research in Education and Counseling
(3) This course is an introduction to historical, experimental, descriptive, and survey research as they relate to seeking solutions to problems within the fields of education and counseling. Research techniques, the analysis of research results, and the uses of research are explored. Students will complete in-depth library research, including research for individual classroom purposes, as well as writing research proposals in American Psychological As-
sociation (APA) format. The knowledge bases will cover both the consumer and producer perspectives of research. Research methodology, techniques, and literature review information will be addressed. Prereq: EDEV 710 and admission to the graduate counseling program or consent of instructor. Same as EDFN 710. Cannot receive credit for both EDFN 710 and COUN 710.

712 Learning and Instruction (3) Overview of research related to the major theories of learning with emphasis on classical and operant conditioning, social learning theory and cognitive theories applied to school environments. Required for students in school counseling or advanced education degrees who are not licensed teachers. Cannot receive credit for both EDPG/COUN 712 and TCED 712. Prereq: admission to the graduate counseling program or consent of instructor.
716 Growth and Development Across the Life Span (Birth to Adult) (3) Emphasis on theory and research on social, emotional and cognitive development over the life with emphasis on educational settings. Cannot receive credit for both EDPG/COUN 716 and TCED 716. Prereq: admission to the graduate counseling program or consent of instructor.

## 721 Multicultural Issues in Education and

 Counseling (3) Emphasis is on multicultural education and cultural foundations in education and counseling; developing knowledge, self-awareness and skill competencies for effectiveness in teaching and counseling services in Pre K-12 schools. Credit cannot be received for both EDFN 720 and COUN 721. (Same as EDFN 720) Prereq: admission to the graduate counseling program or consent of instructor.722 Professional, Ethical and Legal Issues in Counseling (3) An introduction and orientation to the practice of counseling in schools, community agencies and higher education settings. Topics addressed will include the history and philosophy of counseling; ethical decision-making; professional credentials and affiliations; and, standards of practice, research and educational preparation in counseling. Prereq: admission to the graduate counseling program or consent of instructor.
725 Theories and Techniques of Counseling
(3) This course provides a detailed review of the
theoretical foundations of major counseling theories and techniques applicable to children/ adolescents/ adults. Reviewed theories will include Psychoanalytic, Neo-Freudian, Person-Centered, Gestalt Therapy, Existentialist, Behaviorist, Rational Emotive Therapy and Reality Therapy. Prereq: admission to the graduate counseling program or consent of instructor.

## 730 Career Development and Counseling (3)

 Theories of vocational development, career education, career development and the significance of the world of work in the lifestyle of individuals. The strategies related to career exploration, careerrelated assessment, application of career development materials, technical and college career tracks of curriculum development, exploration of gender and cultural/ethnicity issue that may affect the career development of individuals in our society are emphasized. Prereq: admission to the graduate counseling program or consent of instructor.740 Group Dynamics (3) A study of group processes, techniques and ethical issues involved in using groups for counseling and personal and interpersonal growth opportunities. Topics of course investigation include the study of leadership, communication skills, stress management and career development. Prereq: admission to the graduate counseling program or consent of instructor.

## 745 Current Issues in Counseling (Topic) (3)

A study of selected problems and issues affecting counselors. May be repeated under different topics. Only six credits may be applied to the M.S.Ed. degree in Counseling. Prereq: admission to the graduate counseling program or consent of instructor.
746 Expressive Arts in Counseling (3) This course provides an introduction to the history, philosophy and theory of expressive arts therapy. Students will study the integration and utilization of various creative arts (visual, dance/movement, music, imagery/dream and play therapy) in the counseling process. Prereq: admission to the graduate counseling program or consent of instructor.
747 Introduction to Addictions Counseling (3) This course is designed to familiarize students with the history, philosophy, and trends in addictions counseling as well as relevant legal and ethical is-
sues. The roles, functions, and settings for addictions counseling are covered as well as the credentialing process and professional organizations relevant to addictions counselors. Models and theories of addiction are introduced. Prereq: admission to the graduate counseling program or consent of instructor.

748 Principles of Crisis Intervention (3)
Students will gain an understanding of crisis theory. A particular emphasis will be placed on using case studies in order to apply crisis intervention strategies in a variety of crisis situations. Prereq: admission to the graduate counseling program or consent of instructor.

## 750 Mental Health and Psychopathology

(3) This course reviews concepts of personality development and factors influencing it, as well as psychopathology as described in the Diagnostic and Statistical Manual of Psychiatric Disorders. Prereq: admission to the graduate counseling program or consent of instructor.
752 Student Affairs in Higher Education (3)
This course is designed to introduce students to current trends and issues in higher education with an emphasis on the field of Student Affairs and College Counseling including its history, development, and philosophies. A thorough overview of the profession is presented to provide students with knowledge and skills typically required for pursuing a career in a wide range of student services settings. Prereq: admission to the graduate counseling program or consent of instructor.

753 Student Development and Higher Education (3) This course is designed to familiarize students with major theories of student development, and apply key theoretical concepts that address students' cognitive, intellectual, identity/personality, ethical, moral, career, and social development during the college years. Prereq: admission to the graduate counseling program or consent of instructor.

754 Assessment, Evaluation and Administration of Student Affairs and College Counseling
(3) This course is designed to familiarize students with major theories and function of student affairs assessment, evaluation, and administration in the
higher education setting. Issues that reflect the diversity, complexity, and change in higher education today are examined. Emphasis is placed on examining student needs, satisfaction, and culture, and analysis of programs/services outcomes. Prereq: admission to the graduate counseling program or consent of instructor.
760 Individual Appraisal (3) A study of representative psychological and educational test/inventories including the rationale which underlies testing or assessment of individuals for educational or guidance purposes. Practice in the use and appraisal of instruments and techniques for understanding the individual, including both testing and non-testing interview or developmental history procedures. Prereq: admission to the graduate counseling program or consent of instructor.

## 775 Counseling Children/Adolescents with

 Psychological Dysfunctions (3) Identification of children and adolescents with extensive emotional, social, or psychological/mental disorders. Emphasizes a broad spectrum of therapeutic approaches to treatment that can be utilized in educational and mental health settings and in counseling/consultative activities; IEP's; parent education and training; teacher education and training; social skills education and training; and self esteem education and training. Prereq: admission to the graduate counseling program or consent of instructor.776 Psychopharmacology (3) An overview of psychotropic drugs used in the treatment of individuals with psychopathology. Their clinical applications, side effects and relation to counseling clients/students will be covered. Students will discuss case studies and create treatment plans including the use of appropriate medications. Coreq/prereq: admission to the graduate counseling program and must have taken or be enrolled in COUN 750 or equivalent graduate level abnormal psychology course.

777 Psychopathology: Diagnosis and Treatment (3) This course reviews interviewing and diagnosing skills and intervention models and techniques applicable to psychological disorders: cognitive, affective and behavioral. Prereq: admission to the graduate counseling program or consent of instructor.

780 Community Resources (3) A study of the development and function of community agencies and resources. Employment services, rehabilitation services, mental health centers, public health services and social welfare agencies are included. Prereq: admission to the graduate counseling program or consent of instructor.
781 Introduction to Marital and Family Counseling (3) An exploration of the basic philosophy, goals and techniques associated with the major theories of marital and family counseling. Prereq: admission to the graduate counseling program or consent of instructor.

782 Alcohol and Substance Abuse Counseling (3) The process of counseling alcohol and drug or substance dependent persons. The modalities of treatment including the pharmacological approach and referral are covered. Prereq: admission to the graduate counseling program or consent of instructor.

## 783 Clinical Mental Health Counseling (3) A

 survey of the history of mental health counseling and the counselor's role in prevention, intervention, advocacy, conflict resolution, and policy development and legislation related to mental health services in community agencies, private practice, clinics, hospitals, and other institutions. Barriers to services will be identified and special attention will be paid to how the confluence of barriers impacts the counselor's ability to assess and advocate for individual and community needs, to facilitate conflict resolution, to deliver services, and to secure resources for programs designed to serve vulnerable populations. Prereq: admission to the graduate counseling program or consent of instructor.
## 784 Mental Health Services Management,

 Consultation, and Supervision (3) A study of the organization and administration of clinical mental health services; needs assessment, funding acquisition, and program management; consultation; and clinical supervision of mental health service providers. Issues such as reimbursement, right to practice, core provider status, practice privileges within managed care systems, and expert witness status are also included. Prereq: admission to the graduate counseling program or consent of instructor.785 Counseling Practicum (3) Supervised, clinical experience at either a school (required of school counseling majors) or clinical setting (required of clinical mental health majors). Includes 100 hours; 40 of those hours must be in direct contact with clients/students. Relationship building skills, listening skills, fact finding skills, reflective skills, summarizing skills, role playing, simulation and actual experiences with clients in counseling are investigated. Professional liability insurance is required. Enrollment is by application and permission of the instructor. This course must be completed near end of program but prior to first internship. Prereq: COUN 725, admission to counseling candidacy and instructor's approval.

## 786 Organization and Administration of School Counseling Services/Programs (3) Em-

 phasis on the counselors' need to have a knowledge base on the functions, organization, administrative principles and evaluation of counseling services in Pre K-12 schools, college and junior colleges, community agencies and counseling or mental health centers. The student will prepare a proposal/project for the organization and administration of a counseling program that is specific to his/her career goals. Students will be involved in designing a counseling program for a specific school setting that is congruent with their career objectives. Project also includes preparation of sample lesson plans to be incorporated into classroom counseling units. Prereq: admission to the graduate counseling program or consent of instructor.
## 787 Pre-Practicum in School Counseling (3)

This course will prepare the student for the practicum and internship field experiences. Practical and reflective activities will be used to build the skills and knowledge necessary to successfully complete the required field experiences of practicum and internship. Topics may include: the specific requirements for field placements (including direct and indirect student contact hours); understanding school culture and the counselor's role in it; popular counseling theories used in school counseling; overview of supervision theories and practices; the elements of the ASCA National Model; working with special populations; development issues of students; selfassessment of knowledge, skills, and attitudes; and
taking the next steps toward practicum, internship and professional development. Prereq: COUN 786 and this course must be taken prior to COUN 785. Admission to the graduate counseling program or consent of instructor.

788 Internship I (3) This internship provides opportunity for students in the Clinical Mental Health, Student Affairs, and Addictions specializations to develop skills in counseling on site. Case experiences are discussed under the supervision of faculty. Students complete a minimum of 300 hours on site that includes 120 client contact hours (group and individual) and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Students may enroll in one additional course while enrolled in the internship course. Course may be repeated as needed for different specializations. Prereq: COUN 785 and admission to counseling candidacy. Students may enroll in internship during their last two semesters of coursework. Application must be submitted the semester prior to enrollment. Course graded on Pass/Fail basis.

789 Internship in Secondary School Counseling (3) Includes 300 hours of supervised experience in 7-12 school settings ( 120 hours must be direct client contact hours). Students will plan and manage all facets of the counseling program including counseling with students, coordinating the program and consulting with student support personnel, parents and community resources. Students may enroll in one additional course while enrolled in the internship course. Prereq: COUN 785 and admission to counseling candidacy. Students may enroll in internship during their last two semesters of coursework. Application must be submitted the semester prior to enrollment. Course graded on Pass/Fail basis.

790 Internship in Elementary School Counseling (3) Includes 300 hours of supervised experience in Pre K-6 school settings ( 120 hours must be direct client contact hours). Students will plan and manage all facets of the counseling program including counseling with students, coordinating the program and consulting with student support personnel, parents and community resources. Students may enroll in one additional course while enrolled
in the internship course. Prereq: COUN 785 and admission to counseling candidacy. Students may enroll in internship during their last two semesters of coursework. Application must be submitted the semester prior to enrollment. Course graded on Pass/Fail basis.

792 Internship II (3) This internship provides the opportunity for students in the Clinical Mental Health, Student Affairs, and Addictions specializations to develop skills in counseling on site. Case experiences are discussed under the supervision of faculty. Students complete a minimum of 300 hours on site that includes 120 client contact hours (group and individual) and 15 hours of supervision. Favorable final evaluations by the site supervisor and faculty are required for credit. Students may enroll in one additional course while enrolled in the internship course. Course may be repeated as needed for different specializations. Prereq: COUN 785 and admission to counseling candidacy. Students may enroll in internship during their last two semesters of Counseling coursework. Application must be submitted the semester prior to enrollment. Course graded on Pass/Fail basis.

## Criminal Justice (CJ)

200 Introduction to Criminal Justice (3) An intensive examination of the philosophical and historical backgrounds, agencies and processes, purposes and functions, administration and technical problems and career orientations of our criminal justice system. Extensive reading required. Critical thinking, problem solving and writing exercises are utilized. This course is a prerequisite to all other criminal justice courses.

## 211 Principles of Law Enforcement (3) An

 introduction to the complex responsibilities, procedures and policies of a law enforcement agency operating in a pluralistic, multi-culture, free market, democratic society. Extensive reading required. Critical thinking, problem solving and writing exercises geared to practical applications in law enforcement are core requirements of this course. Interaction with computer based software applications for research required.301 Drugs and Society (3) Comprehensive exami-
nation of drug abuse; the biological, psychological, and social impact of drugs; the history and business of drugs; drug laws and drug policy implications; and the criminal justice system response.

302 Criminal Justice Ethics (3) An examination of the ethical issues encountered within the Criminal Justice System. Critical moral reasoning, criteria for ethical decision making, codes of professional ethics and typical ethical dilemmas in the Criminal Justice System will be covered.

## 303 Methods and Analysis in Social Research

 (3) Major concepts and techniques in social science research, including the scientific method, measurement, sampling, data collection, interpretation of statistics and evaluation settings. Data analysis techniques include descriptive and inferential statistics, including central tendency, variability, analysis of variance, and correlation. The course includes training in the use of statistical programs in order to calculate statistics.310 Principles of Criminal Investigation (3)
An intensive examination of the foundation and principles of criminal investigation. This course examines the appropriate use of various sources of information, problem areas encountered when conducting criminal investigations within contemporary society and the follow-through activities necessary for capitalizing on investigative efforts. Extensive reading and writing required.

## 311 Correction Security (3) This course is

 designed to address the educational component of pre-service training for correctional personnel which includes (but is not limited to) education on staff/ inmate relations, prison sociology, issues of skilled based training which addresses inmate security, work ethics, the control of contraband, dealing with mental illness, inmate and staff suicide, and cultural diversity. Credit is awarded only upon successful completion of the Tennessee Correction Academy, or equivalent.
## 312 Physical Training and Use of Force (3)

Practical skills and techniques designed to enhance the physical well-being of criminal justice professionals within the course and scope of their duties. Components include flexibility, muscular strength and endurance, cardiovascular training, and the nonnegotiable use of lawful authority to influence
behavior. Credit is awarded only upon successful completion of the Tennessee Law Enforcement Training Academy Basic Police School, Tennessee Correction Academy, or equivalent.

320 Criminal Procedure (3) An overview of the process of adjudication of a criminal case from the time of arrest to final disposition, including trial procedures, the due process requirement and constitutional limitations. Research requirement.

321 Apprenticeship (3) Initial assessment and development of pre-professional skills and behaviors. Emphasis on identifying, clarifying, and developing personal competencies essential for police service, including communication, decision-making, fitness, and live-fire firearms familiarization. Students must maintain negative reports on drug screen and criminal background check (additional fee). Prereq: Completion of 60 semester hours.
322 Apprenticeship II (3) Basic assessment and development of pre-professional skills and behaviors. Emphasis on identifying, clarifying, and developing personal competencies essential for police careers, including communication, decision-making, fitness, and live-fire firearms familiarization. Students must maintain negative reports on drug screen (additional fee). Prereq: CJ 321 with grade of ' $B$ '.
325 Criminology (3) Problems, theory, cause, control and prevention of criminal behavior. (Same as SOC 413/613)
330 Serial Killers (3) This course will provide students a detailed introduction to, and examination of, serial murder, specifically focusing on biological, psychological and social theoretical explanations of psychopathic, sociopathic, anti-social personality disorders. Students will actively participate in the understanding of issues surrounding serial murder presented to law enforcement agencies and the public. This class is not designed to assist in the development of skills necessary for the forensic criminal profiling of offenders. Research papers and oral presentations are components of this course.

360 Child Abuse (3) The goal of this course is to introduce students to the multifaceted issue of child abuse law. Students will learn about child sexual predators, child witnesses, types of child abuse and neglect and the future of child abuse in the criminal
justice system. The course will include an examination of the various courts that deal with child abuse issues.

364 (564) Corrections (3) Provides an overview of the history and various perspectives of incarceration, tracing the development of prisons in America from their earlier roots in Europe. An examination is placed upon prison inmates, correctional staff, correctional treatment and punishment philosophies, political perspectives regarding criminal offenders and special interest offenders such as juveniles and females, as well as capital punishment. (Same as SOC 364/564)

## 370 Juvenile Justice: Social Problems and Legal Issues for Social Work, and Criminal

 Justice (3) Focuses on the juvenile, the family and the community as related to and interwoven with legal issues, practices and processes encountered by the social work and criminal justice professionals and their clients. Restorative Justice practices are emphasized. (Same as SWRK 345)380 Probation and Parole (3) Provides an indepth examination of the field of community-based correctional supervision, which includes many options utilized by correctional agencies to supervise clients in the community. Emphasis is placed on adult and juvenile systems, major U.S. Supreme Court decisions, methods of supervision and how this component interfaces with incarceration.

400 (600) Criminal Law (3) The history, purpose and theory of criminal law. An examination of the classification of crimes and the nature of criminal liability.

401 Command and Leadership (9) Foundations of leadership, leadership skills, building external relationships, employee and internal matters, and critical issues. Credit is awarded only upon successful completion of UT Law Enforcement Innovation Center Southeastern Leadership Academy.

405 (605) Law Enforcement Administration (3) Study of organization and management as applied to law enforcement agencies, concepts of organizational behavior, and the complex interrelationships between law enforcement and the community.
410 Victimology (3) This course addresses the issues of crime in society by focusing on the victim.

An examination of the expanding role of the victim in the criminal justice system will be the main focus of this course. Students will develop an understanding of criminal prosecutions, of the cost and extent of victimization and will examine various types of offenses committed against victims (child maltreatment, assault, homicide, domestic violence). Extensive research and writing projects are major components of this course.

411 Special Topics [topic title] (1-3) Selected topics of current interest and importance. Course may be repeated with different topics. A maximum of six credit hours can be counted toward a major or a minor in Criminal Justice. Prereq: Instructor's approval.
413 Family Law (3) This course provides an intensive examination of the rules governing family law including but not limited to: marriage, divorce, child custody, child abuse and neglect and adoption. Upon conclusion of this course, the successful student should be able to: 1) describe what constitutes a family; 2) describe the requirements for marriage; 3) identify the grounds for divorce: 4) identify the various aspects of obtaining custody of children; 5) think critically about the multifaceted issues of child abuse and/or neglect and 6) describe the adoption process.
415 American Death Penalty (3) This course will provide an in-depth examination of the issues related to capital punishment in America. Students in this class will examine the death penalty component of the American Criminal Justice System through liberal, conservative and critical approaches that provide opportunities to investigate and question various crime control strategies utilized in the United States. A component of this class will be the development of skills necessary to critically assess the impact the use of capital punishment has on society. Extensive reading and writing assignments required.

420 (620) Criminal Evidence (3) An overview of criminal evidence within the United States, furnishing a practical insight into the rules of evidence and considerations regarding the admissibility of evidence in court. Emphasis is placed on court decisions and contemporary issues within the field and their effect upon members of society. Extensive research required.

421 Apprenticeship III (3) Intermediate assessment and development of pre-professional skills and behaviors. Emphasis on identifying, clarifying, and developing personal competencies essential for police careers, including communication, decisionmaking, fitness, and live-fire firearms familiarization. Students must maintain negative reports on drug screen (additional fee). Prereq: Completion of 90 semester hours, and CJ322 with grade of ' $B$ '.

422 Apprenticeship IV (3) Advanced assessment and development of pre-professional skills and behaviors. Emphasis on identifying, clarifying, and developing personal competencies essential for police careers, including communication, decisionmaking, fitness, and live-fire firearms familiarization. Students must maintain negative reports on drug screen and criminal background check (additional fee). Prereq: CJ 421 with grade of ' $B$ '.

425 Penology (3)This course provides an examination of the history of punishment and the study of crime through the ages with a focus on the social factors that influence various crime control measures and the political forces that underlie these perspectives and punishments. Extensive reading and writing will be required for this course. .

435 (635) Forensics and Physical Evidence (9) This intensive in-residence program at the National Forensic Academy in Oak Ridge prepares students for careers in the field of criminal investigation by increasing their knowledge of forensic science and developing skills in crime scene evidence recovery and submission. Topics include scene management, digital photography, DNA evidence, latent fingerprints, shooting incident reconstruction, bloodstain pattern analysis, and forensic anthropology. Mastery of the subject matter is demonstrated through written and practical exams, and development of a student portfolio. Prereq: Instructor's approval.

450 Current Issues in Criminal Justice (3) Emphasizes the professional development of criminal justice students by a critical examination of ethics, topical commentaries, articles and reports from the most recent literature in the criminal justice field. Extensive reading and writing are core requirements. A research project involving a review of current literature and/or original research is required.

Interaction with computer based software applications is essential.
455 Travel Study in Criminal Justice [Selected Topics] (1-6) A course designed as an educational travel experience in Criminal Justice within the United States or internationally under the supervision of a university instructors. May be taught as an organized study tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course with different topics. A maximum of six credit hours can be counted toward a major in Criminal Justice. Not regularly offered. Prereq: instructor's approval.

460 Senior Seminar in Criminal Justice (3)
A critical examination of theory and practice in the Criminal Justice System. Research, writing and presentation of papers. Prereq: Senior standing or prior approval, and completion of all of the Criminal Justice major requirement courses with a grade of C or above.
470 Tennessee Criminal Law (3) In-depth study of the current Tennessee Code Annotated sections on substantive Criminal Law and applicable sections of evidence and procedure. Credit is awarded only upon successful completion of the Tennessee Law Enforcement Training Academy Basic Police School, or equivalent. Students cannot receive credit for both CJ 400 and CJ 470.

## 480 (680) Internship in Criminal Justice

(3-12) Application of criminal justice skills in a supervised workplace setting. Placement will be determined by the instructor, in consultation with the student. The student may or may not be paid. Student grades will be based on the instructor's academic evaluation as well as the work evaluation by the student's on-the-job supervisor. Prereq: Criminal Justice major, Senior standing, and a minimum 3.00 GPA in Criminal Justice coursework or permission of internship coordinator for undergraduate credit. May only be taken once for credit.

485 Directed Research in Criminal Justice (3)
Research to be directed by a member of the Criminal Justice faculty assigned by the department chair and to be on a subject of interest to the student as well as faculty members.

701 Program Planning (3) Development of costeffective, productivity-oriented professional criminal justice training programs. Emphasis on needs assessment, curriculum development, delivery, assessment, and accountability of professional training.

702 Administration of Justice (3) Survey of administration and management patterns and strategies in criminal justice and modern criminal justice agencies.

703 Civil Liberties (3) Study of the legal and moral responsibility of the criminal justice system to individual rights and the relationship of law to political, economic, and social systems.
704 Topical Seminar in Criminal Justice (3)
In-depth examination and inquiry into selected topics, problems, and contemporary issues related to criminal justice within a democratic society.

705 Applied Research in Criminal Justice (3) This course is designed to provide students with a working knowledge of conducting and applying research through multiple methods. Statistical and/or qualitative software will be utilized. Ethical considerations of conducting field research and IRB applications will be addressed. A major research project will be initiated in this course.

## 706 Juvenile Justice Theory and Practice (3)

An in-depth examination of theories endemic to the field of juvenile justice and how those theories formed the foundation for contemporary practice.

707 Juvenile Justice Strategies (3) This course will consist of an in-depth study of the laws and problems facing abused, neglected, and delinquent children. Prereq: CJ 706.

708 Criminological Theory (3) Presented in seminar format, this course will provide an examination of major criminological theories presented through historical and contemporary writings of major theorists. Extensive reading and writing will be required.

709 Advanced Topics in Victimology (3) This course will consist of an in-depth study of crime victims. Specific crimes will be discussed, remedies will be explored, and the responses of the various components of the criminal justice system to crime victims will be assessed. This course will require extensive reading and writing.

710 Foundations of Leadership (3) Assessment and development of personal leadership skills and behaviors. Emphasis on identifying, clarifying, and developing personal competencies essential for assuming leadership roles in law enforcement and other criminal justice areas.

711 Organizational Leadership (3) Concepts and theories of leadership and their relevance to law enforcement practices and organizational procedures. Emphasis on development of supervisory competencies essential for assuming leadership roles.

712 Leadership Principles (3) Advanced assessment of leadership within formal law enforcement organizations, and development of supervisory competencies essential for senior leadership roles.

## 713 Leadership and Effective Communication

(3) Assessment and development of personal and organizational communication skills and behaviors and the human factors of police leadership. Emphasis on development of effective communication skills required for successful interactions at all levels within contemporary organizations.

## 714 Leadership Theories and Practices (3)

 Contemporary leadership within modern criminal justice organizations. Emphasis on how humanistic and tactical approaches to law enforcement leadership impact the internal culture and external perception of an organization.715 Practical Leadership (3) Implementation of leadership theories and principles in law enforcement and criminal justice organizations. Emphasis on the development of individual ability to develop practical problem solving skills.

716 Standards and Training (3) Personnel selection and administration within modern criminal justice organizations, including recruitment and evaluation of applicants, employee performance assessment, and legal considerations.

717 Professional Development (9) Demonstrated mastery of advanced investigative or administrative expertise in criminal justice. Credit is awarded only upon successful completion of Federal Bureau of Investigation National Academy; University of Louisville Southern Police Institute; Northwestern

University School of Police Staff and Command; UT National Forensic Academy, Southeastern Leadership Academy, or Command College; or equivalent se-nior/executive-level training. Students cannot receive credit for both CJ 635 and 717.

718 Public Policy Analysis (3) This course focuses on methods of conducting public policy analysis. Student will learn how to apply tools of policy analysis in order to make critical public decisions.

## Dance (DANC)

110 Understanding Dance (3) General survey of the development of dance as an art form from primitive times to the present.

110H Honors Understanding Dance (3) General survey of the development of dance as an art form from primitive times to the present. For students in good standing in Honors Programs.

120 Contemporary Dance I (2) Analytical and practical study of beginning dance techniques. May be repeated for credit.

130 Ballet I (2) Introduction to the basic techniques of ballet. May be repeated for credit.

150 Dance Ensemble (2) Preparation and public performance of selected works of dance repertory. May be repeated for credit. Prereq: Instructor's approval.
210 Music and Movement (2) Basic rhythmic analysis for dance. Understanding the relationship between music and movement for both instruction and performance. Introduction to digital music editing and composition for dance.

215 Movement for Performers (2) Provides the actor/musician/dancer with a basic awareness of the human body and function for the stage by exploring various movement techniques.

240 Choreography I (2) Use of rhythmic, spatial and dynamic elements in designing dance movements. Current choreographic approaches. Prereq: Proficiency in dance and instructor's approval.

310 Jazz Dance (2) Analytical and practical study in jazz dance techniques. May be repeated for credit. Prereq: DANC 120 or 320.

320 Contemporary Dance II (2) A continuing study of dance vocabulary with emphasis on analysis and discipline. May be repeated for credit. Prereq: DANC 120.

330 Ballet II (2) Continuation of training in technical skills of classical ballet. May be repeated for credit.

350 Dance Ensemble (2) Preparation and public performance of selected works of dance repertory. May be repeated for credit. Prereq: Instructor's approval.

360 Dance Production (1) Practical application of dance studies in the production environment. May be repeated for credit. Prereq: DANC 240 and DANC 350.

401 Special Projects in Dance (2) Directed individual study. May be repeated for credit.

415 Dance History and Contemporary Issues
(3) This course is an inquiry into varied issues that are central to how dances are created, performed, viewed, received, criticized and analyzed in a historical context. Prereq: DANC 110 or instructor's approval.
420 Advanced Contemporary Dance (2) A continuing study of dance vocabulary with emphasis on intensive advanced level of contemporary dance technique. Prereq: DANC 320 or instructor's approval. May be repeated for credit.

430 Advanced Ballet (2) Advanced training in understanding ballet vocabulary, terminology, pointe work, and correct body posture. The student will demonstrate proficiency in challenging barre and center combinations, proper spatial dynamics and clarity, and appropriate musicality. Prereq: DANC 330 or instructor's approval. May be repeated for credit.
440 (640) Choreography II (2) Advanced techniques of dance composition. Prereq: DANC 240 and instructor's approval.
460 Senior Project (1) Performance or research based projects representative of the student's interest, talents and cumulative experience in dance. Projects are selected and prepared under the supervision of a dance faculty member. Mandatory Pass/Fail.

## Dance Education (DNED)

211 Introduction to Teaching Dance (2) A comprehensive view of dance teaching as a profession including requirements, challenges and opportunities.

The stages of children's development in dance will be covered, as well as lesson plan writing. Includes eight (8) clock hours of clinical lab experiences, directed observations and limited participation in classroom settings.

390 Dance Pedagogy (3) Concepts, methods, materials and practice in teaching dance appropriate for both elementary and secondary students. Includes 12 clock hours of clinical lab experiences, directed observations and limited participation in classroom settings. Prereq: DNED 211.

400 Senior Seminar in Dance Education (4) Current issues in the profession of dance education, review of national standards and the relationship of aesthetic education to the overall development of young people. Historical, philosophical and social aspects of dance in the curriculum. Measurement and evaluation of dance instruction. Includes 10 clock hours of clinical lab experiences, directed observations, limited participation in classroom settings, and student teaching preparation. Prereq: DNED 390 and admission to Educator Preparation Program (EPP).

471 Student Teaching in Dance Grades K-6 (6) Supervised student teaching of dance in grades K-6 in off-campus centers for a minimum of 7.5 weeks. (Normally taken concurrently also with DNED 471.) Prereq: TCED 301-302 and all other required courses in the Professional Education core.

472 Student Teaching in Dance Grades 7-12 (6) Supervised student teaching of dance in grades 7-12 in off-campus centers for a minimum of 7.5 weeks. (Normally taken concurrently also with DNED 471.) Prereq: TCED 301-302 and all other required courses in the Professional Education core.

## Driver Safety Education (DSED)

420 (620) General Safety Education (3) A background in characteristics of effective teaching and techniques for safety principles, practices and procedures. The cause and prevention of accidents in the home, school and community as related to modern living.

430 (630) Basic Driver and Traffic Safety Education (3) The course will explore driver education
in the secondary school, paying particular attention to traffic laws and enforcement, traffic engineering and educational theory. Lesson planning and peer teaching will be evaluated.
435 (635) Advanced Driver and Traffic Safety Education (3) The course will explore advanced driver education concepts of various driving activities involving instructional aids germane to Drivers Education in the public schools (i.e. simulators, range equipment). Prereq: DSED 430 or 630 .

## Early Childhood Education (ECED)

Note: For student teaching courses (402-412), students should check their program of study sheet and student teaching application for other student teaching prerequisites specific to their major.

## 341 Mathematics/Science in Early Childhood

Education (4) Exploration and examination of the content and concepts of the early childhood mathematics and science curriculum. It investigates a study of methods and materials and a review of relevant research. It includes unit planning, lesson planning, simulated teaching and small group instruction in the public schools. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302. Must make a C or better.

351 Language Arts/Social Studies in Early Childhood Education (4) Exploration and examination of the content and concepts of the early childhood language arts and social sciences curriculum. It investigates a study of methods and materials and a review of relevant research. It also includes unit planning, lesson planning, simulated teaching and small group instruction in the public schools. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302. Must make a C or better.

360 Assessment in Early Childhood (3) An investigation of developmentally appropriate measurement and evaluation during the early childhood years that include standardized and teacher-designed tests, and formal and informal assessment. Course also considers the professional and ethical issues associated with assessing young children. Prereq:

Admission to Educator Preparation Program (EPP) and TCED 302 Prereq or Coreq: TCED 303. Must make a C or better.

409 Student Teaching in Kindergarten (6) Supervised student teaching in kindergarten for a minimum of 7.5 weeks. Must be taken with TCED 403 or TCED 412. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses, and Reading requirements.
411 Student Teaching in Pre-Kindergarten (6) Supervised student teaching in Pre-Kindergarten for a minimum of 7.5 weeks. Must be taken with TCED 412. Prereq: Admission to Educator Preparation Program (EPP) and completion of all specialty area and professional education requirements. See note above.

412 Student Teaching Grades 1-3 (6) Supervised student teaching in grades 1-3 for a minimum of 7.5 weeks. Must be taken with TCED 409 or 411. Prereq: Admission to Educator Preparation Program (EPP) and completion of all specialty area and professional education requirements. See note above.

460 (660) Learning: Birth Through Age Eight Years (4) Exploration and knowledge of the learning process in the context of parent-child, teacher-student and school-family-child relationships are the emphases of this course. Cultural diversity and implications of diversity for children birth through age eight years and their learning are addressed. Developmentally appropriate curriculum, instructional material, environments for learning and community resource utilization are integral components of the course. There are 15 clock hours of clinical lab experiences, directed observations and limited participation in educational settings. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302 or permission of instructor. Must make a C or better.

480 (680) Emergent Literacy in the Content Areas: Language Arts, Social Studies, Math, Science and Health (4) A four-hour methods course addressing the content areas of language arts, social studies, math, science and health for the young child with thematic and interdisciplinary teaching strategies appropriate for children in Pre-
kindergarten through Grade Three. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302 or permission of instructor. Must make aC or better.

481 (681) Emergent Literacy (3) Exploration and examination of appropriate resources and strategies for emergent readers from ages 0-8. Methods for encouraging emergent reading skills are investigated. Criteria for book selection, creative links for enhancing literature, techniques in storytelling and literacy data are included. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302 or permission of instructor. Must make a C or better.
485 Creativity and Play (4) A four-hour methods course addressing creativity and play in Pre-kindergarten through Grade Three (birth to age eight years). Prereq: Admission to Educator Preparation Program (EPP) and TCED 302 or permission of instructor. Must make a C or better.

490 Learning Theory and Affective Environment (3) An analysis of the psychological foundations of learning and the application of learning theory to classroom practice, including cognitive, affective and behavioral approaches to classroom discipline and self-discipline. Prereq: Admission to Educator Preparation Program (EPP). Must make a C or better.

700 Early Childhood Growth and Development (3) An advanced study of early childhood development including brain research, theoretical principles and practices, and implications for teaching and learning.

## 710 Curriculum Models in Early Childhood

 Education (3) The study and analysis of past and current models that influence curriculum development in early childhood. Prereq: EDST 710.
## 720 History and Theories of Early Childhood

 Education (3) An examination of the historical, theoretical, and philosophical foundations of early childhood education, and their influence on existing programs for young children and their families.
## 730 Guidance, Discipline, and Classroom

 Environments in ECE (3) Techniques that support the development of healthy self-concepts and self-control within the contexts of early childhood learning environments.740 Developmentally Appropriate Early Childhood Assessment (3) An exploration of developmentally appropriate screenings for young children and their families, diagnostic and normative assessments, play-based and curriculum-referenced assessments, and the use of assessment results to guide instructional practices.

## 750 Trends and Issues in Early Childhood

Education (3) Investigation of current major issues related to young children. An examination of the social, legal, and ethical issues that affect child development and educational programs for children.

## Economics (ECON)

100 American Enterprise System (3) An introductory elective course designed to acquaint students with the various aspects of the U.S. economy, including the free enterprise system, economic issues of public concern, government functions and policies in a market economy and the importance of the evolving global economy.

201 Principles of Macroeconomics (3) An introduction to the economic problem, the basics of supply and demand, national income accounting, fiscal and monetary policy and other topics. Coreq: A college level math course.

202 Principles of Microeconomics (3) An indepth analysis of supply and demand, the economics of production and cost and analysis of firm behavior in various market models, resource markets and the international economy and other topics. Coreq: A college level math course.
311 Intermediate Microeconomic Theory (3)
An indepth analysis of supply and demand and their elasticities, the allocation of resources and price determination in various market models, an analysis of consumption and marginal utility and other topics. Prereq: ECON 201-202.
312 Macroeconomic Theory (3) A thorough analysis of aggregate demand, output, the level of employment, the price level, national income accounting and economic growth. Comparison of classical, Keynesian and other approaches to the employment problem. Prereq: ECON 201-202.

321 International Economics (3) An introduction to basic theories of international trade. World trade and economic growth, world trade and income distribution, basic rationale for free trade and trade protection, national policies affecting international trade, trade agreements, international cartels, international trade accounts and foreign exchange. Prereq: ECON 201 and 202.

322 Economic Development (3) The basic theories of economic development. Overview of world economic development in a historical perspective. Macroeconomic trade and government policies that have influenced international economic growth. International financial assistance to the developing world and its results. Prereq: ECON 201 and 202.
331 Money and Banking (3) Nature and functions of money, role of commercial banks in the monetary and economic system, structure and function of the Federal Reserve System, monetary operations of the treasury, relationship between money and economic activity. Prereq: ECON 201 and 202.

333 International Business (3) The domestic and international dimensions of the relationships among private enterprises, governments and individuals in a changing world. Exploration of the role of governments in maintaining environments conducive to private enterprise including multinational businesses as well as the danger of business concentration both domestic and international. Prereq: ECON 201 and 202.

335 Public Finance (3) Public expenditures, federal and state revenue systems, budgeting and public debt management. Prereq: ECON 201 and 202.

351 Business Forecasting (3) Study of the factors contributing to business fluctuations. A survey of the possible techniques used to analyze current conditions and to forecast future levels of activity as well as applications of selected forecasting models.
Prereq: ECON 201 and 202.
411 Managerial Economics (3) Application of economic theory to business decision making: emphasis on profit objectives, measurement and forecasting demands and costs. Prereq: ECON 201 and 202.

416 Development of Economic Thought (3) An analysis of the origin and development of economic
thought beginning with the traditional and premarket economies and continuing through mercantilism, capitalism, socialism and the mixed economies of the twentieth century. Prereq: ECON 201 and 202.

417 Market Structures (3) An analysis of monopoly and competition in market economies and the interrelationships of market structure, business behavior and economic performance. Prereq: ECON 201, 202 and 311.

471-479 Topics in Economics [topic title]
(3) Selected topics in economics offered on an occasional basis for qualified students. Admission by permission of instructor only.
480 Internships in Economics (1-9) Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. May be repeated for up to a total of nine hours internship credit. A maximum of six hours may be used to fulfill degree requirements. Pass/Fail. Prereq: Departmental approval required; at least Junior standing.

491-492 Independent Study in Economics (3, 3) Special research projects undertaken individually under the supervision of the faculty. Maximum credit available for independent study courses is six hours. Prereq: Senior standing.

710 Managerial Economics (4) Applications of economic theory, management problems from an economic point of view using decision-making tools in managing enterprises.

711 Economics for Secondary Teachers (1-3) Presentation and analytical application of economic concepts with emphasis on methods of relating the concepts to students in grades $9-12$. May be repeated for a maximum of three semester hours. May not be counted toward M.B.A. or M.Ac. degree requirements.

712 Economics for Elementary Teachers (1-3) Presentation and analytical application of economic concepts with emphasis on methods of relating the concepts to students in grades K-8. May be repeated for credit for a maximum of three semester hours. May not be counted toward M.B.A. or M.Ac. degree requirements.

## 713 Selected Topics in Economics [topic title]

(1-6) The study of specific topics in economics. Topics
and prerequisites to be announced. May be repeated for a maximum of six semester hours. May not be counted toward M.B.A. or M.Ac. degree requirements.

## 720 International Business and Economics

(3) The function, purpose and role of business in an international economics context. Included are multi-national firms, international monetary system, balance of payments, government regulations affecting international trade, foreign exchange markets.

## Educational Evaluation (EDEV)

710 Educational Statistics (3) An elementary course in methods applied to educational problems; resolution of assigned or chosen problems in educational statistics.

## 761 Educational Assessment and Evaluation

(3) Construction, use and interpretation of teachermade and standardized instruments for measuring pupil development. Emphasis on data-driven decision-making and an introduction to construction of instruments appropriate for assessing differing student needs. Credit cannot be given for both EDEV 661 and EDEV 761. Prereq: Admission to Educator Preparation Program (EPP).

## Educational Foundations (EDFN)

710 Research in Education and Counseling (3) This course is an introduction to historical, experimental, descriptive, and survey research as they relate to seeking solutions to problems within the field of education. Research techniques, the analysis of research results, and the uses of research are explored. Students will complete in-depth library research, including research for individual classroom purposes, as well as writing research proposals in American Psychological Association (APA) format. The knowledge bases will cover both the consumer and producer perspectives of research. Research methodology, techniques, and literature review information will be addressed. Same as COUN 710. Cannot receive credit for both EDFN 710 and COUN 710 .

711 Data Driven Decision-Making in Education (3) This course applies fundamental knowledge of assessment using project-based learning. Course content includes a review of current school assessments and the technology used to support data driven decision-making. Also included is the analysis, interpretation, and reporting of assessment data to inform curriculum and instructional practices based on the needs of students and educators.

## 720 Multicultural Issues in Education and

Counseling (3) Emphasis is on multicultural education and cultural foundations in education and counseling; developing knowledge, self-awareness and skill competencies for effectiveness in teaching and counseling services in Pre K-12 schools. Same as COUN 721. Credit cannot be received for both EDFN 720 and COUN 721.

721 Diversity and Equity in Higher Education (3) This course will provide opportunities for knowledge and research in areas of multiculturalism, interculturalism, access, program design, government and institutional initiatives, social justice and equity related to underrepresented populations in Higher Education. Students will examine past and present case law and governmental policies and programs that have addressed or attempted to address diversity and equity in colleges and universities. Theories and literature on ethnocentrism, inclusion, diversity, equity, race, religion, sexual orientation, ethnicity, nationalities, gender and age will be discussed and reviewed.

730 Seminar in Post-Secondary Education (3)
Models of instruction applicable to the college level; major problems and issues in higher education.

731 Internship in College Teaching (3) Assignment as an intern in a selected area of college teaching. Prereq: EDFN 730 and consent of instructor.

740 History of Higher Education (3) An introduction to the historical origins and development of American Higher Education. Students will explore the historical foundations of higher education in the United States from European roots and philosophical ideas. Using both epistemological and ontological methods, students will examine the culture, beliefs, values, mission and goals of postsecondary education. Students will study historical, philosophical,
cultural, social, religious, and economic issues that created a unique American higher education model. The course will also discover the theories and philosophies that undergird the institution of higher education. Issues of social justice, diverse institution types, government regulation, access and change and their influences on the academy will be studied.

# Educational Leadership (EDLD) 

710 Instructional Leadership (3) Culturally responsive leaders function comfortably in crosscultural settings and interact harmoniously with people from cultures and races that differ from one's own. An effective school leader identifies culturally responsive instructional practices that guide teachers in planning and executing culturally responsive learning experiences, and provides feedback on how these practices are implemented. When all teachers are purposeful about implementing culturally responsive instructional practices, there is a shared student-centered approach to teaching in which the students' unique identities and cultural strengths are recognized and nurtured to promote relevant and rigorous instruction, student achievement and a sense of safety and social-emotional well-being. Clinical (Field) Experience is required.

711 Recruitment, Retention, and Strategic Enrollment Management (3) An overview of the field of enrollment management focused on the marketing, communications, recruitment, orientation and retention of college students. It examines how enrollment management shapes institutional policy and decisions including budgets, personnel, academic programs and new initiatives. Students will engage in the review of actual enrollment plans and the creation of a strategic enrollment management (SEM) plan for an institution of higher learning.

## 715 Organizational \& Business Management

(3) Focuses on the knowledge, skills, and practices necessary to improve management, communication, technology, school level governance, and operation systems in order to develop and improve data informed and equitable school resource plans and to apply laws, policies, and regulations. Clinical (Field) Experience is required.

730 Family \& Community Engagement (3) Candidates will lead, plan, implement, and evaluate community and family engagement initiatives that promote continuous school improvement. They will explore theory of practice, methods, models, and protocols for school to engage family and community members to maximize each student's academic success and well-being. Candidates will have an opportunity to reflect on their own beliefs, values, and leadership style while considering parental involvement, community partners as well as social, economic, and cultural factors. Candidates will understand the importance of systems that support communication with family members and community partners and the use of data for decision making to promote school improvement and equity for all students including the underserved. (Theory of Action/Logic Model). Clinical (Field) Experience is required.

## 731 Higher Education Finance and Resource

Management (3) This course provides students with an overview of finance and resource management in higher education. The course will provide a basic understanding of the funding and financial management of colleges and universities including distinctions in funding differences and similarities between public and private institutions, 2-year and 4 -year, for profit and HBCUs. Current challenges regarding budget cuts, rising tuition, regulations, accountability, affordability and access will be examined. The curriculum will include discussions, projects, and research on federal and state funding models, advancement and development strategies, and auxiliary services.

## 735 Electronic Tools for Educational Leaders

(3) Assist educational decision-makers to locate, display, analyze and communicate pertinent information to facilitate efficient and effective decisionmaking using electronic technology. Includes the use of technology to communicate with public/ community and school personnel, and all support service components (transportation, food services, record keeping, payroll, purchasing, auditing and personnel records). Prereq: admission to graduate educational leadership program or consent of instructor

745 Measurement and Decision Making (3) Culturally responsive school leaders guide teachers to interpret and use data in ways that recognize the importance of the including students' cultural identities in all aspects of school life. Culturally responsive principals focus on the assets of students when they collect data, ask probing questions to help analyze root causes that may explain the data, and respond by establishing practices that recognize the inherent role and impact of culture and history upon learning and development. When educators intentionally review and respond to data through a culturally responsive lens, they make decisions that acknowledge and reduce privileges, confront individual and institutional bias; and take action for improvement that provide equitable opportunities and equitable outcomes for each student.

750 Clinical Practice I (3) Candidates will utilize a systems approach in collaboration with mentor principals to establish an instructional focus with accompanying strategies to improve student achievement. They will communicate to multiple stakeholders the theory of action that underpins the instructional focus and accompanying strategies. Candidates will demonstrate their proficiency to lead successfully continuous school improvement efforts by: applying systems thinking to implement and continuously monitor the Change Project in alignment with the School Improvement Plan., leading monitoring and evaluating curriculum alignment and equitable instruction and assessments, managing all resources equitably to ensure a safe learning environment for the implementation of the School Improvement Plan. Clinical (Field) Experience is required.

## 755 Equitable and Culturally Responsive Prac-

 tices (3) Effective school leaders actively engage their teams in exploring key principles of equity as a way to understand the communities they serve. Effective school leaders guide their teachers and staff in uncovering their own biases and assumptions, identify key areas for staff development and growth, and facilitate a culture of learning as they integrate practices to address the diverse needs of the students and families within their communities. Effective school leaders are aware of their own personal biases and assumptions in order to guide staff in developing a shared understanding of cultural responsiveness and equity, so that each student can receive the qualityeducation they deserve. Clinical (Field) Experience is required.
760 School Finance \& Educational Law (3)
Ethical and culturally-responsive building-level administrators understand and demonstrate the capacity to promote the current and future success and well-being of each student and adult by applying the knowledge, skills, and commitments necessary to improve management, communication, technology, school-level governance, and operations systems, to develop and to improve data-informed and equitable school improvement plans that support individual student's learning needs, to promote the mission and vision of the school, and to apply laws, rights, policies, and regulations to promote student and adult success. Clinical (Field) Experience is required.

761 Higher Education Law (3) A study of federal and state laws and policy related to institutions of higher education. Students will examine legal and compliance issues facing institutions of higher education. Instruction will cover areas of data and personal privacy (HIPAA and FERPA), disabilities (ADA), student rights and campus safety (Title IX), tort liability, financial compliance (Title IV), and other relevant topics through discussions, projects, research and case studies in higher education.
775 Leading Educational Change (3) Effective school administrators are intentional about advocating for or hiring and retaining a diverse and culturally responsive staff who have the ability to function in cross-cultural settings and with people from different cultures, races, and backgrounds. Effective leaders also look for ways to identify, select, develop, and mentor culturally responsive and diverse staff representing the demographics of the school and community that they serve. An inclusive learning environment respects diversity and equity, selects culturally responsive staff and provides opportunities for students to learn and improve when they are taught by staff who often look like them, have the same shared experiences and who are focused on providing a rigorous and personalized education for each student. Clinical (Field) Experience is required.

780 Clinical Practice II (3) Candidates will utilize a systems approach in collaboration with mentor principals to establish an instructional focus
with accompanying strategies to improve student achievement. They will communicate to multiple stakeholders the theory of action that underpins the instructional focus and accompanying strategies. Prereq: must be taken during the last semester of coursework.

## Educational Studies (EDST)

## 290 Workshop in Education [Title of Work-

shop] (1-3) Workshop on selected topics. No more than nine hours of workshop credit may be applied to an undergraduate degree in education. Can not be repeated for credit under the same workshop title.
440 (640) Selected Problems in Education:
[Title] (3) A study of selected problems and issues affecting education. Prereq: Admission to Educator Preparation Program (EPP) or Instructor's approval.
445 (645) Parenting Across Cultures (3) A course that explores various issues affecting parenting across cultural groups. The interrelationship between culture and parenting is a major focus. Concerns and issues regarding parenting and society's definition of "family" are explored. Styles of parenting and the influence of culture, ethnicity, and socioeconomic status are addressed.

## 450 (650) The School, the Teacher, and the

Law (3) A study of the federal, state and local laws that affect the operation of the school with special emphasis on legal rights and responsibilities of both students and school personnel.

## 455 Educational Travel Study [Selected Top-

 ics] (1-6) A Course designed as an educational travel experience in Educational Studies within the United States or internationally under the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course with different topics. A maximum of sex credit hours can be counted towards an Educational Studies degree. Not regularly offered. Prereq: Requires instructor's approval.460 (660) Education in a Pluralistic Society (3) The study of issues that exist in teaching culturally different students in a multicultural school setting.
710 Models of Instruction, Curriculum Development and Advanced Teaching Strategies (3) Advanced principles of curriculum and instruction as applied to education; study of a variety of curriculum designs used regularly or experimentally; development and organization of the curriculum; analysis of current practices, problems and trends in education; an exploration of significant alternative approaches to teaching in education; examination of ethical practices related to implementation of programs with consideration given to issues of diversity and school culture.

720 Introduction to Leadership (3) In this course, students will examine their development and expression of leadership through self-reflection, activities, conceptual theories and external projects. The interpersonal and cultural skills and practices needed to be an effective and compelling leader of postsecondary institutions will be the focus. Topics will include, leadership attributes, traits, strengths, philosophy, styles, skills, vision, symbols, climate, inclusion, managing conflict, ethics and obstacles. Students will engage with current exemplary leaders in colleges and universities to explore leadership in practice.

## 725 Integrated STEM Curriculum Design

 for Middle School 5-9 Teachers (3) Effective instructional strategies that support STEM learning and integrate STEM content and skills as well as cross-disciplinary problem-solving skills, reasoning, communication, connections, and representation of STEM through well-planned instructional activities.740 Project in Education (3) The student will select a specific project and develop this project through research and implementation in a specified educational setting. Prereq: 18 graduate hours and permission of instructor. May not be repeated for credit without permission of the Department of Educational Studies.

745 Workshop in Education: [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours of workshop credit may be applied to a graduate degree in education. Cannot be repeated
for credit under the same workshop title. Prereq: Instructor's approval.

750 Teaching with Technology (3) This course provides a research-based overview of the use of a variety of media and technology tools as an integrated part of the teaching and learning process. Emphasis is on current technology-related issues in schools and the use of technology to promote learner-centered classroom environments. Credit cannot be received for both EDST 750 and IDT 750.

753 Student Development and Engagement in Higher Education (3) This course is designed to familiarize students with major theories of student development, and apply key theoretical concepts that address students' cognitive, intellectual, identity/ personality, ethical, moral, and career during the college years. Engagement will be examined in terms of the intellectual, emotional, behavioral, physical, social and cultural activities and opportunities afforded students in colleges and universities. Students will conduct research on various development and engagement theories and practices in postsecondary education.
760 Organization and Administration of Postsecondary Education (3) The study of the organizational structure of postsecondary institutions, knowledge and skills necessary for effective administrators.

770 Teaching Adult Learners (3) Exploration of adult and continuing education including analysis of non-traditional learners in higher education. Emphasis is placed on history, social impact, current practices, and research in the areas of basic education, leisure learning, community services, and customized training. Provides an analysis, comparison, and contrast of a range of teaching styles and models available to university faculty. Particular emphasis will be directed toward teaching improvement models and assessment skills.

780 Mentoring, Consulting and Coaching the Postsecondary Learner (3) An analysis of the issues, techniques and practices related to mentoring the postsecondary learner.

## Elementary Education (ELED)

413 (613) Mental Health in Schools (3) Influences within the school which affect the self-concepts, motivation and social adjustment of students and teachers. Emphasis on means for promoting mental health in the classroom. Opportunity for selfexploration provided.

## 430 (630) Problems in Teaching Language

 Arts and Social Studies in the Elementary School (3) Individual or group work on assigned or chosen problems in English and social studies. Prereq: Admission to Educator Preparation Program (EPP).
## 433 (633) Contemporary Approaches to Teaching Arithmetic and Science in the

 Elementary School (3) Special investigation concerning effective teaching of arithmetic and science in the elementary school. Use of the current curricula materials. Individual or group work on assigned or chosen problems in elementary arithmetic and science.455 (655) Child Psychology (3) An overview of the principles of learning and behavior applicable to young children's physical, social and intellectual development. Emphasis on the current research findings related to young children and the process of education. Prereq: Admission to Educator Preparation Program (EPP).
490 (690) Workshop in Education: [Title of
Workshop] (1-3) Workshop on selected topics. Same as SEDU 420 (620) if same Title of Workshop. No more than six hours of workshop credit may be applied to an undergraduate or graduate degree in education. Prereq: Instructor's approval.

730 Methods of Teaching Language Arts and Social Studies in the Elementary Classroom (3) Exploration and examination of the content and concepts of the elementary language arts and social studies curricula as well as an investigation of methods and materials and a review of relevant research. Unit planning, lesson planning, simulated teaching and small group instruction in the public schools are required. Directed experience in public schools.

Prereq: TCED 780, TCED 705 (for MSIL Elem/Sec major only) or SPED 460/660 (for MSIL K-12 SPED majors only), and Admission to Educator Preparation Program (EPP).
731 Methods of Teaching Mathematics and Science in the Elementary Classroom (3) Exploration and examination of the content and concepts of the elementary mathematics and science curricula as well as an investigation of methods and materials and a review of relevant research. Unit planning, lesson planning, simulated teaching and small group instruction in the public schools are required. Directed experience in public schools. Prereq: TCED 780, TCED 705 (for MSIL Elem/Sec major only) or SPED 460/660 (for MSIL K-12 majors only), and Admission to Educator Preparation Program (EPP).
793 Student Teaching Grades K-4 (3) Supervised student teaching in grades K-4 for a minimum of 7.5 weeks. Must be taken with ELED 794.
794 Student Teaching Grades 5-8 (3) Supervised student teaching in grades 5-8 for a minimum of 7.5 weeks. Must be taken with ELED 793.

795 Student Teaching Grades K-6 (3) Supervised student teaching in grades K-6 for a minimum of 7.5 weeks. To be taken by candidates seeking licensure in K-12 programs only.

## Engineering (ENGR)

100 Society and Technology (3) Historical review of the interaction between society, technology and engineering. Three lecture hours.
101 Engineering Graphics (3) Introduction to technical drawing and introduction to the computer for use in computer assisted drawings. Two lecture hours and one two-hour lab. Coreq: MATH 251.
121 Statics (3) Application of vector algebra to represent forces and moments in two and three dimensions and the relationship of these forces systems to the equilibrium of rigid bodies. Friction centroids and moments of inertia. Three lecture hours. Prereq: MATH 251.

201 Engineering Methods (2) Engineering problem solving emphasizing matrix methods. Two lecture hours. Prereq: MATH 251.

220 Strength of Materials (3) Concepts of stress and strain; stress-strain relations; transformations of stress and strain; applications including axially loaded members, torsion of circular shafts, bending of beams, buckling of columns, stress in spherical and cylindrical thin-walled pressure vessels. Shear and moment diagrams, combined stress. Three lecture hours. Prereq: MATH 252 and ENGR 121.

231 Digital Logic (3) Number systems and codes. Boolean Algebra. Gate-level digital electronics with hardware reduction strategies. Combinational and sequential logic. Three lecture hours. Prereq: Sophomore standing.

232 Linear Circuits I (3) A first course in linear circuits. Basic principles of resistors, operational amplifiers, capacitors, and inductors; DC and AC circuit analysis techniques (Ohm's law, Kirchhoff's laws, mesh analysis, nodal analysis and circuit theorems); Steady-state AC phasor analysis, complex power and power factor. Students cannot receive credit for both ENGR 230 and ENGR 232. Three lecture hours. Prereq: MATH 252. Coreq: PHYS 221.
233 Electrical Laboratory I (1) Lab methods, experiments and design approaches that illustrate and apply digital logic and linear circuit topics covered in ENGR 231 and ENGR 232. One three-hour lab. Prereq: ENGR 231. Coreq: ENGR 232.

241 Dynamics (3) The relationship between the motion of particles and rigid bodies and the forces which act upon them. Newton's laws of motion. Three lecture hours. Prereq: MATH 252, PHYS 220 and ENGR 121.

## 301 Computer Aided Engineering/Design

Tools (1) Discipline specific software tools are used to model engineering problems. Students apply software targeted to their engineering concentration. One three-hour lab. Graded on Pass/Fail basis. Prereq: Junior standing and instructor's approval.

302 Computer Aided Manufacturing (CAM)
Laboratory (1) An introduction to tool path generation using manual G\&M programming and CAM software. Parts will be fabricated using Computer Numerical Control (CNC) machine tools. In addition to CNC turning and milling operations, two-dimensional cutting operations including plasma, laser, water jet
and electrical machining are covered. One three-hour lab. Prereq: ENGR 301 (Mechanical concentration). Coreq: ENGR 383.
310 Engineering Materials (3) Correlation of atomic structure, crystal structure and microstructure of solids with mechanical, physical and chemical properties of engineering significance. Two lecture hours and one three-hour lab. Prereq: CHEM 121 and ENGR 220.

## 311 Engineering Applications of Probability

 and Statistics (3) Basic knowledge of probability theory and statistical inference for use in engineering. Theory and practical applications of random variables and probability distributions; estimation of statistical parameters; and hypothesis testing. Three lecture hours. Prereq: MATH 320.313 Engineering Internship (1) Work experience during one summer or semester for a business, industry or government agency, on-site, in an engineering intern (apprenticeship) position which is approved by the department chair. A final report is required. Students who complete the co-op program will be allowed to substitute their last co-op semester for this course. Students enrolled in this course will be considered full-time by the College of Engineering and Natural Sciences. Prereq: At least Junior standing and approval of the Department Cbair.

315 Engineering Analysis (3) Formulation and solution of differential equations typical to engineering. Emphasis will be placed on classical solution techniques of ordinary differential equations and Laplace transforms. Three lecture hours. Prereq: MATH 252.

315H Honors Engineering Analysis (3) Formulation and solution of differential equations typical to engineering. Emphasis will be placed on classical solution techniques of ordinary differential equations and Laplace transforms. A project comparing a differential equation model to actual data is required. Three lecture hours. Prereq: MATH 252 and instructor's approval.

316 Signals and Systems (3) Classification of signals and systems, convolution representation of systems, response of linear systems to periodic and finite-energy signals, system modeling by differential equations, Fourier series and transforms, frequency domain analysis of systems. Three lecture hours.

Prereq: ENGR 232, ENGR 241 and either ENGR 315 or MATH 330.

## 317 Computational Methods and Numerical

Analysis (3) An introduction to numerical solutions of real-world engineering problems using Excel and structured programming in MATLAB. Solution techniques for nonlinear equations, systems of linear equations, numerical differentiation, numerical integration, and nonlinear ordinary differential equations will be used to solve engineering analysis problems. Three lecture hours. Prereq: ENGR 241
and 315.
331 Semiconductor Electronics (3) Basic electronic devices including diodes, bipolar junction transistors, and field-effect transistors; elementary power supplies and voltage regulation, transistor applications, amplifier fundamentals, operational amplifier applications, and small-signal transistor amplifiers. Three lecture hours. Prereq: ENGR 231 and ENGR 232.

332 Linear Circuits II (3) A second course in linear circuits (following ENGR 232). RLC Circuits, three-phase circuits, magnetically coupled circuits, frequency response, and two-port networks. Three lecture hours. Prereq: ENGR 232.
333 Electrical Laboratory II (1) Lab methods, experiments and design approaches that illustrate and apply semiconductor electronics and linear circuit topics covered in ENGR 331 and ENGR 332. One three-hour lab. Prereq: ENGR 233 and ENGR 331. Coreq: ENGR 332.

340 Thermodynamics (3) Fundamentals of engineering thermodynamics. The phases of a pure substance and their thermodynamic properties. The concept of work and heat, conservation of mass, conservation of energy, entropy and the second law of thermodynamics using closed system and control volume analyses. Three lecture hours. Prereq: PHYS 220. Coreq: MATH 320.

341 Fluid Mechanics (3) Fluid properties and behavior, fluid statics and dynamics of ideal and real fluids. Continuity, momentum, energy equations for control volume analyses. Laminar and turbulent incompressible flows. Pipe flows, open channel flow, lift and drag calculations. Three lecture hours.

350 Principles of Land Surveying and Geomatics (3) Engineering surveying measurements, methods and computations. Mensuration, leveling, traversing, topographic mapping. Earthwork computations, horizontal and vertical curves. Two lecture hours and one three-hour lab. Coreq: MATH 160 or 251.

351 Basic Structural Analysis (4) Analysis of statically determinate and indeterminate structural elements and systems for loads and deformations. Analysis of beams, trusses, floor systems and frames. Determination of gravity and liveloads. Determination of deformations by the elastic curve and by energy methods. Indeterminate analysis using force, displacement and approximate methods. Use of computer spreadsheets. Four lecture hours. Prereq: ENGR 220.

352 Transportation Engineering (3) Analysis of the characteristics of transportation systems, including vehicle dynamics, volumes, speeds, capacities, roadway conditions and accidents. Traffic studies. Highway design including intersections, horizontal and vertical alignment, and pavement design. Two lecture hours and one three-hour lab. Prereq: MATH 252. Coreq: ENGR 311.

353 Hydraulics and Hydrology (3) Fundamentals of open channel hydraulics and engineering hydrology. Hydrologic cycle, qualitative and quantitative hydrology and related practical engineering computations involving precipitation, runoff and discharge. Engineering analysis of practical open channel flows; energy, depth, slope and transient considerations. Three lecture hours. Prereq: ENGR 311. Coreq: ENGR 341.

356 Construction Materials (2) Understanding the engineering properties of various construction materials such as: aggregates, masonry products, timber products, bituminous material, steel, and structural connections. One lecture hour and one three-hour lab. Prereq: ENGR 220
361 Digital Signal Processing (4) Properties of continuous and discrete signals. Z-transform and Fast-Fourier Transform. Sampling theorem and IIR and FIR Digital filtering techniques. Three lecture hours and one three-hour lab. Prereq: ENGR 316.

370 Vibrations (4) Free and forced vibration of translational and rotational single- and multi-degree-of-freedom mechanical and structural systems. System modeling and analytical and computer simulated response to periodic and general input excitations. Selection of system parameters to achieve desired response. Resonance and rotating unbalance. Modal analysis of multi-degree-of freedom systems. Experimental verification of analytical results, with report writing. Three lecture hours and one three-hour lab. Prereq: ENGR 220, 241 and 315.

371 Advanced Strength of Materials (3)
Development and application of the equations of equilibrium, strain-displacement equations, and stress-strain relationships to plane stress, plane strain and axisymmetric problems. Solution of problems involving thick walled cylinders, interference fits, rotating disks, torsion of non-circular cross sections, and non-symmetric bending. Three lecture hours. Prereq: ENGR 220.

380 Engineering Economy (3) Economic decision making for engineering projects and capital expenditures proposals. Concepts of time value of money, cash flow and capital rationing. Basic comparative models for evaluating alternatives. Depreciation and tax consequences. Students cannot receive credit for both INEG 380 and ENGR 380. Three lecture hours. Prereq: MATH 251 and Sophomore standing.
381 Human Factors in Engineering (3) A study of the limitations of humans in production and other man-made systems. Analysis of stress and environmental factors such as noise, lighting and atmospheric conditions on performance of tasks. Three lecture hours. Prereq: Instructor's approval.

## 382 Metals Casting and Joining Processes (3)

Process concepts providing an operational knowledge of the practice and theory of metals casting, welding and thermal cutting. Application of metallurgical principles to the casting of metals. Study of mold materials, metal flow, and cast metals. Analysis and application of primary and secondary processing methods for the manufacture of products. Development of process designs and practices appropriate for product specifications, inspection and process control. Two lecture hours and one three-hour lab.
Prereq: ENGR 220 and ENGR 310.

383 Material Forming Processes (2) Concept design steps for metal forming and stamping dies. Analysis and control of metal forming processes. Analysis and application of secondary processing methods for the manufacture of products. Two lecture hours. Prereq: ENGR 220. Coreq: ENGR 302.

409 Engineering Design and Project Management (2) An introduction to engineering design and project management. Topics include the design process, establishing goals, objectives, and requirements, project planning, estimating, scheduling, tracking and monitoring, team work, resolving conflicts, and engineering ethics in the context of design and project management. Two lecture hours. Coreq: ENGR 410.

410 Senior Design I (1) Working as individuals or in teams, students conduct an engineering design project while working under the direction of a faculty adviser. Students are required to organize and develop a plan for accomplishing project activities; establish goals, objectives and design requirements; gather information; develop concepts; perform trade studies, analyses and engineering assessments; and develop engineering design packages that may include system diagrams, schematics, CAD models and assembly and part drawings. A summary poster presentation required. Prereq: Senior standing and approval of the student's adviser.

411 Senior Design II (3) A continuation of ENGR 410. Working as individuals or in teams, students complete the design project defined in ENGR 410. This capstone design project requires that students apply knowledge gained in previous coursework to solve practical, open-ended engineering problems encountered on a realistic project having deadlines and performance requirements. Some projects may require hardware fabrication and product realization. A final report, poster and presentation are required. Prereq: ENGR 301 and ENGR 410.

413 Engineering Management (3) Human, quality, organizational, legal and ethical aspects of the engineering profession. Three lecture hours. Prereq: instructor's approval.

440 Energy Systems (3) A continuation of ENGR 340. Applications involving entropy as a property and The Second Law of Thermodynamics. Thermo-
dynamic analyses of vapor power cycles, gas power cycles, refrigeration cycles, nozzles and psychrometric applications. Analyses of reactive gas mixtures, hydrocarbon fuels and combustion. Three lecture hours. Prereq: CHEM 121 and ENGR 340.

450 Reinforced Concrete Design (4) Reinforced concrete as a modern construction material. Aggregate and Portland cement properties and mix design. Structural analysis and design of rectangular beams, T-beams, beam-columns and one-way floor slabs using the American Concrete Institute (ACI) 318 code. Standard lab tests and design project with test verification. Determination of wind and earthquake loads. Use of computer spreadsheets. Three lecture hours and one three-hour lab. Prereq: ENGR 351.

451 Geotechnical Engineering (4) Introduction to soil mechanics, shallow foundations and retaining structures. Soil identification and classification, compaction, effective stress, consolidation, shear strength, vertical and lateral stress and slope stability. Standard lab tests. Response of soil to foundation and retaining structure loads, including settlements and stability. Design of shallow foundations and retaining structures. Three lecture hours and one three-hour lab. Prereq: ENGR 220. Coreq: ENGR 351.

452 Steel Design (3) Structural analysis and design of beams, columns, axial members, frames and connections using the American Institute of Steel Construction (AISC) Manual. Use of computer spreadsheets. Three lecture hours. Prereq: ENGR 351.

453 Pavement Design and Analysis (3) Design principles of highway pavements. Pavement stresses and strains. Flexible and rigid pavement materials testing and mix design. Thickness design of asphalt and concrete pavements. Pavement distresses and evaluation. Two lecture hours and one three-hour lab. Prereq: ENGR 220.

454 Computational Hydraulics and Computational Hydrology Modeling (3) Basic functional Geographic Information Systems skills necessary to support hydraulic and hydrologic modeling are covered. The underlying equations supporting the computational modeling of open channel hydraulics and practical, engineering hydrology, are reviewed.

A series of exercises composed of practical applications utilizing widely used and accepted computational hydraulic and computational hydrologic software. Prereq: instructor's approval.
455 Timber Design (3) Identify the structural properties of wood and the effects of various physical, environmental, and manufacturing factors upon wood strength and stiffness. Design solid-sawn and engineered wood structural members such as beams, columns, and beam columns. Design plywood structures. Analyze and design structural connections for wood and engineered wood structures. Design wood diaphragms and shear walls. Prereq: ENGR 351.

456 Environmental Engineering (3) Fundamental concepts in environmental engineering dealing with water, air, and land pollution and other areas such as environmental laws and regulations, mass balance approach, and pollution control technologies. Basic principles of water and wastewater characteristics and treatments. The course will include design components related to drinking water treatment plants, waste water treatment plants, and distribution systems. Two lecture hours and one three-hour lab. Coreq: ENGR 341. Prereq: CHEM 121.

457 Environmental Engineering II (3) Advanced topics in environmental engineering with an emphasis on system analysis and design. Laws and regulations and design component governing the storage, transportation, treatments and disposal of municipal waste. Other topics include sustainability, energy resources, green engineering, risk assessment. The course will include design components of sewer systems, advanced wastewater treatment plants and landfills. Three-hours lectures. Prereq: ENGR 456.

## 459 Engineering Design and Construction

Management (2) An introduction to construction engineering and management concepts. Topics include understanding the design process. Introduction to engineering design as it relates to the preparation of contract drawings and the ability to read and properly interpret drawings. Understanding construction delivery and procurement methods, types of construction contracts, project planning,
estimating and scheduling, quality assurance and control in the design and construction process, health and safety, and engineering ethics in the context of design and project management. Two lecture hours. Coreq: ENGR 410.

460 Microprocessors and Computer Organization (3) Computer organization, memory hierarchy, digital interfacing, use of microprocessors in common consumer applications, study of contemporary general and special purpose architectures. Three lecture hours. Prereq: ENGR 231, ENGR 232, ENGR 233 and CSCI 221.

461 Communication Systems (3) Analog and digital communication systems, information coding, modulation, signal processing techniques, software and hardware implementations, contemporary wireless, audio and video applications. Three lecture hours. Prereq: ENGR 231, 311, and 316.

462 Linear Control Systems Design (3) An interdisciplinary approach to feedback control system analysis and design. Block diagrams, transfer functions, stability, steady state error, time response, root locus and Bode techniques, lead/lag compensators and design of PID controllers. Three lecture hours. Prereq: ENGR 232, 241, and 315.

463 Electrical Power Systems (3) Fundamentals of power systems analysis, transformers, per-unit analysis, transmission line parameters, transmission lines, and power flow. Three lecture hours. Prereq: ENGR 201, ENGR 315 and ENGR 332.

464 Engineering Electromagnetics (3) Application of physical laws of electricity and magnetism to the design of electrical components, including resistors, capacitors, inductors, and transmission lines. Transient and steady-state behavior of electromagnetic waves. Three lecture hours. Prereq: PHYS 221, ENGR 232 and MATH 320.

465 Electric Machines (3) Introduction to magnetic circuits and transformers, electromechanical energy conversion principles, three-phase Circuits and power, phasors, DC motors and generators, induction machines, synchronous machines and drives, inverters, DC-DC conversion, and motor control. Three lecture hours. Prereq: ENGR 332 and PHYS 221.

466 Digital Systems Design (3) Techniques and strategies for designing digital systems. Three lecture hours. Prereq: ENGR 231.

467 Embedded Systems Laboratory (1) The fundamentals of integrating micro-controllers, sensors, and actuators to create embedded systems. One three-hour lab. Prereq: ENGR 231, ENGR 232, ENGR 233 and CSCI 221.

471 Heat Transfer (3) An introduction to the theory of conduction, convection and radiation and their use in engineering applications. Steady and transient heat transfer solutions with analytical and numerical solutions. An introduction to heat exchanger analysis and multi-phase heat transfer. Three lecture hours.
Prereq: ENGR 317 and ENGR 341.
472 Kinematics/Dynamics of Machines (4)
Analysis and synthesis of mechanisms and machine systems subjected to dynamic forces and motion constraints. Topics covered include classical analysis and synthesis of mechanisms, computer modeling and simulation of machine dynamics, rotating unbalance and analysis and synthesis of cams and geared systems. Three lecture hours and a three-hour lab.
Prereq: ENGR 241, ENGR 315, ENGR 317, and MATH 320.

473 Machine Design (3) Fundamental principles, including stress analysis and design considerations for static and fatigue strength. Design and selection criteria for mechanical components including fasteners, bearings, gears, and miscellaneous elements used in mechanical systems. Three lecture hours. Prereq: ENGR 371 and 472.
476 Applied Finite Element Analysis Lab (1) Introduction to the application of the finite element method to the solution of stress, vibration, heat transfer, and fluid dynamics problems using commercial finite element software. One three-hour lab. Prereq: ENGR 371 and 472. Coreq: ENGR 473.

477 Gas Dynamics (3) An examination of topics in one-dimensional compressible flows. Topics include sonic velocity, Mach numbers, isentropic flow, nozzles, diffusers, normal and oblique shocks, flow with friction and heating. Three lecture hours. Prereq: ENGR 341. Coreq: ENGR 317.

481 Machine Vision and Robotics (3) Introduction to the design, programming and integration of robotic systems in industrial applications. Includes the hardware, software and methods used in high speed image processing; methods for interfacing vision systems with robots and other automated systems. Two lecture hours and one three-hour lab. Prereq: ENGR 317. Coreq: ENGR 483.

483 Industrial Controls I (3) Programmable logic controllers and associated hardware. Electrical hardware including digital I/O, switches, and relays. Mechanical hardware including pneumatic and hydraulic system fundamentals. Emphasis on information at the device and machine levels. Two lecture hours and one three-hour lab. Prereq: ENGR 231. Coreq: ENGR 232 and ENGR 233.

484 Industrial Controls II (3) A continuation of ENGR 483. Analog I/O, PID control loop setup and tuning, and PLC networking. Emphasis on information at the device, machine, and system levels. Two lecture hours and one three-hour lab. Prereq: ENGR 232, ENGR 233 and ENGR 483.

## 485 Polymer Manufacturing Processes (3)

Analysis of polymer and elastomeric material behavior in processing, mechanics of processing, identification of appropriate processes, diagnosis of process related problems and mathematical modeling of process designs. Three lecture hours. Prereq: ENGR 301 (Mechanical Concentration) and ENGR 310.

486 Quality Engineering (3) Practical and statistical engineering methods to improve product quality and process design in a manufacturing environment. Topics covered will include manufacturing metrology, geometric dimensioning and tolerancing (GD\&T), statistical process control and methods (SPC), quality standards, and the use and performance of measuring devices in the manufacturing environment. Three lecture hours. Prereq: ENGR 311.

## 487 Hydraulic and Pneumatic Systems Design

 (3) A study of fluid power components and their application in engineered systems including design criteria, system performance, and standardized symbols and schematics. Performance characteristics and differences are discussed. Three lecture hours.Prereq: ENGR 241 and 341.

490 Special Topics (Title of topic) (1-3) Selected topics relating the state-of-the-art in engineering science and engineering design. Engineering subjects which are of current interest and importance but are not covered in depth in any other course. May be repeated for credit. Prereq: Approval of advisory committee and dean.

## Engineering, Civil (CIEG)

## 354 Advanced Land Surveying and Geomat-

 ics (3) Principles of the Global Positioning Systems (GPS), mapping surveys, mapping, astronomical observations, control surveys and geodetic reductions, state plane coordinates, boundary surveys, surveys of public lands, construction surveys, horizontal curves, vertical curves, volumes, photogrammetry and an overview of geographic information systems. Two lecture hours and three-hour lab. Prereq: ENGR 350. (Same as AGET 354)454 Land Surveying with GPS (3) Land surveying techniques and methodologies using survey-grade Global Positioning Systems (GPS). Topics include: the GPS signal, biases and solutions, GPS receivers and GPS surveying methods (static, differential GPS [DGPS], kinematic, pseudokinematic, rapid static, on-the-fly and real-time kinematic [RTK]), coordinates, planning a GPS-based survey, observing (equipment, reconnaissance, monumentation, logistics) and postprocessing. Techniques for proper utilization of RTK and DGPS. Two lecture hours and two-hour lab. Prereq: ENGR 454. (Same as AGET 454)

456 Boundary Control and Legal Principles
(3) Role of the surveyor in boundary establishment, creating GLO boundaries, creating nonsectionalized boundaries, locating easements and reversions, resurveying and retracing sectionalized lands, locating sequential conveyances, locating simultaneously created boundaries and locating combination descriptions and conveyances. Fundamentals associated with the ownership, transfer and description of real property; federal and state nonsectionalized land surveys; and riparian and littoral boundaries. Surveyor ethics, liability and professionalism. Prereq: ENGR 350. (Same as AGET 456)

## 458 Subdivision Site Planning and Devel-

 opment(3) Physical elements of designing land subdivision including: sustainability and site design, site analysis, site grading (soil properties, slope stability, erosion and sediment control), designing for people, street and parking lot design, infrastructure (cul-de-sac design, parking lot design, streets, etc.), landscape restoration (wetlands, streams, vegetative cover, erosion damage, brownfield redevelopment, etc.), site layout, vegetation in the site plan, project management issues, historic landscapes and preserving the land and landscape and culture. Two lecture hours and two-hour lab. Prereq: ENGR 350. (Same as AGET 458)
## Engineering, Industrial (INEG)

310 Operations Management (3) Management of business transformation processes. A survey of the basic concepts, principles and practices involved in the design, implementation, operation and control of business processes (operations) in contemporary business organizations. Emphasis is placed on the integration of the operation function with other disciplines to foster achievement of strategic and tactical goals in both manufacturing and service organizations. Topical coverage includes operations strategy, product/service design, process design, contemporary quality management, forecasting, capacity planning, facility location and layout, work design and scheduling, production planning and control with a broad emphasis on goal-driven process and productivity management and quality management. Prereq: MATH 210 and either MGT 300 or MGT 301, or ENGR 311 and Instructor Approval. (Same as MGT 310)

## 312 Introduction to Management Science (3)

Introduction to quantitative methods used in business decision making. Topical coverage includes mathematical programming, dynamic and network programming, multi-objective decision modeling, decision theory, simulation, inventory models and waiting lines. Computer software will be used to analyze application problems in business and economics. Prereq: CSCI 201 and MGT 310, or INEG 310. (Same as MGT 312)

330 Process Control and Improvement (3) A methodology for selecting, defining, measuring, stabilizing, evaluating and improving both production and service processes is presented. A variety of analytical methods are utilized in the sequence of instruction including the seven simple tools of quality, metrology, SPC, process capability analysis and experimental design. Prereq: Junior standing. (Same as MGT 330)

332 Quality Management Systems (3) Covers the American Society of Quality (ASQ) Body of Knowledge Sections I, II \& IV. Addresses the evolution of quality from the beginning of the 20th Century to the present day. Includes topics from elements of current Quality Management Systems and Auditing to important elements of every Quality Management System essential to the success of active management systems.

## 334 Process and Service Design and Control

(3) Covers the American Society of Quality (ASQ) Body of Knowledge Sections III \& IV. Explores management and control of processes, products, and services. Within this class, the student will learn about the importance of monitoring and measurement systems in quality. Included within this class is a workshop that provides hands on experience with measurement tools (Gage Reliability \& Reproducibility, Bias, Accuracy, Linearity, Stability, Discrimination and Measurement Uncertainty). Prereq: MATH 210 or ENGR 311.

## 336 Quantitative Methods and Improvement

(3) Covers the American Society of Quality (SAQ) Body of Knowledge Sections V \& VI. Addresses the mathematical tools needed in the monitoring and measurement activities used in a quality management system environment. Includes methods for Continual Improvement of processes, systems, products and personnel. Prereq: MATH 210 or ENGR 311.

402 Industrial Safety (3) Accident prevention, control and record keeping, safety standards, codes and laws. Fundamentals of industrial hygiene, occupational safety and health. Organization and development of safety programs. Prereq: Junior standing or instructor's approval.

412 Service Operations Management (3) A study of operations management specific to the
service sector. Emphasis is on formulating service strategy, designing and improving the service delivery system, and matching supply and demand in service operations. Topics include strategic positioning and service strategy, internet strategy, environmental strategy, new service development, managing service experiences, front- and back- office interface, offshoring and outsourcing, analyzing processes, service quality, yield management, inventory management, and waiting time management. Prereq: MGT 310 or INEG 310. (Same as MGT 412)

## English (ENGL)

105 English Composition (3) Introduction to the fundamentals of written discourse. Study of rhetoric, grammar, and style as means to effective prose, with an emphasis on the writing process. Writing Center visits embedded in assignments. Readings and concomitant writing assignments. Predominantly a skills course. Mandatory placement. Students may also elect to take ENGL 105 in place of 111 to receive extra support during the writing process. Students must complete ENGL 105 and 112 or 113 in sequence. In order to proceed to ENGL 112, students must complete ENGL 105 with a grade of C or higher.

## 111 English Composition (3) (TBR: ENGL

1010) Introduction to the fundamentals of written discourse. Study of rhetoric, grammar and style as means to effective prose. Readings and concomitant writing assignments. Predominantly a skills course. Students must complete ENGL 111 and 112 in sequence. In order to proceed to ENGL 112, students must complete ENGL 111 with a grade of C or bigher.

111H-112H Honors English Composition (3,
3) An introduction to written discourse for students with Enhanced ACT scores in English of 28 or above.

112 English Composition (3) (TBR: ENGL 1020) Further study of written English and practice in composition. Readings and research writing with documentation. Predominantly a skills course. Students must complete ENGL 111 and 112 in sequence. For successful completion of ENGL 112, students must earn a grade of C or higher.
113 English for Technical Writers (3) Technical writing is the art and science of translating complex
information into the language used by the intended audience. Technical writing is widely used in career paths, including computer science, robotics, bioengineering, and agriculture. The intent of this class is to prepare students majoring in one of the applied sciences for the type of technical writing that they will be exposed to within their specific career. Students engage in conveying technical information in a clear, concise, and coherent manner to a variety of audiences. Exercises are taught through a variety of genres such as risk analysis reports; instructional memos; design/use/analysis reports; and technical reports. Key competencies include collecting, analyzing, and organizing information. In order to proceed to ENGL 113, students must complete ENGL 105 or 111 with a grade of C or higher.

200 Introduction to English Studies (3) Principles of and practice in literary analysis, including the opportunity to read and evaluate major texts, study rhetorical principles, and explore various theoretical approaches to literature. Because ENGL 200 explores basic concepts of literary study, it should be taken early in a student's career. Prereq: ENGL 112, 112H, or 113.

250 British Literary Tradition (3) (TBR: ENGL 2210) English literature from Beowulf through the Neoclassic period. Prereq: ENGL 112, 112H, or 113.

## 250H Honors British Literary Tradition (3)

The literature of Britain from its beginnings through the eighteenth century. Limited class size allowing in-depth discussions, projects and presentations. Open to students who have demonstrated superior academic quality. Prereq: ENGL 112, 112H, or 113 and departmental approval.
251 British Literary Tradition (3) (TBR: ENGL 2220) English literature from the Romantic period to the present. ENGL 251 may be taken before ENGL 250. Prereq: ENGL 112, 112H, or 113.

## 251H Honors British Literary Tradition (3)

The literature of Britain from the romantic period to the present. ENGL 251 H may be taken before ENGL 250 H . Limited class size allowing in-depth discussions, projects and presentations. Open to students who have demonstrated superior academic quality. Prereq: ENGL 112, 112H, or 113 and department approval.

260 American Literary Tradition (3) (TBR:
ENGL 2110) American literature from the preColonial period through the Romantic period. Prereq: ENGL 112, 112H, or 113.

260H Honors American Literary Tradition (3)
American literature from the pre-Colonial period through the Romantic period. Limited class size allowing in-depth discussions, projects and presentations. Open to students who have demonstrated superior academic quality. Prereq: ENGL 112, 112H, or 113 and departmental approval.

261 American Literary Tradition (3) (TBR:
ENGL 2120) American literature from the Realistic period to the present. ENGL 261 may be taken before ENGL 260. Prereq: ENGL 112, 112H, or 113.

## 261H Honors American Literary Tradition

(3) American literature from the Realistic period to the present. ENGL 261 H may be taken before ENGL 260 H . Limited class size allowing in-depth discussions, projects and presentations. Open to students who have demonstrated superior academic quality. Prereq: ENGL 112, 112H, or 113 and departmental approval.
270 World Literature (3) (TBR: ENGL 2310) A survey of world masterpieces (excluding American and British writers) from the beginnings through the Renaissance. Prereq: ENGL 112, 112H, or 113.

271 World Literature (3) (TBR: ENGL 2320) A survey of world masterpieces (excluding American and British writers) from the eighteenth century to the present. ENGL 271 may be taken before ENGL 270. Prereq: ENGL 112, 112H, or 113.

305 (505) The Art of the Essay (3) Advanced study in the theory and practice of expository writing. Prereq: ENGL 112, 112H, or 113.

310 (510) Fiction Workshop (3) Principles of and practice in writing fiction. Prereq: ENGL 112, 112H, or 113.

311 (511) Creative Nonfiction Workshop (3) Principles of and practice in writing creative nonfiction. Prereq: ENGL 112, 112H, or 113.

315 (515) Poetry Workshop (3) Principles of and practice in writing poetry. Prereq: ENGL 112, 112H, or 113.

320 (520) Introduction to Linguistics (3) A linguistic study of sound system, word structure and syntax. Some attention to etymology and social and regional dialects.

## 325 (525) Technical Communications (3)

Introduction to written, oral and electronic media in professional fields such as criminal justice, engineering, agriculture and business. Topics include memoranda, letters, proposals, feasibility reports, oral presentations and on-line communications. Prereq: ENGL 112, 112H, or 113 and one course within the student's major field of study.

330 (530) Topics in World Literature (3) A study of selected authors, genres, or periods from world literature (Eastern and Western) in translation. Specific topics may include Greek and Roman Drama, Medieval European literature, the modern European novel, Russian literature and Japanese literature. Students may repeat course with variation in topic.

335 (535) Holocaust Literature (3) A study of literature of and about the Holocaust through selected texts in English and in translation.

## 341 (541) Topics in American Literature

before 1900 (3) A study of selected authors, movements and periods in American literature before 1900. Specific offerings may include Colonial American literature, American Renaissance, American Realism and Naturalism, nineteenth-century American Poetry, or nineteenth-century Women Writers. Students may repeat course with variation in topic.

343 (543) Literatures of Contemporary America (3) A study of literature representative of the many cultural groups in America, with emphasis on aspects of race, ethnicity, religious background and gender since 1945.

345 (545) Black Writers in America (3) Prose, poetry and drama by black authors.
350 (550) Women Writers: Gender, Race and Class (3) A historical survey of women writers, including contemporary writers, which focuses on women writers' concern with and presentation of issues such as race, ethnicity, religion and class. American and British authors will be represented.

355 (555) Folklore (3) A survey of folk literature and its significance as an aid to understanding racial and cultural heritage.

360 (560) Sixteenth-Century British Literature
(3) A study of British literature written between 1485 and 1603 excluding Shakespeare.

365 (565) Restoration and Eighteenth-Century English Literature (3) A study of English literature from 1660 to 1798.

370 (570) Romantic Prose and Poetry (3) A study of English literature from 1789 through the early nineteenth century.

375 (575) Development of English Drama (3) A survey of English drama from the Medieval beginnings to Shaw and Wilde.

380 (580) Modern Drama (3) Major British, American and Continental playwrights since Ibsen.

385 (585) Modern Poetry (3) Major twentiethcentury poets and movements in England and America and their nineteenth-century predecessors.

390 (590) Playwriting (3) Writing exercises, scenes and one-act plays which may be performed in the lab theater. Prereq: ENGL 112, 112H, or 113 and THEA 110 and 220 or by permission of the instructor. (Same as THEA 390/590.)

395 (595) Literature and Film (3) A study of the interrelationships between literature and film, from such perspectives as genre, aesthetics, and adaptation studies. American and British authors will be represented.

## 401 (601) Studies in British and Common-

 wealth Writers Since 1660 (3) An intensive study of one to four authors from England, Scotland, Ireland, or the Commonwealth (Canada, New Zealand, Australia, India and South Africa) writing after 1660.420 (620) History of the English Language (3) The development of English from its Indo-European backgrounds to the present day. Elementary readings in Old and Middle English illustrating various stages of the language.

425 (625) Practical English Grammar (3)
Study of system and pattern implicit in the English language. Basic sentence patterns, inflections, determiners, parts of speech, expansions, complementation and usage.
435 (635) Fantasy Literature (3) A study of the genre's genesis and of works of Fantasy literature in the $19^{\text {th }}$ and $20^{\text {th }}$ centuries.

440 (640) Southern Literature (3) A study of humorists, local colorists and realists in relation to the Southern tradition in literature from William Byrd to the present.
445 (645) The American Novel to Faulkner (3) Representative novels from the beginnings to Faulkner, with attention to the historical development of the genre.

450 (650) Introduction to Literary Criticism (3) The concepts, terminology and procedures of formal literary study with readings in representative critics.

460 (660) Early English Literature (3) A survey of Old and Middle English literature in translation (excluding Chaucer) from the beginnings to 1485 .
465 (665) Victorian Prose and Poetry (3) A study of English literature from 1832 to 1901.

470 (670) The British Novel to Joyce (3)
Representative novels to Joyce, with attention to the historical development of the genre in Great Britain.
475 (675) Modern Novel (3) Major twentiethcentury novelists and movements, primarily in Great Britain and America.

480 (680) Chaucer (3) A study of representative works read in Middle English, with attention to the cultural context.

485 (685) Shakespeare (3) A study of representative poems and plays, with attention to the cultural background and to the theater of Shakespeare's age.

## 490 (690) Seventeenth-Century British

Literature (3) A study of the British literature written between 1603 and 1660 including Milton's entire career.

493 (693) Seminar [title TBA] in Film Studies (3) Special topics in Film Studies. May be repeated with variation in topic.

494 Internship in English (3) To gain experience in the use of written and oral communications in the world of work. Service positions are not monetarily compensated. Course performance based on an agreement between student and English department chair, who stipulates specific academic and work assignments. In all cases, grades will be based upon academic evaluation and work evaluation by
on-the-job supervisors. May be repeated once with permission of the English Department Chair.
495 (695) Topics [title TBA] in Gender and Cultural Studies (3) Special topics in gender and cultural studies issues in literature. May be repeated with variation in topic.

496 (696) Seminar [title TBA] in British Literature (3) Special topics in British literature. May be repeated with variation in topic.

## 497 (697) Seminar [title TBA] in American

 Literature (3) Special topics in American literature. May be repeated with variation in topic.498 (698) Seminar [title TBA] in Rhetoric and Writing (3) Special topics in rhetoric or writing. May be repeated with variation in topic.

499 Critical Approaches to Literature: A Senior Capstone Course (1) A capstone experience for English majors to read, write, review, evaluate, put the major's academic career in perspective, and have a better grasp of the nature of the discipline as demonstrated through a senior writing project. A writing and speaking intensive course. Prereq: ENGL 200.

## 700-701 Graduate Studies in Language or

Literature ( 3,3 ) Advanced study in literature or linguistics. Open to graduate students in Education. May be repeated for credit.

## 710-711 West Tennessee Writing Project

Seminar (3, 3) Advanced study in reading and writing pedagogy with emphasis on the teacher as writer, reflective practitioner, instructional leader, and classroom researcher. Course work includes one orientation day, the four week summer institute, and four meetings during the following school year.

## Exercise Science (EXSC)

305 Applied Human Movement (3) Introduction to the study of human movement. Includes anatomical terminology, joint movement, analysis and application of basic biomechanical principles emphasizing safe instructional and performance practices. Prereq: any buman anatomy and/or. physiology course with a lab, or HPED 300 or instructor's approval.

316-317 Exercise Science Practicum (2, 2) An introduction to a variety of career opportunities, developing a professional resumé, professional philosophy, professional goals and objectives and a professional portfolio. Includes a 45 hour supervised study and experience with a cooperating agency. Application must be approved and liability insurance purchased before student may enroll. Prereq: Student must be a Department of Health and Human Performance major.
318 Exercise Science and Wellness Directed Practicum (2) A 45 hour supervised study and experience with an appropriate on-campus department/personnel.
319 Exercise Science and Wellness Practicum (2) An introduction to a variety of career opportunities, developing professional resumé, professional philosophy, professional goals and objectives and a professional portfolio. The practicum includes a 45 hour supervised study and experience with a cooperating agency. Application must be approved one semester in advance.

## 429 Applications in Exercise Physiology (1)

Application of exercise physiology knowledge, skills, and abilities as it relates to health and fitness of all ages in the general population. Emphasis is placed on developing proficiency in technology within the exercise science and wellness domain. Coreq: EXSC 430 for Exercise Science/Wellness. May be repeated and/or taken alone with instructor's permission.
430 Exercise Physiology (3) This course examines the basic principles of exercise physiology relating to the body's initial and long term responses to physical activity and exercise to maintain homeostasis. Prereq: Any buman anatomy and/or physiology with lab; Health and Human Performance majors only or instructor's approval. Coreq: EXSC 429.

## 431 Exercise Testing and Prescription:

General Populations (3) Application of exercise testing and prescription in the general patient/client populations. Develop proficiency in using testing equipment and evaluating results. Prereq: EXSC 429 and 430 or HPED 300 or instructor's approval.

433 Exercise Testing and Prescription: Special
Populations (3) Application of exercise testing and
prescription in an array of patient/client populations including those with heart and/or pulmonary disease, diabetes, pregnancy and/or older adults. Develop proficiency in using testing equipment and evaluating results. Prereq: EXSC 431.

## 434 Cardiovascular Exercise Physiology (3)

 Overview of the physiological mechanisms underlying healthy and disease cardiac function during acute and chronic exercise and how those components adapt to and benefit from a systematic program of exercise training. Prereq: HPER 327, HPED 300 or EXSC 430.436 Introduction to Electrocardiograph (3) This course will introduce the students to basic electrocardiograph (ECG) interpretation. Topics will include the interpretation of axis, rate, rhythm, hypertrophy, infarction, 12 lead placement and Holter monitor use. Prereq: EXSC 430 or Instructor's approval.

## Family and Consumer Sciences (FCS)

## 100 Family and Consumer Sciences Perspec-

tives (1) Family and consumer sciences as an academic discipline. Survey of the curriculum, its interdisciplinary nature, overview of professional opportunities and formulation of individual plans for education and career. Concepts and principles of decision making and resource management applied to family and consumer sciences. Required of all family and consumer sciences majors. Offered in fall semester only.

200 Food Preparation Methodology (2) A study of the fundamental principles of food preparation with emphasis on developing teaching methodology. One one-hour lecture and one two-hour lab.

28- Preprofessional Practice (1-3) Variable credit course with maximum allowable hours of three. Work experience in a professional setting matched with student's curriculum and career goals. Scheduling arrangement must be made and approved by adviser one semester prior to registration. Subject matter area is indicated by the third digit: 0 for Family and Consumer Sciences, 1 for Child and Family Studies, 2 for Food and Nutrition, 3 for Consumer Resource Management, 5 for Fashion Merchandising, 6 for Family and Consumer Sciences Education, 7 for Dietetics,

8 for Gerontology, and 9 for Food Service Management. Prereq: Minimum of 2.50 cumulative grade point average. May be repeated; student can earn no more than three hours credit.

400 Senior Seminar (3) Assessment of personal and academic potentials for professional careers by the Family and Consumer Sciences graduate. Examination of crucial past, present, and future issues that affect individuals, families, communities and job environments using systems theory. Analysis of these issues through teambuilding activities and assignments with focus on interrelationships of issues and capacity building. This is a speaking and writing intensive course. Prereq: Senior standing.

## 411 Fundamentals of Cooperative Extension

(3) History, philosophy and organizational structure of the Cooperative Extension Service, major areas of program emphasis, teaching methods used and relationships with other educational agencies. (Same as AGRI 411)

460 Orientation to Field Experience (2)
Intensive course emphasizing preparation for individualized field experience in area of career choice. Scheduled concurrently with Family and Consumer Sciences 48- and Family and Consumer Sciences 49Supervised Field Experience (1-5, 1-5) Prereq: Senior standing and minimum of 2.50 cumulative grade point average or permission of instructor.
47- (67-) Topics: [Selected Area] [topic title] (1-6) Topics in selected areas of Family and Consumer Sciences for students showing special ability and interest. The subject matter area is indicated by the third digit: 0 for Family and Consumer Sciences, 1 for Child and Family Studies, 2 for Food and Nutrition, 3 for Consumer Resource Management, 5 for Fashion Merchandising, 6 for Family and Consumer Sciences Education, 7 for Dietetics, 8 for Gerontology, and 9 for Hospitality and Food Service Management. Must be requested in advance of registration. May repeat enrollment up to six credit hours.
Prereq: Departmental and instructor's approval.
48-, 49- Supervised Field Experience (1-5,
1-5) Supervised work experience in off-campus placement matched to the student's curriculum and career goals. May be repeated with variable credit up to a maximum of five hours in 48- and five hours in

49- depending on available resources and student's course load at time of registration. Scheduling arrangements must be made through the adviser and the department chair at least one semester prior to registration. The third digit will follow the pattern described in FCS 47- (67-). Prereq: Minimum of 2.50 cumulative grade point average (3.00 for Dietetic students) attained two semesters before enrolling in field experience and senior standing.

700 Non-Thesis Graduation Completion (2)
Required for the non-thesis student not otherwise registered during any semester when such a student uses university facilities and/or faculty time before degree completion. May repeat enrollment. P/N only.

701-702 Master's Thesis (3, 1-3) Thesis proposal and research; thesis writing and presentation. May repeat enrollment. P/N only.

## 705 Strategic Planning and Communication

 in the Workplace (3) An examination of strategic planning skills with implementation in real world settings; an exploration of interpersonal communication skills as they relate to emotional intelligence in the workplace.760 Perspectives in Family and Consumer Sciences (3) Philosophical and historical examination of disciplines constituting family and consumer sciences. Integrating theories and practices which define individuals and families in their near environments.

## 765 Strategies for Leadership and Teambuilding in Family and Consumer Sci-

 ences (3) Examination of effective leadership and teambuilding strategies appropriate for various family and consumer sciences audiences; integrating theory and best practices to the workplace, classroom, and community. Includes the exploration of communications tools and techniques that contribute to effective teambuilding.
## 77- Trends in Family and Consumer Sciences

[Selected Area] (1-6) Recent advances in selected areas of family and consumer sciences, their impacts and implications for new programs and curricular considerations. The selected area is indicated by the third digit as described for FCS 47-above. Must be requested in advance of registration. Prereq: Consent of chair and instructor. May repeat enrollment up to six (6) credit bours.

791 Research Methods in Family and Consumer Sciences (3) Topics and methods in family and consumer sciences research. Development of research proposals.
792 Research Seminar in Family and Consumer Sciences (3) Interpretation of research literature; focus on selected areas for written and oral presentations.

# Family and Consumer Sciences Education (FCSE) 

The Department of Family and Consumer Sciences cooperates with the College of Education, Health, and Behavioral Sciences in preparing students for teacher certification. Enrollment in the following courses requires prior assessment for admission to Educator Preparation Program (EPP). Students must meet the admission criteria as described.

300 Managing Family \& Consumer Sciences Classrooms (1) An examination of skills and techniques for effective management of family and consumer sciences classrooms. Includes techniques for management of food and textiles labs, principles of behavioral management, and interpersonal relationships in the classroom. This course will serve as a checkpoint for the Educator Preparation Program (EPP) portfolio. Field experience required.

330 Introduction to Vocational Family \& Consumer Sciences Education (2) Program planning in Family and Consumer Sciences including Occupational Family \& Consumer Sciences. Implications of TEAM and other models of teaching for curriculum and lesson planning. Leadership and supervision for Family, Career and Community Leaders of America programs and activities. Measurement and assessment. Prereq: Admission to Educator Preparation Program (EPP).

340 Methods of Teaching Family \& Consumer Sciences (3) Learning and teaching styles, lesson planning. Examination of various instructional strategies, equipment and resources. Examination of edTPA requirements. Student, parent and teacher relationship and counseling. Prereq: Admission to Educator Preparation Program (EPP).

400 Practicum in Family and Consumer Sciences Education (3) Supervised field experience in a high school family and consumer sciences classroom. Includes lesson planning, instructional delivery, and assessment. To be taken the semester prior to student teaching. Prereq: Admission to the Educator Preparation Program (EPP).
404 Student Teaching in Family \& Consumer Sciences (6) Supervised teaching experience in off-campus centers for the entire semester. Coreq: TCED 401, FCSE 405. Prereq: Admission to Educator Preparation Program (EPP).

405 Student Teaching in Family \& Consumer
Sciences (6) Supervised teaching experience in off-campus centers for the entire semester. Coreq: TCED 401, FCSE 404. Prereq: Admission to Educator Preparation Program (EPP).

## 713 Human Relationships in the Classroom

(3) Basic needs of individuals, social values and techniques of interpersonal relations in developing effective secondary home economics programs.
722 Evaluation in Family \& Consumer Sciences Education (3) Purposes, fundamental principles and techniques.

## Fashion Merchandising (FASH)

102 Fashion Selection and Personal Image
(3) Principles and elements of design applied to the personal and professional clothing needs of men and women.

103 Clothing Construction and Evaluation (3)
Basic principles of fitting, pattern alterations and apparel construction; comparative study of factors influencing quality of ready-made garments. One one-hour lecture and two two-hour labs.

200 Introduction to Fashion Merchandising
(3) Survey of the fashion business focusing on fashion socioeconomics, principles governing origins and activities involved in the delivery of goods and services to the consumer, including implications of these factors to apparel merchandising.

206 Visual Merchandising and Presentation
(3) The exploration of creative techniques utilized in
the display of retail merchandise and their effective application to the enhancement of product saleability; to include presentation strategies for use with clients. A study of local and regional markets. Prereq: INTD 100 or FASH 102.

## 300 Clothing/Adornment and World Culture

(3) Functional and sociocultural aspects of dress and adornment in world cultures. Historical, technological and economic influences.

303 Textiles (3) Consumer-oriented study of textiles emphasizing properties of fiber and fabric in relation to the selection, use and care of apparel and household textiles. Two one-hour lectures and one two-hour lab.

305 Fashion Industry Processes (3) Survey of the fashion industry from apparel production to marketing and distribution.

307 Fashion Promotion (3) Fashion marketing communication techniques used to promote fashion merchandise. Evaluation of fashion retail sales promotion strategies.

## 308 Buying Functions in Merchandising (3)

A comprehensive analysis of the buying structure, institutions and environments. Emphasis on buying practices, activities, techniques and underlying concepts fundamental to merchandising; computer applications. Prereq: MATH 140.

309 Fashion Merchandising Tour (1-3) Tour of wholesale and retail establishments in national fashion centers. A maximum of three hours credit can be counted toward a major. Prereq: Family and Consumer Sciences majors only or instructor's permission.
405 Fashion History (3) Apparel from ancient to modern times including a study of past and current designers, factors influencing the development of contemporary fashion.
412 (612) Environmental Textiles (3) Selection of textiles based on design, use and care in environmental applications. Prereq: FASH 303 recommended.

415 (615) Fashion Design (3) Principles of fashion design using flat pattern techniques and computer aided design applications; including advanced clothing construction techniques. One
one-hour lecture, two two-hour labs. Prereq: FASH 103 or instructor's approval. Graduate students will be required to complete a research project resulting in a written paper.

416 Fashion Law and Media (3) An analysis of the changing media landscape within the fashion industry and the role of various media outlets in responding to these changes. Additionally, this course will prepare students in the growing importance of legal procedures within the fashion industry in relation to intellectual property rights and analyze the role of consumer-centered media outlets in contributing to the need for legal protections in fashion.

## 702 The Textiles and Clothing Consumer (3)

Consumer problems as encountered during the life cycle; legislation and quality standards of current textile products.

703 Textile and Apparel Industry Issues (3)
Domestic and international issues of current importance in the textile and apparel industry; production, consumption and governmental policies.

704 Social, Psychological and Aesthetic Analysis of Apparel (3) Analysis of social science theories and concepts applicable to clothing and appearance.

## Fellows Research Program (FRP)

201-202 Fellows Research Seminar (1, 1) Current topics in agriculture, geosciences, and natural resources management. Features topical subject delivery by Department of Agriculture, Geosciences, and Natural Resources faculty with guest lecturers from industry, government agencies, and field practitioners. Students will complete an exhaustive literature review for FRP 202 in a subject area associated with their field of study. Prereq: Student must be a member of the Agriculture, Geosciences, and Natural Resources Fellows Research Program (AGN-FRP) and be in good standing (as determined by the AGN-FRP Committee).

301 Fellows Research Methods (3) Foundations for scientific writing and presentation. Topics include: searching the scientific literature, experimental design, data analysis, scientific writing, and professional presentation of research. Students will collect
relevant data and develop a portfolio demonstrating data analysis, scientific writing, and presentation skills. Prereq: FRP 210-202, MATH 210, and a member in good standing in the Agriculture, Geosciences, and Natural Resources Fellows Research Program (AGNFRP) (as determined by the AGN-FRP Committee).

401-402 Research Participation (3, 1-3) Application of the scientific method and techniques of research to the solution of problems in the field of agriculture, geosciences, and natural resources. Preparation of project outline and presentation of written and oral reports are required. Restricted to students with demonstrated ability to conduct a supervised research problem. Taught only by arrangement prior to registration. May be used to satisfy the 4-6-hour research component of the Agriculture, Geosciences, and Natural Resources Fellows Research Program. Prereq: FRP 210-202, FRP 301, and a member in good standing in the Agriculture, Geosciences, and Natural Resources Fellows Research Program (AGNFRP) (as determined by the AGN-FRP Committee).

## Finance (FIN)

160 Financial Planning (3) An introductory course designed to teach students to manage their personal finances. Topics include saving and investment for retirement, insurance, taxes, the responsible use of credit, and the societal problems by irresponsible use of credit including bankruptcy and divorce.

301 Managerial Finance (3) The domestic and multinational corporation, its operating, legal and tax environment. Financial statement analysis, longterm investment decisions, security valuation, cost of capital, international finance, and sources of longterm financing. Prereq: ACCT 201 or ACCT 300; and ECON 201 or 202.

302 Intermediate Managerial Finance (3) An advanced course in financial management designed to cover theory and practice of the finance function in corporations. Topics covered include capital budgeting, cost of capital, capital structure, leasing, working capital management, long-term financing, and dividend policy. Prereq: Grade of C or better in FIN 301.

311 Investment Analysis (3) An introductory course on the basics of investing in bonds and com-
mon stocks. Topics covered include the operations of stock and bond markets, fundamental and technical analysis of stocks, bond portfolio management, options and futures. Prereq: Grade of C or better in FIN 301.
313 Analysis of Financial Statements (3) An indepth study of current financial reporting practices; analysis and interpretation of corporate financial statements. The course includes an extensive review of financial accounting concepts. Credit may not be granted for both Accounting 313 and Finance 313. Prereq: Grade of C or better in FIN 301.
332 International Finance (3) Financing the multinational corporation, hedging and arbitrage, foreign exchange, Eurodollar and Euro-bond markets and cost of capital are covered topics. Capital budgeting for foreign acquisitions and investments are covered. Currency value changes and the impact upon the balance sheet and corporate cash flows are covered. Prereq: Grade of C or better in FIN 301.
341 Financial Markets and Institutions (3) A study of the wide range of markets and instruments used to finance projects and control risk in today's global economy. Students are introduced to the operational, regulatory and transitory characteristics of capital markets and financial institutions. Topics in this application-oriented course include the monetary system, stock, bond, mortgage, futures and options markets, pension funds, investment firms, commercial banks, credit unions, mutual funds and insurance companies. Prereq: ACCT 201 or 300, and ECON 201 or 202.
351 Commercial Banking (3) A comprehensive study of commercial banks and their role in the economy. The course emphasizes the practical application of business and economic principles as they relate to bank management and regulatory policy. Topics covered include banking history and regulation, consumer and commercial credit analysis, asset and liability management, risk management, loan policy and money management services. Trends such as consolidation, on-line banking, internationalization and project-line expansion are also addressed. Prereq: Grade of C or better in FIN 301.
370 Principles of Real Estate (3) A survey course in the economic and financial aspects of investing
in real estate. Urban economic growth and development, property valuation, mortgage and equity financing, mortgage market operations, portfolio analysis, taxation and investment analysis will be covered. Emphasis of the course is on home ownership and investing in small income-producing properties. Prereq: ECON 202.
411 Portfolio Management (3) A course applying security analysis concepts to the management of the TVA Investment Challenge portfolio. Students will be responsible for portfolio management decisions and security selection in managing the TVA portfolio. This course is designed to permit students to apply their knowledge of investment analysis to the management of an equity portfolio that is part of the competitive program sponsored by the Tennessee Valley Authority. Prereq: Grade of C or better in FIN 311.

## 471-479 Topics in Finance [topic title] (3)

Selected topics in finance offered on an occasional basis for qualified students. Admission by permission of instructor only.

480 Internships in Finance (1-9) Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. May be repeated for up to a total of nine hours internship credit. A maximum of six hours may be used to fulfill degree requirements. Pass/Fail. Prereq: Departmental approval required; at least Junior standing.
491-492 Independent Study in Finance ( 3,3 ) Special research projects undertaken individually under the supervision of the faculty. Maximum credit available for independent study courses is six hours. Prereq: Senior standing.
493 Financial Policy Analysis (3) A capstone case course in corporate finance which integrates financial management in the decision-making process of the firm. Special topics include working capital, financial structure of the firm, dividend policy, mergers and acquisitions, bankruptcy and reorganization. Prereq: Grade of C or better in FIN 302.
710 Corporate Financial Management (4) An analysis of the problems associated with the internal financial management of business enterprises through the application of decision-making methods.

Prereq: ACCT 711 or 201 or 300; and ECON 710, or 201 and 202.

## 711 Investment and Portfolio Management

(3) An introduction to the theory and practice of security analysis and the management of investment portfolios, with emphasis on investment management by institutional investors. Topics covered include fundamental and technical analysis of common stocks, asset allocation strategies, management of equity and debt portfolios, options, futures, hedging and derivative securities. Students will be involved in the management of a stock portfolio. Prereq: FIN 710 or both ACCT 711 and FIN 301.

721 Banking and Financial Services (3) An interactive seminar that brings students, faculty and industry leaders together to study and discuss critical issues facing today's financial services industry. The course will address the full range of financial services including investment and commercial banking, insurance, pension plans, risk management, mutual funds, e-commerce and personal and business planning. Leadership, customer service and marketing issues will be discussed. Finally, the course will provide a comprehensive overview of the structure of the financial system, interest rate and business cycle determinants and international financial markets. Prereq: FIN 710 or both ACCT 711 and FIN 301.

732 International Corporate Finance (3) The study of financial management of the international operations of corporations including exchange risk, capital budgeting, political risk and the management of working capital. Current topics in international finance will also be covered in areas such as hedging, risk management, futures and options. Prereq: FIN 710 or both ACCT 711 and FIN 301.

## Fine Arts (FA)

## 300 Computers and Media for the Arts (3)

Exploration of relevant computer software programs, various media platforms and digital technology applications for use in the pedagogy and studio instruction methods for the visual and performing arts. Projects will utilize the computer and digital media technology in the design and distribution of projects and curricular materials as well as for research and class presentations. Graphic Design emphasis students may
not use this course as a supporting course in the Arts elective. Prereq: B.F.A. majors only, ART 120-130, and ART 140-150 or permission of the instructor.

301 Gallery Practicum (1) Practical application of professional art and gallery studies. Prereq: ART 110 or ARTH 210 or ART 211 or THEA 110 or THEA 111 or DANC 110 or consent of the instructor. May be repeated for credit.
310 Aesthetics (3) A basic course in aesthetics, dealing with such conceptual issues as the criteria of identity for works of art, the idea of style, of expression, the notion of aesthetic attitude, the relevance of artists' intentions to interpretation and truth in literature and the arts. Analysis of these and similar notions with reference to examples from various art forms (painting, music, literature, etc.). Written reports and oral presentations are required. (Same as PHIL 310)
350 Fine Arts in Early Childhood (3) Methods and activities in music, art, drama and movement (dance) for children from birth to eight years.

410 Art Theory and Criticism (3) A study of historical and contemporary thought and process of art theory and criticism. The student will gain an appreciation of how their work will be understood or interpreted in a critical, professional setting.

467 Travel Study (Selected Topics) (3) A course designed as an educational travel experience in the fine arts, including one or more of the following: art history, dance, graphic design, theatre, studio art. Student may repeat course for credit. Requires instructor's approval.

## Food Service

 Management (FSVC)300 Food and Beverage Management (2) Foundations of managing restaurants and associated beverage operations; planning and control procedures, human resources management, customer service, marketing strategies, and emerging technologies; relationship between food and beverage operations and overall hospitality organization.
301 Sanitation (2) Theory and practice of Culinary Sanitation. Course covers proper food handling techniques, food borne illness prevention, and introduc-
tion to the "Hazard Analysis Critical Control Point" (HACCP) method of kitchen operation. ServSafe certification is offered at culmination of course.

## Food Science (FSCI)

200 Food Science (3) Basic principles of food science in developing products of standard quality. Influence of composition and treatments on properties of food. Standard methods of food preparation with emphasis on quality and safety. One two-hour lecture and one two-hour lab.

313 Food Management (3) Food for families and individual consumers. Bases for selection, cost, food values, safety, legislation. Etiquette and aesthetics associated with planning and serving food. One twohour lecture and one two-hour lab.

332 Nature of Food (3) Composition of food. Chemical, physical and microbiological factors related to characteristics and response to treatments. Two one-hour lectures and one two-hour lab. Prereq: CHEM 310, CHEM 319L, and MBIO 251, or equivalent.

403 (603) Experimental Study of Food (3) Applications of experimental method to food materials. Evaluation of food products by objective measurements and sensory assessments. One one-hour lecture and two two-hour labs. Prereq: FSCI 332, CHEM 310, CHEM 319L, or equivalent.
701 Advanced Food Science (3) Applications of research methods to individual problems. Prereq: FSCI 403 or equivalent.
704 Developments in Food Science (3) Emphasis on function of food components, safety and utility in food product development.

# Food Systems Management (FSMG) 

## 203 Orientation to Food Service Systems (3)

Identifying types of establishments, service and career opportunities. Field trips and lab experience. Two one-hour lectures and one three-hour lab.

312 Quantity Food Management (3) Principles of food materials handling and menu planning for volume feeding. Lab experience in quantity food procure-
ment, preparation, service, personnel management and sanitation. One one-hour lecture and two twohour labs. Prereq: enrollment in Food and Nutrition or Dietetics option or instructor's approval.

410 Food Service Systems (3) Synthesis of administrative functions in organizing and managing food service systems; emphasis on identifying resources to meet the needs of the system and on means for providing quality assurance in food and nutrition services. Prereq: FSMG 312, enrollment in Food and Nutrition or Dietetics option, or instructor's approval.
413 (613) Food Systems Design (3) Principles of design for physical facilities of food service systems based on needs of the systems. Layout and equipment specifications according to economic and technical requirements. Prereq: FSMG 312 or instructor's approval.
415 Standards of Professional Practice (2) The dietetics profession and the development of practitioners. Laws, regulations and other factors affecting dietetics practice. Taken during semester when FCS 487 and 497 Supervised Field Experience in Dietetics are scheduled. Prereq: Senior Standing and 2.50 GPA.

## 711 Administration of Food and Nutrition

Services (3) Organization and direction of systems which provide food and nutrition services to consumers as individuals and groups.
713 Financial Management of Food Systems
(3) Collection and analysis of data for maintaining control of assets in various food systems.

714 Preprofessional Practice I (3) Two-hundredeighty hours of supervised practice plus 40 hours of lecture-discussion/independent study addressing the didactic aspects of dietetic practice in food systems management. This course consists of rotations in menu management, procurement, quantity food production, patient and non-patient food delivery and services, sanitation and safety (HACCP), cost/quality control, financial operational reporting and staff relief. Prereq: Admission to Dietetic Internship.
716 Experimental Quantity Food Study (3) Analysis of problems in production, holding and service of food produced in quantity. Use of management resources in lab settings. Prereq: FSMG 312 or consent of instructor.

## French (FREN)

111 Elementary French (3) (TBR: FREN 1010)
An introductory course emphasizing listening, speaking, reading and writing. May be used to remove a language deficiency or for students with no prior experience in this language. After passing 111, students will take the second semester of the elementary sequence, 122. Three classroom hours.

115 Transitional French (3) A review of listening, speaking, reading and writing for students who have had two years of French at the high school level or equivalent as determined by the department. After passing FREN 115, students will take the second semester of the elementary sequence, FREN 122 . Three classroom hours.

122 Elementary French (3) (TBR: FREN 1020) An introductory course emphasizing listening, speaking, reading and writing. Three classroom hours. Prereq: FREN 111 or 115 or the equivalent as determined by the department.

222 Intermediate French (3) Grammar review, reading, writing and conversation. Three classroom hours. Prereq: FREN 122 or equivalent as determined by the department.

250 France Today: The French People and Their Culture (3) An interdisciplinary study of the French people today, with emphasis on their life-styles, customs, mentality and overall culture. Discussion of current trends in French politics, education, media, religion and literature and the arts (including popular culture) especially as they illustrate important cultural values and attitudes. Consideration of France's cultural influence on selected areas of the francophone world (e.g., sub-Saharan Africa and Quebec). Taught in English.

300 (500) Intensive Conversation in a Foreign Country (3) In-residence training in the foreign language of the area visited. The course elected must be approved in advance by the Chair of the Department of English and Modern Foreign Languages.

Research project required for graduate credit. Prereq: FREN 222 or equivalent.
311 (511) Introduction to French Literature and the Arts (3) Analysis of literary and critical texts
as well as art to illustrate the most commonly identified characteristics of major schools of thought and major periods from the Middle Ages to the present. Prereq: FREN 341 or 342 or instructor's approval.

## 321 (521) Introduction to French Civilization

and Material Culture (3) A descriptive and critical approach to French history, geography, religious, political, social, educational and economic institutions. Prereq: FREN 341 or 342 or instructor's approval.
341 (541) Advanced Conversation (3) Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency and conversational strategies. Study of the phonetic system of the French language and exercises to improve pronunciation. Grammar appropriate for oral French. Discussions utilizing readings and electronic media such as videos and the internet. Class presentation of research project required for graduate credit. Heritage speakers and those with near-native abilities in French are not eligible to take this course. If they intend to major in French or earn a Recognition of Proficiency, they should see the department chair for a waiver. Prereq: FREN 222 or instructor's approval.
342 (542) Advanced Composition (3) Emphasizes composition skills. Written practice to extend range of topics, vocabulary, fluency and compositional strategies. Grammar and stylistics appropriate for written French. Practice writing expository and creative prose, translations as well as use of internet discussion lists. Class presentation of research project required for graduate credit. Prereq: FREN 222 or instructor's approval.

350 Masterpieces of French and Francophone Literature (in English Translation) (3) In-depth discussion of selected literary masterpieces from France and other francophone countries. Emphasis on characters, themes and social trends which reflect the culture and traditions of the francophone world. No knowledge of French required; taught in English. Does not count towards major, minor or Recognition of Proficiency in French. Prereq: ENGL 111-112.

360 (560) Studies Abroad (3) In-residence study of the literature, language, or civilization of the area visited. Relevant field trips. Must be approved in
advance by the Chair of the Department of English and Modern Foreign Languages. Research paper required for graduate credit. Prereq: FREN 341 or 342.

370 (570) Travel Study (1-3) A combination of travel and study experiences in the U.S. or abroad designed to enrich students' knowledge of the target foreign language and culture. May be taught as an organized study tour under faculty supervision or as an independent travel and study project with prior department approval. Topics, prerequisites and course requirements announced in advance. Research paper required for graduate credit. Students may repeat course with change of topic for maximum of six hours credit. Chair of the Department of English and Modern Foreign Languages approval must be obtained for travel-study courses to count towards minor, major, or Recognition of Proficiency. Not regularly offered.

## 381-382 (581-582) Survey of French Litera-

ture $(3,3)$ Selected readings to give students an acquaintance with important personalities, movements and ideas in French literature. 381: Beginning to 17th century. 382: 18th century to present. Research paper required for graduate credit. Prereq: FREN 341 or 342 or departmental approval.

401 Foreign Language Internship (3) Utilization of the target foreign language in a monitored work environment. Appropriate placements may be found locally, nationally, or abroad. Students may or may not be paid. Evaluation by both supervising instructor and on-the-job supervisor. Chair of the Department of English and Modern Foreign Languages approval must be obtained for internships to count towards minor, major, or Recognition of Proficiency. Prereq: FREN 341 or 342.

451 (651) The Language of Business and the Professions (3) Study of the basic terminology and documents of business and various professions as practiced within the francophone world. In addition to business, professions such as communications, travel and tourism, agriculture and criminology will be covered. Composition of business letters and resumés, translation and presentation of oral reports. Research paper required for graduate credit. Prereq: FREN 341 or 342 or instructor's approval.

491 (691) French Cinema (3) A survey of French cinema from the turn of the century to the New Wave of the 1960s and '70s. Discussion of the films of major French directors with emphasis on how each film contributes to the development of a national tradition and reflects important issues in French society. Research paper required for graduate credit. Prereq: FREN 341 or 342 or instructor's approval.

## 495-496 (695-696) Topics in French Lan-

 guage, Literature, or Civilization (1-3, 1-3) Study of selected aspects of French language, literature, or civilization. Taught in French. Topics and prerequisites announced in course schedule. Research paper required for graduate credit. Students may repeat course with change of topic. Only six hours of topics courses may count towards a minor, major, or Recognition of Proficiency. Not regularly offered.498-499 (698-699) Independent Study (1-3, 1-3) Directed reading or research under supervision of a staff member. Available only to Juniors and Seniors having completed at least six hours of upper-division coursework in French. Project must be approved by faculty in the discipline concerned and the department chair. Research paper required for graduate credit. Students may take no more than six hours of independent study.

## General Studies (GENS)

101 General Studies, Seminar in Freshman Studies (2) Study and small group discussion of problems commonly encountered by students making the transition from high school to college. Assigned reading on current topics, informational programs presented by major academic units, academic and career planning placement and proficiency testing in addition to a general orientation to the university, are the major aspects of the course.

134 Success Strategies (1) Mandatory course for students who are placed on Academically EligibleWarning for the first time and have less than 45 credit hours completed. This course emphasizes time management, study skills test taking strategies, and other elements of success as needed by the students in the class. Prereq: Instructors approval.

280-289 General Studies, Minicourses [Title] 380-389 General Studies, Minicourses [Title] 480-489 General Studies, Minicourses [Title] (1)

Topics courses designed to provide a quick response to interests and needs of students and faculty. A student may enroll in a maximum of three General Studies Minicourses (180-189, 280-289, 380-389, or 480-489) as an undergraduate student. Minicourses will count as electives and must meet the following requirements:

1. Faculty wishing to offer a course must submit a proposed syllabus including the grading system (Pass/Fail or letter grade) to be used and obtain departmental and Academic Affairs approval.
2. Students are required to meet the academic standards established by the teacher at the onset of the course. Course requirements may include a syllabus of readings, an examination, an essay or term paper, research project, field project, or creative work.
3. Students must be taking 12 hours or more to be eligible to enroll.

A topic may be offered as a General Studies
Minicourse no more than three semesters without obtaining Faculty Senate approval as a General Studies course.

## 150 Information Literacy and Research Skills

(2) This course is designed to help students develop research skills utilizing library resources, with a focus on effectively accessing and evaluating print and electronic sources for use in research projects, papers, and other academic endeavors. Time will also be spent on developing introductory information literacy skills needed to navigate the modern information landscape.
201 Career Exploration (2) Development of an understanding of the relationships between aptitudes, interest and values and successful career decisions. Includes career testing and counseling current trends in job supply-demand and salaries, relationship of academic major to career fields, use of the university catalog in academic planning and research on specific careers. Designed to create the basis for an informed career decision. Prereq: No
first semester fresbmen, seniors with instructors approval.
211 College Study Skills (2) Assists the student in developing practical techniques to enhance academic success in college. Topics include goal setting, time management, self-esteem, concentrating and remembering, listening, note-taking strategies, study notes, researching and writing papers, preparing for tests. Prereq: 2 semesters of college-level work attempted, seniors who are in good academic standing must have instructors approval.
300 Fundamentals of Career Entry (1) This course is designed to prepare students for careers after graduation by making students aware of career choices, aiding students in resumé writing, teaching interview techniques and helping students to prepare for entry into the work force. Graded on a Pass/Fail basis.

301 Portfolio Development (3) This course requires students to develop a portfolio that they can then use to document prior life/work experience. An expanded version of this document serves as documentation to support an award of credit for college level learning gained through experience. Students will enhance their research skills by compiling and organizing documents that will constitute proof of their creditable experience; develop their persuasive writing skills by presenting how these documents substantiate their claim that prior work and/ or experience should be given course credit; and develop their ability to document resource materials correctly for the field(s) in question. Prereq: an autobiographical essay to be used as a diagnostic tool for writing skills and creditable learning experience, and approval of the instructor. Graded on a Pass/Fail basis.

## 302 Leadership for Learning Organizations

(3) This course will introduce concepts and theories of leadership and organizational culture. Emphasis will focus on the context of leading in learning environments: types of organizations, stakeholders, group dynamics, change, and establishing goals. The course will also include self-assessment and experiential components to supplement the translation of theory to practice. The course will approach leadership as a social process that involves the interaction of leaders, followers, and stakeholders in different contexts. With the rate of change in new
information and knowledge, the ability to create and sustain a learning organization is especially relevant to education, but also holds application for other fields (e.g., business, agriculture, criminal justice). Student cannot receive credit for GENS 314-315-316 and GENS 302.

400 Senior Seminar (3) Assessment of personal and academic potentials for professional careers. This course is designed to prepare students to enter the workplace or change jobs. Students will explore real world work issues and key issues in the students' selected field of study through examination of crucial past, present and future information, concepts, policies and practices. Course will include the development and/or enhancement of skills in resumé writing and interviewing.

## Geography (GEOG)

## 151 Introduction to Regional Geography:

North America, Europe and Russia (3) An integrated study of the cultural, economic, political and physical aspects of countries and regions within North America, Europe and Russia.

152 Introduction to Regional Geography: Asia, Africa and Latin America (3) An integrated study of the cultural, economic, political and physical aspects of countries and regions within Asia, Africa and Latin America. GEOG 151 and 152 do not have to be taken in sequence.

180 Topics in Geography (1-4) Study of special topics or travel-study experiences at an introductory level not requiring extensive prerequisites in the discipline. Prereq: Instructor's approval.

202 Introduction to Cultural Geography (3) An introduction to patterns and processes of the world's cultural systems, landscapes and built environments.
210 Geoscience Literacy (1) Methods of archival research and scientific writing. Topics include data collection and organization, critical reasoning, professional integrity, referencing and citation methods, and the peer review process. Written and oral presentations will be required.

270 Introduction to Geospatial Technology (3) An introduction to the principles, techniques, and software associated with Geographic Information

Systems (GIS), Global Positioning Systems (GPS), and remote sensing. Data collection, basic spatial analysis and interpretation, and multi-disciplinary applications are emphasized. Course material is taught through lecture presentations and a series of interactive projects. Two hours lecture and two hours of lab per week;. (Same as AGRI 270)
305 Principles of Meteorology (3) An introduction to the elements and processes that shape the weather. Weather observation techniques, weather analysis and forecasting will be emphasized. Atmospheric hazards and air quality issues will also be presented.

## 310 Principles of Geographic Information

 Systems (3) An introduction to Geographic Information Systems as a tool with which to construct and conduct computer-based spatial analysis and mapping. Topics related to data acquisition, database development, fundamental analytical procedures and cartographic output are emphasized. Two-hour lecture, two-hour lab.355 (555) Principles of Geomorphology (3) A study of the process mechanics operating within the earth's surficial systems and the resultant landforms derived from these processes; information obtained is used to analyze how landform history manifests past climatic or tectonic phenomena. Students cannot receive credit for GEOL 355 (555). Prereq: GEOS 110 or 110H. (Same as GEOL 355/555)
364 (564) Introduction to Remote Sensing (3) An introduction to the principles and concepts of remote sensing as a tool for geographic inquiry. Emphasis will include the nature of remote sensing images (photographs, satellite imagery, radar) and their analysis and interpretation for applications in geographic inquiry and environmental assessment. Prereq: Junior standing; GEOS 110 or 110H or permission of instructor.

365 (565) Tennessee's Geologic and Cultural Landscapes (3) Lectures and field excursions emphasizing the interactions of geology and culture in Tennessee. Geologic topics include: physiographic regions and geologic history, landforms, structural and tectonic history, natural and economic resources and environmental issues across the state. Cultural topics include: settlement history, economic
development, political patterns and distribution of populations. Attention is given to current state issues. Prereq: Any two of the following courses: GEOS 110, 120, 130, and 140 or equivalent honors courses or permission of instructor. (Same as GEOL 365/565)

380 (580) Geography of North America (3) A region-by-region examination of the United States and Canada. The physical features, settlement histories, agricultural production, industrialization, urbanization, political problems and cultural practices of North America's regions will be emphasized. Prereq: Junior standing.

381 (581) Geography of Europe (3) A systematic study of the cultural, economic, political and physical characteristics of Europe. Prereq: Junior standing.

401-402 Research Participation (3, 3) Application of the scientific method and techniques of research to investigation of problems in the field of geography. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellow Research Program.

410 Geographic Information Systems: Modeling and Applications (3) A systematic study of the development of a GIS to produce analytical and spatial models of the natural and cultural environments. Data base development and spatial modeling will be emphasized. Prereq: GEOG 310 or AGET 482 or permission of instructor and Junior standing.
441-442 (641-642) Travel-Study (3, 3) A faculty-supervised domestic and/or international educational group tour. A maximum of six credit hours can be counted towards a major.

444 Geography Internship (3-9) Provision for an advanced geography student to benefit by supplementary practical experiences in a particular branch of Geography. Specific assignments are arranged in consultation with an adviser during the semester preceding that in which the student expects to enroll in this course. Course performance is based on specific academic and work assignments. Grades
will be based upon academic performance and work evaluation by a job supervisor. The internship may or may not include monetary compensation. This course can be taken only once. Prereq: Permission of supervising instructor and Junior standing.

461 (661) Economic Geography (3) A study of the spatial patterns, processes and developmental aspects of production. Concepts, models and current literature related to the geography of agriculture, mining, manufacturing, retailing and services are examined. Prereq: Junior standing.

462 (662) Political Geography (3) A study of the spatial forms and processes of political phenomena. Concepts, models and current literature related to territories such as nation-states and congressional districts, the formation and dissolution of empires, geopolitics and international conflict are examined. Prereq: Junior standing. (Same as POSC 462.)
471 (671) Cartography (3) An introduction to map interpretation and design. Concepts and techniques related to map preparation, data management, the use of thematic symbols and graphic design are presented. Prereq: Junior standing.
472 (672) Climatology (3) A non-mathematical analysis of systematic and regional atmospheric behavior. The first part of course deals with basic physical laws affecting the elements of weather. The second part of this course examines the distribution of climates and the impact of climates on human activity. Completion of GEOS 140 or 140H and Junior standing is recommended. (Same as METR 470)
481 Research Practicum (3) A seminar course in which upper-division students undertake a research project under faculty supervision and guidance. The student will be responsible for the project selection, a literature review, research design, analysis and a final report. Students will be required to submit a formal written paper and to present an overview of their project through an oral presentation to a faculty committee. In addition to the research project requirements, students must also formally submit a Portfolio consisting of original copies of substantive papers, maps and other work produced through assignments completed in other upper-division geography courses. Prereq: Senior standing and permission of instructor.

491-492 (691-692) Special Topics in Geography (1-3, 1-3) Seminars or guided readings on a selected topic in geography. A maximum of six credit hours can be counted towards a major. Prereq: Permission of instructor.

755 Global Climate and Climate Change (3) A study of the physical principles and processes important to understanding past, present, and future climates on Earth. Analyses of data, discussions, case studies, and detailed investigation into the principles that affect global climate systems will be approached from a climatologist's standpoint. Natural and anthropogenic climatic changes and climatic influences on human activity will be studied. (Same as NRM 755.)

## Geology (GEOL)

210 Geoscience Literacy (1) Methods of archival research and scientific writing. Topics include data collection and organization, critical reasoning, professional integrity, referencing and citation methods, and the peer-review process. Written and oral presentations will be required.
220 Methods in Field Geology (2) An introduction to geological field methods. Topics include keeping a field notebook of observations and measurements, outcrop sketches, and specimen descriptions, using topographic and geologic maps, basic orienteering, using geologic compasses, constructing cross sections, and preparing a field report. Prereq: GEOS 120 or 130 or equivalent honors course.

275 Travel Studies in Geology (1-4) Travel-study experience at an introductory level not requiring extensive prerequisites in the discipline. May be repeated for credit. Prereq: Instructor's approval.

285 Topics in Geology (1-4) Special topics at an introductory level not requiring extensive prerequisites in the discipline. May be repeated for credit. Prereq: Instructor's approval.

315 (515) Principles of Oceanography (3) Survey of the physical, chemical, biological and geological processes occurring in the world's oceans, including natural resources for legal-political problems associated with the marine environment. Course is designed for science and science education majors. Prereq: one year sequence in a science or permission of instructor for graduate credit.

320 (520) Mineralogy (4) A study of the crystallography, classification, identification and the systematics of mineral families. Lab includes hand specimen analytical methods of identification. Three hours lecture and two hours lab. Prereq: GEOS 120, and MATH 140 or equivalent honors courses. Coreq: CHEM 121.
330 (530) Igneous and Metamorphic Petrol$\mathbf{o g y}$ (4) A study of the genesis, classification and identification and tectonic setting of igneous and metamorphic rocks. Lab includes hand specimen and optical methods of identification. Three hours of lecture and two hours of lab. Prereq: GEOL 320.
345 (545) Natural Hazards (3) An advanced examination of volcanic hazards, earthquakes, flooding, mass movement, subsidence, extraterrestrial impacting and the geological implications of extreme weather events. Societal implications and remediation of these hazards is emphasized. Project required. Three hours lecture. Prereq: GEOS 110, 120, 130, or 140 or equivalent honors courses.

350 (550) Principles of Paleontology (4) Field and lab techniques used to obtain information from fossil-bearing rocks and sediment. Major topics of emphasis include: paleoecology, functional morphology, evolutionary theory, extinction processes and paleobiogeography. Lab exercises will stress the use of common fossil taxa as paleontological tools to address issues in earth history. Three hours lecture and two hours lab. Prereq: GEOS 130 or 130 H or at least eight credit hours of Biology coursework.

355 (555) Principles of Geomorphology (3) A study of the process mechanics operating within the earth's surficial systems and the resultant landforms derived from these processes; information obtained is used to analyze how landform history manifests past climatic or tectonic phenomena. Prereq: GEOS 110 or 110H. (Same as GEOG 355/555)

## 360 (560) Sedimentology and Stratigraphy

(4) The study of sedimentary rocks emphasizing their origin, characteristics, and interpretation, as well as the principles and techniques for establishing the temporal order and spatial distribution of sedimentary layers. Three hours of lecture and two hours of lab per week. Prereq: GEOS 120 or 130 or equivalent honors courses.

365 (565) Tennessee's Geologic and Cultural Landscapes (3) Lectures and field excursions emphasizing the interactions of geology and culture in Tennessee. Geologic topics include: physiographic regions and geologic history, landforms, structural and tectonic history, natural and economic resources and environmental issues across the state. Cultural topics include: settlement history, economic development, political patterns and distribution of populations. Attention is given to current state issues. Prereq: Any two of the following courses: GEOS 110, 120, 130, and 140 or equivalent honors courses or permission of instructor. (Same as GEOG 365/565)

385 (585) Plate Tectonics (3) An examination of the processes that control plate tectonics and the geologic features that form from plate interactions, both modern and ancient time. Topics include the earth's interior, tectonic plate motion, features associated with plate boundaries including the mountain belts, rifts, fault zones, volcanic activity, and seismic hazards. Prereq: GEOS 130 or 130H. GEOL 400 recommended.

395 (595) Economic Geology (3) An investigation into the origin and distribution of metallic and industrial materials in Earth's crust. Topics include formation, exploration, exploitation, and remediation of ore deposits. Where possible, deposits are discussed in the context of local, regional, and global economic and political impacts. Prereq: GEOL 320.

400 (600) Structural Geology (4) Description and interpretation of deformation processes and common geologic structures such as folds, faults, joints and cleavage. Lab topics include: map interpretation, depth and thickness problems, construction of structure sections, structure contour maps, stereonets. Three hours lecture and two hours lab. Prereq: GEOS 130 or 130 H .

401-402 Research Participation (3, 3) Application of the scientific method and techniques of research to investigation of problems in the field of geology. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used
for Agriculture, Geosciences, and Natural Resources Fellows Research Program.

415 (615) Marine Geology (3) A study of the geology of ocean basins with special emphasis on the continental shelf, sediments and sedimentary processes of the Gulf of Mexico and Caribbean regions. Expectations for graduate credit include higher performance expectations, additional field work experience, and additional material coverage beyond the undergraduate expectation. This course is generally offered during summer term using facilities at a Gulf coastal research laboratory. Field trips will be taken to study beach processes and sediments in Mobile Bay, Mississippi Sound and offshore Gulf of Mexico. Prereq: Eight credit hours of Biological or Pbysical Systems laboratory science coursework; for graduate credit, a student must already possess an undergraduate degree in geology or an allied marine science discipline.

445 (645) Geohydrology (4) A study of the water cycle, especially those parts dealing with streams, ground water and water quality. Three hours lecture and two hours lab. Prereq: MATH 140 and GEOS 120 or GEOS 140 or equivalent bonors courses.

465 Geology Internship (1-4) Opportunities for students to gain work experience in industry, government, or the private sector. The academic component, supervised by a UTM instructor, includes readings, discussion with the instructor, and evaluation of job performance by both the UTM instructor and job site supervisor. The internship may or may not include monetary compensation. No more than six credit hours may be counted within the concentration. May be repeated for credit. Prereq: Permission of supervising instructor.

475 (675) Travel Studies in Geology: (Title)
(1-4) Students study the geology and geologic history of a given locale through extended travel to the designated region of study. Travel sites vary each year and may be either domestic or foreign. Preand post-course meetings with lectures, discussion groups and independent topic research are used in conjunction with field study activities. Students are responsible for their own travel expenses, fees,
personal health and life insurance and any other expenses when the semester topic requires it. This course may be repeated for credit with different topics. No more than four hours credit may be counted toward requirements for major or minor.

## 485 (685) Special Topics in Geology: (Title)

 (1-4) Intensive lectures and/or lab work on special topics in geology. Topics include, but are not limited to: Geology of State and National Parks, Geophysics, Clastic Petrology, Carbonate Petrology, Geochemistry, Paleocology, Biostratigraphy and Paleobiogeography, Economic Geology, Forensic Geology, Geoscience Education, Comparative Planetology, History of Geology, Geoarchaeology. Prereq: Instructor's approval. This course may be repeated for credit with different topics. No more than four hours credit may be counted toward requirements for major or minor.495 Senior Research Project (1-3) Seniors, by invitation of the geology faculty, propose and pursue research under the supervision of a faculty member. Students will submit a paper for review by a faculty committee of two or more members of the geology faculty and perhaps faculty members from other disciplines involved in the research. Graded on a Pass/Fail basis.

499 Senior Seminar (1) Senior capstone course which covers topical and current developments in the geosciences. This seminar also provides an opportunity for students to finalize their professional portfolios and plan their career paths. Prerequisite(s): Geology major and senior standing.

## Geoscience (GEOS)

## 110 Geoscience in Everyday Life (4) A survey

 of the geosciences as they apply to societal issues. Topics include earthquakes, volcanoes, natural resources, water availability issues, severe weather, flooding, mass wasting, pollution, pandemics, and other natural phenomena. Scientific data and tools by which the Earth is studied will also be introduced. Three hours lecture and two hours lab.
## 110H Honors Geoscience in Everyday Life (4)

See GEOS 110 above for course description and general limitations. This course is open to students
who are participants in the Honors Program. Other students who have demonstrated superior academic ability may be eligible to register for this course as well and must receive consent of the instructor prior to enrollment. (Same as GEOS 110 but for Honors credit and may not be taken in addition to GEOS 110.)

120 Earth Materials and Processes (4) An examination of the composition and structure of the Earth, its internal and surface processes, and applications to the environment and society. Topics include geologic time, minerals and atomic structure, the rock cycle, plate tectonics, Earth's internal structure, deformation processes, and geomorphology. Prereq: GEOS 110, or two semesters of university-level lab science coursework.

## 120H Honors Earth Materials and Processes

(4) See GEOS 120 above for course description and general limitations. This course is open to students who are participants in the Honors Program. Other students who have demonstrated superior academic ability may be eligible to register for this course as well and must receive consent of the instructor prior to enrollment. (Same as GEOS 120 but for Honors credit and may not be taken in addition to GEOS 120.)

130 Global Change and Earth History (4) The evolving Earth is investigated - past, present, and future - with emphasis on scientific methods used to study its history and societal issues related to future global change. Topics include geologic time and stratigraphy; lithosphere, atmosphere, hydrosphere, cryosphere, and biosphere evolutionary interactions, including organic evolution and extinction; and paleoclimate and sea level change. Prereq: GEOS 110, or two semesters of university-level lab science coursework.

## 130H Honors Global Change and Earth History

(4) See GEOS 130 above for course description and general limitations. This course is open to students who are participants in the Honors Program. Other students who have demonstrated superior academic ability may be eligible to register for this course as well and must receive consent of the instructor prior to enrollment. (Same as GEOS 130 but for Honors credit and may not be taken in addition to GEOS 130.)

140 Weather and Climate (4) An introduction to the elements and processes that occur in the Earth's atmosphere and their impacts on society. Topics include atmospheric structure and composition, moisture, energy, precipitation, wind, processes producing weather phenomena, and principles of climatology. Three-hour lecture, one two-hour lab. Prereq: GEOS 110.

140H Weather and Climate (4) See GEOS 140 above for course description and general limitations. This course is open to students who are participants in the Honors Program. Other students who have demonstrated superior academic ability may be eligible to register for this course as well and must receive consent of the instructor prior to enrollment. (Same as GEOS 140 but for Honors credit and may not be taken in addition to GEOS 140.)

## Geoscience Education (GEDU)

700 Advanced Earth Systems Science (3) Investigations in Earth Systems Science is a detailed exploration of Earth's interacting global processes and environments including the lithosphere, atmosphere, biosphere, hydrosphere and astrosphere. The course uses Problem-Based and Student-Centered learning techniques and is taught completely online. A combination of individual and group coursework via an asynchronous discussion board is utilized.

705 Earth/Space Science and STEM Integration for Middle Grades 5-9 Teachers (2) Earth and space science topics for middle school that promote an understanding of the objects of the universe and their relationship in terms of size and distance and the movement of objects in space along with mathematical models that provide this knowledge base. Star patterns in charts and models of the relationships between Earth, Sun, and Moon, the planets in the solar system will be explored. The composition as well as the land and water features of the Earth, geologic processes, the rock cycle, and the hydrologic cycle will also be included. Inquiry, application of technology, and problem-solving are incorporated into instruction.

710 Advanced Physical Geology for Educators
(3) An advanced study of physical geology intended
to provide teachers with the foundation knowledge of Earth's internal structure, plate tectonics, rock cycle, weathering and earth materials; natural resources, geochemical cycles; and the basis for geologic time and the history and nature of science. Prereq: Permission of instructor.

720 Oceanology for Educators (3) Detailed study of modern and ancient oceans. Topics include ocean floor topography and bathymetry; marine sediments and ocean floor volcanism; waves, tides and currents; air/sea interactions, ocean chemistry, marine ecosystems and evolution of ocean systems through geologic time; paleoceanography. Prereq: Permission of instructor.
730 Understanding Evolution (3) Detailed study of cosmic, geologic and organic evolution and with emphasis on the history of evolutionary thought and methods scientists use to investigate evolution. Special emphasis is given to common misconceptions about evolution, includes approaches to correcting inaccuracies, incomplete knowledge and misconceptions students have about evolution as well as strategies for improving teaching and learning about evolution. Prereq: Permission of instructor.

740 Field Experience in Geoscience: [Title] (1-3) Field experiences may include summer workshops or institutes, extended weekend field courses, travel courses, field camps, or extended field trips. Field experiences may have an online component, but the core of the course is practical in-the-field participation emphasizing the application of principles and methods of geoscience investigation and education.
Prereq: Permission of instructor.
750 Global Climate Change (3) Detailed study of the geographic patterns and physical processes of global climate change throughout Earth's history and assessments of future climate change scenarios. The course will examine the evidence of climate change in the geologic and fossil record and investigate the various types of models that predict future climate changes. Prereq: GEDU 700 and permission of instructor.

## 760 Astrophysics for Educators (3) Detailed

 study of the formation, evolution and structure of the universe, galaxies and stars. Topics include the Big Bang model, nucleosynthesis and interstellar medium, dark matter and dark energy, stellar remnantsand star nebulae, stellar activity, the Sun as a star, modern instrumentation and space missions and studying motion and light. Prereq: GEDU 700 and permission of instructor.

## German (GERM)

111 Elementary German (3) (TBR: GERM 1010) An introductory course emphasizing listening, speaking, reading and writing. May be used to remove a language deficiency or for students with no prior experience in the language. Three classroom hours.
122 Elementary German (3) (TBR: GERM 1020)
An introductory course emphasizing listening, speaking, reading and writing. Three classroom hours.
Prereq: GERM 111 or equivalent as determined by the department.

222 Intermediate German (3) Grammar review, reading, writing and conversation. Three classroom hours. Prereq: GERM 122 or equivalent as determined by the department.

250 Germany Today: The German People and Their Culture (3) An interdisciplinary study of contemporary Germany, with an overview of Austria and Switzerland. Emphasis on the life-styles, customs, mentality and culture of the German people. Discussion of current trends in German society, politics, economy and the arts. Consideration of the cultural, social and political differences between Germany, Austria and Switzerland and of the leadership role that falls to Germany as the leading country in the European Union. Taught in English.
300 (500) Intensive Conversation in a Foreign Country (3) In-residence training in the foreign language of the area visited. The course elected must be approved in advance by the Chair of the Department of English and Modern Foreign Languages. Research project required for graduate credit. Prereq: GERM 222 or equivalent.
321 Introduction to German Culture (3) An overview of German civilization and culture of the past 1200 years in order to enhance the understanding of Germany today and its role in present-day Europe. Prereq: GERM 341 or 342 or instructor's approval.

330 Twentieth-Century German Drama (3)
Introduction to German Drama, with emphasis on
the Expressionists, Brecht, new trends after World War II, the Swiss and the radio play. Taught in English. No foreign language credit. Offered in alternate years. Prereq: Six semester hours of Western world literature or instructor's approval.
341 (541) Advanced Conversation (3) Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency and conversational strategies. Study of the phonetic system of the German language and exercises to improve pronunciation. Grammar appropriate for oral German. Discussions utilizing readings and electronic media such as videos and the internet. Class presentation of research project required for graduate credit. Heritage speakers and those with near-native abilities in German are not eligible to take this course. If they intend to major in German or earn a Recognition of Proficiency, they should see the department chair for a waiver. Prereq: GERM 222 or instructor's approval.
342 (542) Advanced Composition (3) Emphasizes composition skills. Written practice to extend range of topics, vocabulary, fluency and compositional strategies. Grammar and stylistics appropriate for written German. Practice writing expository and creative prose, translations as well as use of internet discussion lists. Class presentation of research project required for graduate credit. Prereq: GERM 222 or instructor's approval.

## 350 Masterpieces of German and Austrian

 Literature (in English Translation) (3) In-depth discussion of selected literary masterpieces from Germany and Austria. Emphasis on characters, themes and social trends which reflect the culture and traditions of both countries. No knowledge of German required; taught in English. Does not count towards major, minor or Recognition of Proficiency in German. Prereq: ENGL 111-112.360 (560) Studies Abroad (3) In-residence study of the literature, language, or civilization of the area visited. Relevant field trips. Must be approved in advance by the Chair of the Department of Modern Foreign Languages. Research paper required for graduate credit. Prereq: GERM 341 or 342.
370 (570) Travel Study (1-3) A combination of travel and study experiences in the U.S. or
abroad designed to enrich students' knowledge of the target foreign language and culture. May be taught as an organized study tour under faculty supervision or as an independent travel and study project with prior department approval. Topics, prerequisites and course requirements announced in advance. Research paper required for graduate credit. Students may repeat course with change of topic for maximum of six hours credit. Chair of the Department of Modern Foreign Languages approval must be obtained for travel-study courses to count towards minor, major, or Recognition of Proficiency. Not regularly offered.
381-382 (581-582) Survey of German Literature ( 3,3 ) 381 : Beginning to Enlightenment. 382: 18th-20th Centuries. Prereq: GERM 341 or 342 or instructor's approval.
401 Foreign Language Internship (3) Utilization of the target foreign language in a monitored work environment. Appropriate placements may be found locally, nationally, or abroad. Students may or may not be paid. Evaluation by both supervising instructor and on-thejob supervisor. Chair of the Department of English and Modern Foreign Languages approval must be obtained for internships to count towards minor, major, or Recognition of Proficiency. Prereq: GERM 341 or 342.

## 451 (651) The Language of Business and the

Professions (3) Study of the basic terminology and documents of business and various professions as practiced within the Germanic world. In addition to business, professions such as communications, travel and tourism, agriculture and criminology will be covered. Composition of business letters and resumés, translation and presentation of oral reports. Research paper required for graduate credit. Prereq: GERM 341 or 342 or instructor's approval.
491 (691) German Cinema (3) A survey of 20th century German film from inception to contemporary manifestation. Discussion of the major German directors and their impact on the medium of film. Special emphasis placed on the silent films of the prewar years, the Weimar period and the New German Cinema. Film's reflection of social, political and cultural issues in Germany highlighted throughout. Research paper required for graduate credit. Prereq: GERM 341 or 342 or instructor's approval.

495-496 (695-696) Topics in German Language, Literature, or Civilization (1-3, 1-3) Study of selected aspects of German language, literature, or civilization. Taught in German. Topics and prerequisites announced in course schedule. Research paper required for graduate credit. Students may repeat course with change of topic. Only six hours of topics courses may count towards a minor, major, or Recognition of Proficiency. Not regularly offered.

498-499 (698-699) Independent Study (1-3, 1-3) Directed reading or research under supervision of a staff member. Available only to Juniors and Seniors having completed at least six hours of upper-division coursework in German. Project must be approved by faculty in the discipline concerned and the department chair. Research paper required for graduate credit. Students may take no more than six hours of independent study.

## Gerontology (GERO)

200 Introduction to Gerontology (3) Introduction to the multidisciplinary study of aging and older adulthood. Survey of contemporary theories of aging, normal aging processes, challenges associated with aging, and needs of older adults in the U.S. Topics include caring for older adults, cultural influences, and older adults' roles in families and societies.
311 Developmentally Appropriate Activities for Older Adults (3) Planning, implementing, and evaluating activities for older adults. Emphasis on physical, cognitive, social, emotional, and creative activities.

312 Caregiving in Late Life (3) This course examines the experience of caring for older adults in non-institutional settings. Topics include planning and implementing care at home; special care needs of older adults; resources for caregivers and care recipients; and well-being of the caregiver.
314 Death, Dying, and Bereavement (3) Analysis of individual, family and societal values, beliefs, and practices as they relate to death, dying, and bereavement in the United States. Overview of cultural variations including a global perspective.

## 740 Perspectives on Death and Dying (3)

Examination of theories and conceptual frameworks
about dying, death, and bereavement. Awareness of personal assumption, biases, attitudes, and reactions to death. Enhancing skills in coping with loss and supporting others who are dealing with death issues.

## 744 Theories of Adulthood and Aging (3)

Selected theories concerning development in adulthood and late life. Historical views, current research and application to aging-related issues.

## Graphic Design (GDES)

210 Graphic Design (3) Computer-based design, tools and practices through actual use in the design lab. Introduction to vector and raster graphics. A brief history of graphic design placing issues of the new media in context with the aesthetics of visual art. Prereq: ART 120 and ART 140, or permission of instructor.

220 Graphic Design II (3) Course will continue to explore fundamental graphic design concepts and strategies. Introductions to web, interactive, and video, discussion of contemporary trends in digital media and technical standards in the field. Prereq: GDES 210 or permission of instructor.

302 3D Modeling and Computer Graphics (3) D Modeling and Computer Graphics is a hands-on studio course exploring the development of 3D computer graphics for virtual environments and display systems. Students will use computer modeling to explore the principles of 3-dimensional design and emerge with the ability to create well designed 3D models, and also become familiar with the foundations of polygonal modeling, texture mapping, lighting and rendering for video games and other digital media.

## 340 Video Game Foundations (3) This course

 will introduce students to the concepts, elements, and tools used in the development of modern 2-D and 3-D real-time interactive computer video games. Students will examine the history and philosophy of games, the game production process, and game development careers. Topics covered in this course include graphics, gameplay interfaces, storytelling, contextual design, level design, game mechanics, and software engineering. Prereq: GDES 302345 Digital Photography (3) Advanced studio work specifically utilizing the digital camera and a variety of
software applications to create digital imagery for multiple uses and platforms. Concentration on development of a personal aesthetic. Prereq: GDES 210.

350 Typography and Page Layout (3) An advanced studio course specifically investigating the use and function of type in historical and contemporary print production. The development of advanced page layout skills for commercial and informational design will also be integrated into this study of typography. Prereq: GDES 220.
360 Digital Illustration (3) Advanced studio course in the study and practice of digital illustration. Emphasis will be placed on the creative use of digital technologies and microcomputer applications in the creation of illustrative imagery. Prereq: GDES 210.

## 391 Special Topics in Graphic Design (3)

Selected software applications, media, and/or genres for intensive study. May be repeated for credit. Prereq: GDES 210 or 220 or permission of instructor.
425 Interactive Multimedia (3) An introduction to sequential interactive information delivery systems. Exploration, composition and delivery of complex multimedia content in user-driven formats such as the World Wide Web or other interactive media authoring solutions. Incorporation of digital and traditional media including sound, imagery and digital video into finished presentations which reflect visual literacy and sensitivity to digital aesthetics.
Prereq: GDES 220 or permission of instructor.
435 Advertising Design (3) An advanced studio course in print- and media-based advertising design. Advertising strategy and production using industry standard computer software applications. Strong emphasis placed upon conceptual development, current graphic design aesthetics and the social context of the designer in advertising. Prereq: GDES 210 or permission of instructor.
440 Professional Practices in Design (3) Upper-division seminar for the examination and discussion of topics and issues related to the professional work environment in the design field and preparation of graphic design students for material and professional expectations in their discipline. A variety of topics such as portfolio presentation, career strategies and professional development
through graduate studies will be covered through lectures, guest speakers and professional site visitations. Prereq: GDES 350 or permission of instructor.

450 Internship in Graphic Design (3) Application of graphic design skills and practices in a supervised assignment with an appropriate commercial or professional organization. Prereq: Senior standing and permission of instructor.

## 452 Video Game Design and Development

(3) This is a project-oriented course on Game Design and Game Programming. Students from a variety of disciplines work together in small teams on game projects. Students will design, implement and test games with interactivity, animation, sound, constraints, and networking capabilities. They will develop a range of entertainment ideas on various digital platforms, playtest their game ideas, and product finished pieces. Prereq: GDES 302 and 340.

## Greek (GREK)

## 110-120 Elementary Greek $(3,3)$ An

introduction to the Greek language; translation, writing, readings in selected classical and koine sources, philosophical and religious. Some attention to the Greek background of medical/scientific and legal terminology. Does not meet foreign language degree requirement for B.A., B.S., B.S.C.J., or B.S.S.W. degrees. May be taken on Pass-Fail basis.

## Health (HLTH)

## 111 Principles and Concepts in Personal

Health (3) Development of the understandings, attitudes and practices which contribute to better individual health.

111H Honors Principles and Concepts in Personal Health (3) See HLTH 111 above for course description and general limitations. Limited class size, extensive discussion, and writing assignments are featured. Open to students who have demonstrated superior academic ability. Prereq: Departmental approval.

## 220 Advanced First Aid, CPR and AED (3)

Procedures for emergency care and accident prevention. American Red Cross certification in Advanced First Aid, CPR and AED are available.

221 CPR and AED Recertification (1) This course is ideal for participants prior to internship/ student teaching who seek to recertify their current American Red Cross certification CPR and AED. Must have current American Red Cross certification at the time of enrollment. Prereq: HLTH 220.

303 Pharmacology and Sports (3) Pharmacology and sports examines classifications, therapeutic uses, actions and side effect/adverse reactions of major drugs related to sports activities. That knowledge base includes, but is not limited to, pharmacokinetics, legal concerns, therapeutic outcome of drugs commonly used to treat athletes, protocols for over-the-counter medications and substance abuse.

## 427 Principles of Health Education and

 Promotion (3) Required of all Health and Human Performance majors concentrating in Public Health and available as an elective to students interested in developing a basic knowledge in health education interventions. The course is designed to provide students with the conceptual foundation necessary to assess for, plan and implement health promotion programs and interventions. Prereq: HLTH 111428 Public Health Practices (3) The goal of this course is to introduce students to the field of public health including the scope, impact, challenges and employment opportunities. This course provides an overview of the U.S. public health system and focuses on its history, organization, approach, and functions. The course places special emphasis on current health issues from our daily lives to highlight the relevance of public health. The course also examines the major factors that determine the health of a population and overall life expectancy. Prereq: HLTH 111.

## 441 Planning, Implementing and Evaluating

 Community Health Initiatives (3) In this course, students learn to develop evidence-based community health initiatives. Over the course of the semester, students work on developing their own culturally competent community health initiatives, each of which is targeted at a particular population with a specific health need. Students learn to assess community needs and assets using a variety of methods and through use of logic models, design theoretically informed intervention activities appropriate to the needs/assets identified, create a budget and organi-zational structure, and engage key stakeholders at every facet of development and implementation of the community health initiative. Prereq: HLTH 427.

442 Seminar in Policy Development \& Advocacy (3) Students will explore policy in the areas that impact the public's health and learn their future role in the policy formation and advocacy process. Prereq: HLTH 428 or with instructors' approval.

475 Health Methods (3) Field-based experience for health at the secondary level emphasizing preassessment, unit/lesson planning, teaching strategies, implementation and evaluation.

491 Public Health Internship (12) A semester long experience working within a public health agency planning, implementing and/or evaluating a health promotion program or programs. Minimum of 400 hours of structured, supervised work experience. Application must be approved and liability insurance purchased before student may enroll. Prereq: Must bave all coursework complete prior to enrolling in the internship.

## Health and Human Performance (HHP)

325 Stress Management (3) This course is designed to help people know how to cope with stress in their lives. Being able to manage stress in a positive manner enhances the potential for maximum performance both professionally and personally. This course teaches the student how to recognize negative and positive stressors and how to cope accordingly.
330 Introduction to Epidemiology (3) Introduction to the basic principles and methods of epidemiology. Topics to be covered include the historical perspective of epidemiology, measures of disease occurrence and association, clinical epidemiology, disease screening, causal inference and study design.

351 Substance Abuse Prevention (3) This course examines the scope of substance abuse in the United States and explores the various strategies of prevention. Addictive behaviors, dependence and short and long term consequences of drug use and abuse including prescription drugs, illicit street drugs and
ergogenic substances will be covered. Students may not receive credit for this class and Psychology 360.

353 Human Sexuality (3) This course addresses the relationship between health and human sexuality, focusing on the prevention of disease, disorder and dysfunction. Content examines the broad range of attitudes, behaviors, knowledge, practices and myths pertaining to sexuality.

360 Healthy Aging (3) This course addresses the physical, psychological, cultural, and social issues associated with being an older person in our society. Students enrolled in this course will learn factors and influences associated with aging and what can be done to perhaps slow the aging process.

## 406 Psychosocial Aspects of Physical Activity

 (3) This course examines the psychosocial benefits of physical activity, specifically focusing on the application of the promotion and maintenance of leisure-time physical activity. Theories of motivation and physical activity intervention techniques will be discussed as well as the importance of exercise for mental health.485 Workshop in Health: [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours workshop credit may be applied to an undergraduate or graduate degree. Prereq: Instructor's approval.

## Health and Physical Education (HPED)

20- Topics in Sports Officiating [name of sport] (2) Training of students in the psychology of officiating, the mechanics and court positioning to officiate interscholastic, recreational and intramural sports as selected using the third digit: 1 for basketball, 2 for baseball/softball, 3 for football, 4 for soccer, 5 for volleyball. Certifications are made available. May enroll in one or more selected sports.

280 PRAXIS Seminar (1) This seminar will prepare HHP K-12 candidates for the ETS Physical Education Content and Design PRAXIS exam and the Health Education PRAXIS exam. This seminar will provide a PRAXIS overview, review course content knowledge and skills, and develop candidate test taking strategies. May be repeated for credit.

300 Anatomy and Exercise Physiology (3) This course introduces the structure and function of the cardiovascular, lymphatic, immune, respiratory, and muscular systems. Also included is the examination of initial and long term responses of physical activity and exercise within these systems. Prereq: BIOL 110 or equivalent; Health and Human Performance Licensure K-12 majors and coaching minor students only or instructor's approval.

301 Anatomy and Exercise Physiology Lab (1) Application of exercise physiology and analysis of human movement knowledge, skills, and abilities as it relates to health and fitness of all ages in the general population. Emphasis is placed on developing proficiency in exercise prescription and human movement. Coreq: HPED 300 for $K$-12 licensure majors.
304 (504) Adapted Physical Education (3) Overview of characteristics, programs, special needs, legal requirements, and instructional strategies related to children with exceptionalities. Emphasis is given to modification of physical education activities and programs for special populations. Includes field experiences.

308 Class Management for Health and Physical Education (3) Field-based experience for health and physical education focusing on theories and application of research in classroom management. Introduction to the language and skills of pedagogy while modeling professional behavior when applying all these skills in actual school settings. Grades K-5. Portfolio checkpoint. Background check required during the semester of enrollment.

309 Methods of Teaching Elementary Health and Physical Education (3) Field-based experience for health and physical education emphasizing the development and practice of effective teaching skills as related to teaching and learning styles, strategies for teaching and models of instruction. Addresses attitudes, knowledge and skills as defined by the Educator Preparation Program (EPP). Prereq: Admission to Educator Preparation Program (EPP), HPED 308, 320 and HLTH 111.

310 Methods of Teaching Physical Education and Physical Activity for the Classroom Teacher (3) The pre-service teacher will be introduced to developmentally appropriate classroom-based physical activities that integrate physical activity with
academic concepts. Emphasis on research linking school-based physical activity with academic performance will be examined. Lesson planning, peer teaching, and teaching indoor and outdoor physical activity at selected teaching sites will provide the pre-service teacher with a valuable field-based teaching experience. Prereq: Admission to Educator Preparation Program (EPP).

320 Foundation and Sport Skills (3) Addresses historical foundations of health and physical education in addition to NASPE guidelines and curriculum issues related to developmentally appropriate locomotor, rhythmic and sport skills. Requires demonstration of performance proficiency in selected team sports.
321 Individual Lifetime Activity (3) Addresses historical foundations of health and physical education in addition to NASPE guidelines and curriculum issues related to developmentally appropriate locomotor, rhythmic and sport skills. Requires demonstration of performance proficiency in selected individual sports.

390 Practicum (3) Supervised field-based experience in coaching and/or athletic related area. Application must be filed one semester prior to enrolling in practicum. Prereq: Instructor's approval.

## 410 Teaching Models in Physical Education

(3) Introduces instructional models specifically developed for teaching secondary physical education. Emphasis on planning and applying developmentally appropriate physical education models. Sport Education and Teaching Games for Understanding models will be emphasized along with the concepts and tactics of teaching games.
411 Secondary Instruction Strategies and Curriculum Development (3) Field-based experience for physical education at the secondary level emphasizing pre-assessment, unit/lesson planning, teaching strategies, implementation and evaluation. Introduction to curriculum design and implementation from a historical and education governance perspective. Prereq for 411: HPED 309; Admission to Educator Preparation Program (EPP); prereq for 611: Admission to Educator Preparation Program (EPP) or instructor's permission.

412 Public Relations for Teachers and Coaches (3) Examines the concepts of program promotion, coordination of non-academic responsibilities and understanding relationships with administrators, teachers, parents and community.
460 Theory and Techniques of Coaching Baseball/Softball (3) Individual and team fundamentals primarily for the public school coach. Emphasis on conditioning techniques, strategies, team management, motivation, equipment selection/fitting and scheduling.

## 465 The Theory and Techniques of Coaching

 Basketball (3) Emphasis on conditioning techniques, strategies, team management, motivation, equipment selection/fitting and scheduling.470 The Theory and Techniques of Coaching
Football (3) Emphasis on conditioning, techniques, strategies, team management, motivation, equipment selection/fitting and scheduling.

475 The Theory and Techniques of Coaching Volleyball (3) Emphasis on conditioning, techniques, strategies, team management, motivation, equipment selection/fitting and scheduling.

485 Workshop in Physical Education: [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours of workshop credit may be applied to an undergraduate or graduate degree in education. Prereq: Instructor's approval.

## History (HIST)

121 Development of World Civilization I (3 (TBR: HIST 1110) Studies the formation, interactions, and development of world civilizations and cultures from ancient beginnings to 1500 .

## 122 Development of World Civilization II (3

 (TBR: HIST 1120) Studies the formation, interactions, and development of world civilizations and cultures from 1500 to the present.121H-122H Honors Development of World Civi-
lization $(3,3)$ Open to students who have demonstrated superior academic ability. Consent of department required. See HIST 121-122 for course descriptions. (Same as HIST 121-122 but for honors credit and may not be taken in addition to HIST 121-122).

201 History of the United States I (3) (TBR: HIST 2010) A study of the main currents and developments in American life from colonial times to 1877 .

202 History of the United States II (3) (TBR: HIST 2020) A study of the main currents and developments in American life from 1877 to the present.
250 History of Tennessee (3) (TBR: HIST 2030) Tennessee history from the view of the culture of the Indian tribes living in this area through early European settlement, the Revolutionary War in Tennessee and the organization of Tennessee as a state. Social and economic life on the frontier, the culture of the pre-Civil War South, the Civil War and Reconstruction periods in Tennessee and from the Progressive era to the present.

299 History and Historians (3) An introduction to the History Major designed to introduce students to basic techniques, skills and issues of historical research, writing and teaching, including key historical concepts and methods, the nature and fields of history and historiography. Should be taken prior to the junior year and before commencing upperdivision course work, including taking HIST 499 for which it is a prerequisite. Required for History and Secondary History majors.

## 302 (502) Introduction to Public History (3)

Explores the various opportunities for work as a public historian and addresses the current issues and debates in the field. Students will learn about the major functions of public history work. May be followed by a semester internship in public history.

## 303 (503) Women in American History (3)

Explores the lives of American women through the prism of class, race and ethnicity-in relationship to each other, to their families, to their work at home and in the public sphere and to their influence on American society and culture. Beginning with the European settlement of North America and continuing until the present, women's history will be woven into a presentation of the American past.
304 (504) Women in World History (3) This course takes a thematic approach to study women in the non-Western world. Examples from Asia, the Middle East, Africa, and Latin America, and different
chronological periods, will focus on themes including women and religion, war, politics, work, and family. Regional and chronological emphasis will vary with each offering.

305 Women in European History (3) A thematic approach to the history of women in Europe, this course addresses topics from ancient to modern Europe, and will focus on themes such as religion, politics, medicine, family, and the law. Regional, chronological, and thematic emphasis will vary with each offering.

306 Women in East Asia (3) This course examines women's experiences in East Asia from ancient times to the present by focusing on major ideologies, institutions, and practices that determined women's gender roles, status, and everyday lives in China, Japan, and Korea. Primary sources produced by women are used to enable students to acknowledge women's voices and perspectives on their society, culture, and life.

310 American Military History (3) American military history from the American Revolution to the present. Evaluation of significant battles from the viewpoints of the participants, their resources, decision-making techniques and the nine principles of war. Discussion of all of America's wars. Emphasis on the Civil War, World War I, World War II, Korea and Vietnam. (Same as MSL 310)

320 (520) Ancient Greece (3) A study of Greek society from Minoan civilization to the Hellenistic Age (1400-300 BC). Topics include hoplite warfare, Greek colonization, the Olympics, Sparta, Periclean Athens, the Persian and Peloponnesian Wars and the empire of Alexander the Great.

321 (521) Ancient Rome (3) A study of Rome's cultural and political development from 700 BC to 400 AD. Examines Rome's origins as a small city state to its rule over a vast empire that stretched from Britain to the Middle East. Topics include the formation of the Roman Republic, expansion, civil war, imperial government and the development of Christianity.

323 (523) The Middle East, 500-1800 (3) This course surveys the history of Middle Eastern societies during medieval and early-modern eras with an emphasis on the rise of Islam and its world historical
context. Topics include the development and spread of Islam, the Caliphate and its demise, the Crusades, the Mongol empires, and the rise of Turkish power culminating in the Ottoman and Safavid Empires.

## 324 (524) The Modern Middle East (3)

This course surveys major political and cultural developments in the Middle East over the last two centuries, emphasizing interactions with the West, the development of secular nation-states, the nature of Arab nationalism and the Arab-Israeli dispute, oil diplomacy, and the Islamist revival. Time is reserved for discussion of topics that have acquired a broad contemporary significance.
325 East Asia to 1600 (3) This course introduces the trajectory of development of East Asian civilizations, from the prehistoric period to 1600 . The goal of this course is to help students to understand East Asia as an integrated region with common cultural heritages and shared historical experiences while also emphasizing the historical development of the distinctive national identities of China, Japan, and Korea respectively.
339 Early Modern History (3) A study of 16th and 17th century European political, cultural, social, economic, and intellectual history. This course is an examination of how Europe progressed from the middle ages to the modern era. Topics include religious reformation, religious wars, nation building, exploration and colonization, women and gender, and cultural and intellectual movements.

## 340 (540) The Age of Enlightenment and

 Revolution, 1715-1815 (3) A study of 18th century European political, social, economic and intellectual history, including the French enlightenment and its influence on Europe and America. Set against the background of military and diplomatic developments of global war, the course will examine the causes of the French Revolution and Napoleonic era.341 (541) Europe, 1815-1914 (3) A comparative study of European states from the Congress of Vienna to World War I, this course examines industrialization, political modernization, the birth of popular culture, the challenges of mass society, colonialism, and Europe's changing relations with the world.

342 (542) Europe From War to War, 1914-
1945 (3) A comparative study of European states from the outbreak of World War I to the end of World War II, this course examines total war's impact on peoples, cultures, and economies; political and cultural modernization, the birth of the welfare state, unification attempts, and Europe's changing relations with the world.

## 343 (543) Europe, 1945 - Present (3) A

 comparative study of European states from the end of World War II to the present. Examines the Cold War's impact on peoples, cultures, and economies; the end of the industrial age, the creation of the European Union, and Europe's changing relations with the world.
## 401 Independent Study in American History

 (1-3) Directed reading or research under supervision of a staff member. By arrangement only. Prereq: 24 bours of history with a 3.00 average (in history), 2.50 average (overall) and departmental approval.402 Independent Study in World History (1-3)
Directed reading or research under the supervision of a faculty member. By arrangement only. Prereq: 24 hours of history with a 3.00 grade point average and departmental approval.
403 (603) Social and Cultural History of the
United States (3) Based on an analysis of gender, race, class and ethnicity, this course examines American society "from the bottom up," looking at such issues as the environment, health and demography, religious values, industrialization, cities and suburbia, social movements, popular culture and everyday life. 1600 to Present.
404 (604) Sex and Gender in American History (3) Topical study of sexuality and gender over the four centuries since the arrival of Europeans in North America. The course will examine important theories and trends within the vibrant subfield of cultural history. Focusing on the private sphere as well as the public sphere led cultural historians to examine issues of sexuality and to recognize its intersection with race, gender, class, age, time period, region, and culture. The course will focus on such themes as courtship, marriage, sexualities, the politics of reproduction, prostitution, sexually transmitted diseases, sexual violence, and sex censorship.

414-415 (614-615) History of England (3, 3) A survey of English history from the Norman Conquest to the present. 1066 to 1714 (414). 1714 to the present (415).

420 (620) Late Antiquity and Medieval History (3) Examines European society from 300 to 1300, with particular emphasis on the development of the Christian church in Western Europe and Byzantium. Topics include the Papacy, asceticism and monasticism, the Frankish and Carolingian kingdoms, the Inquisition and the Crusades.

421 (621) Renaissance and Reformation (3) Examines the social, political, intellectual, artistic and religious developments in Europe from the thirteenth through the sixteenth centuries and the resulting changes, with emphasis on the Humanist movement, the Reformation and the Counter Reformation.

425 Science and Superstition in Early Modern Europe (3) This course is an examination of the contrasting ideas, beliefs, and trends in the areas of science and superstition from the middle ages to the 19th century. Topics include the Scientific Revolution, the history of Witchcraft trials, popular magic and medicine, and the Enlightenment.

434 (634) African-American History I (3) This course covers the background and origin of the slave trade in Africa, the mid-passage, the nature of the slave trade in the Americas, the Africans in America both as freemen and slaves, movements to end slavery and slave resistance efforts and the role of blacks in the Civil War.

## 435 (635) African-American History II (3)

This course covers the African-Americans from the Reconstruction period to the present time. Topics included are the ending of slavery, the economic and political transition following it, the emerging debate over the role of the African-American in American life, the struggle for political and legal equality and the social and cultural development of African-Americans in the twentieth century.

441 (641) History of Latin America (3) An examination of main topics such as conquest, colonialism, independence movements, civil wars and revolutions, economic upheavals and political instability in Latin America and the Caribbean Basin, with
special emphasis on the roles of church and state (including the military) and the challenges faced by diverse and stratified societies. Thematic and geographical focuses will vary with each offering.
442 (642) History of Mexico (3) Mexican history from pre-Hispanic civilizations (especially the Aztec Empire) to the present. Examines colonial Mexico, its movement towards independence, issues of political and economic stability, its relationship with the United States and its ongoing revolution.
444 (644) Imperial American, 1877 to 1900 (3) A critical examination of the pivotal era in U.S. history, with special attention given to such topics as Gilded Age politics and culture, the final subjugation of the American Indians, the closing of the frontier, and America's expanding involvement overseas, including its war with Spain and its conquest of the Philippines.
445 China since 1600 (3) This course explores the historical transformation of China from an empire to a modern state to global super power. It examines the social, cultural, and institutional features of the Qing dynasty and its troubled encounters with the West in the nineteenth century, the internal and external conflicts and contentions in the process of China's transformation into the two modern states of the Republic of China and the People's Republic of China, and the significance of present-day China in the world and the current problems confronting China.

446 Japan since 1600 (3) This course examines the trajectory of Japan's historical development from the 17 th century to the present. It covers the society and culture of early modern Japan under the Tokugawa Shogunate systems (1600-1868) and the rise of the only non-Western imperial power of the modern era. Further, it explores Japanese experiences during the Second Sino-Japanese War and World War II as well as postwar Japanese society and its relations with both the United States and neighboring Asian countries.

448 (648) Russia Since 1552 (3) A study of Russia from the conquest of Kazan to the present, this course examines Russia's imperial formation, 19th century reforms, 20th century revolutions, and superpower role.

450 (650) Public History Internship (3-6)
Full-time apprenticeship with a public or private historical agency or institution of local, regional, or national significance. May be taken at any time of the year and may be paid. Prereq: HIST 302, 3.0 GPA in the major. Not limited to History majors.

## 459 The Twenty-First Century World (3) A

 topical, cross-cultural seminar dealing with major twenty-first century civilizational values and dynamics, their roots, and their impact on human beings and the environment. Includes, but is not limited to, the study of human and civil rights, migrations, global warming, modernism and post-modernism, social engineering, the industrial economies, and imperial power. This writing-intensive course uses a variety of historical methods to contribute to emerging narratives and to construct syntheses.
## 460 (660) Topics in Diplomatic History:

[Topics Title] (3) Classes allowing for an in-depth study of the nature and styles of diplomacy and of selected topics pertaining to U.S., European, or non-European diplomacy through time periods from the beginning of civilization to the present. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses ( 460,470 , 480 , or 490 ) can be counted toward the major or minor. Not regularly offered.

461 (661) The Colonial Period and the Revolution (3) A study of the origins and development of the American colonies, with special attention given to those that formed the "original thirteen states." Social, cultural and religious differences and developments as well as political and military events. An examination of the causes and events that brought about the rupture of the ties to England and the military and diplomatic history of the Revolutionary War.
462 (662) The Constitution and the Rise of the Federation (3) A study of the problems for the Confederation after the drafting of the peace with England and an examination of the solutions found, or attempted, in the Constitutional Convention.
The nature of the union formed by the ratification process and the subsequent changes in that union during the Federal Period. Review of the attempts to form a distinctly American culture.

463 (663) U.S. Foreign Relations to 1920 (3)
This course surveys the major themes of United States foreign affairs from the formation of the republic through the First World War. Topics include: foreign policy in the Revolutionary War, Hamiltonian vs. Jeffersonian approaches, the War of 1812, the Monroe Doctrine, continental expansion and War with Mexico, foreign policy during the Civil War, Caribbean and Pacific expansion, the First World War, and the League of Nations debate.

464 (664) U.S. Foreign Relations since 1920
(3) This course surveys the major themes of United States foreign affairs since the First World War. Topics include: disarmament, neutrality, the Second World War, origins of the Cold War and confrontation with the Soviet Union, interactions with developing nations, conflicts in Korea and Vietnam, the end of the Cold War, and wars in Afghanistan and Iraq.
465 (665) American Thought to 1877 (3) A study of currents in American intellectual history from colonization to Reconstruction. The course explores religious traditions and revivalism; causes and impact of reform movements; political ideologies of republicanism and democracy; transcendentalism and Unitarianism; and debates surrounding slavery.

466 (666) American Thought since 1877 (3) Major aspects of American intellectual history from Reconstruction to the present. Principal attention to the debates surrounding Darwinian evolution; development of pragmatism; trends in liberal and conservative political ideologies; the role of the public intellectual; anti-Communism; and working class life in the labor movement.

## 467 (667) Travel-Study [Selected Topics]

(1-3) A course designed as an educational travel experience in American History and Culture within the United States under the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course (with different topics). Not regularly offered. Requires instructor's approval.
468 (668) Travel-Study [Selected Topics] (1-
3) A course designed as an educational travel experience in international history and culture in foreign
countries under the supervision of a University instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a Pass/Fail basis. Students may repeat course with different topics. Not regularly offered. Requires instructor's approval.
470 (670) Topics in World History: [Topics
Title] (3) Classes in selected aspects of world history dealing with a global or comparative approach, such as, but not limited to, urbanization, technology, sports, disease, climate, demographics, food, rise and fall of civilizations, transportation, industrialization and migrations. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses ( $460,470,480$, or 490 ) can be counted toward the major or minor. Not regularly offered.

480 (680) Topics in U.S. History: [Topic Title] (3) Classes in one or more of the following areas: (a) interdisciplinary approaches to historical periods and (b) specialized topics suitable for in-depth study. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses ( $460,470,480$ or 490) can be counted toward the major or minor. Not regularly offered.

## 484 (684) History of Africa 1400 to Present

 (3) A survey of African history from the 15 th century to the present, emphasizing the rise of colonialism, its significance to Africa's underdevelopment and African resistance to colonialism, with special focus on the histories of Algeria, South Africa, Rhodesia (Zimbabwe), Kenya, Angola and Mozambique.
## 490 (690) Topics in European History: [Topic

Title] (3) Classes taught with an interdisciplinary and/or comparative approach, or allowing for an indepth study of specialized topics in European history. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses ( 460,470 , 480 or 490) can be counted toward the major or minor. Not regularly offered.
494 (694) Antebellum America, 1815-1850 (3) A study of this remarkable period of American growth and expansion and the conflicts that pushed the nation toward the Civil War, with emphasis on the market and transportation revolutions, reform movements, the evolution of American democracy, territorial acquisi-
tion, the U.S.-Mexico War, slavery, sectionalism and presidential administrations, from Madison to Polk, particularly that of Andrew Jackson.

495 (695) The Civil War and Reconstruction, 1850-1877 (3) A critical inquiry into the inflammatory politics of the 1850s, the many causes of the Civil War, the course, conduct and significance of the American Civil War and its aftermath. Special emphasis on the military campaigns, emancipation, activity behind the lines, wartime diplomacy and reconstructing the nation.

496 (696) U.S. History, 1900-1945 (3) This course involves the study of one of the most dramatic periods of US history, beginning with the Spanish American War, running through World Wars I and II, and the atomic bomb. Domestically, it examines the deepening of racial segregation, the rise of great industrial monopolies, the greatest economic crisis in the nation's history, and some of the political responses to these and other great events.

497 (697) U.S. History, 1945 to the Present (3) This course examines the United States from the height of its power at the close of World War II, into the Cold War, through the Civil Rights Revolution, the turbulent 1960s, the Vietnam conflict, America's deindustrialization, the rise of conservatism, and on to the age of Obama, in an effort to make sense of the present by studying this, the most recent past.

498 (698) The Sixties (3) A critical inquiry into a tumultuous period in recent US history. Exploring the rise of the Civil Rights and Black Power Movements, the New Frontier and the Great Society, U.S. foreign policy and Vietnam, the anti-war, women's and counter-cultural movements and the conservative response to political, cultural and social change.

## 499 Senior Seminar: Historical Research and

Writing (3) A theme-based writing seminar designed to promote scholarly expression and hone analytical and critical thinking skills. Students will learn the mechanics of historical writing and editing in a closely directed environment while acquiring skills essential to professional development. Themes will be selected by the instructor. This course is required for all History Majors and should be taken before the student's final semester. Prereq: HIST 299.

701 Graduate Independent Study in American History (3) Directed reading or research under supervision of a faculty member to meet the needs of public school teachers of social studies. Significant reading and writing required. Topics, prerequisites and course requirements announced in advance.

## 702 Graduate Independent Study in European

 or Asian History (3) Directed reading or research under supervision of a faculty member to meet the needs of public school teachers of social studies. Significant reading and writing required. Topics, prerequisites and course requirements announced in advance.770 Advanced Topics in History [Selected Topics] (3) A course designed to provide instruction in specialization areas of history useful to public school teachers of social studies. Significant reading and writing required. Topics, prerequisites and course requirements announced in advance. Course may be repeated twice for credit toward the M.S. in Education with a major in teaching history. Not regularly offered.

## Honors (HONR)

200 Topics in Honors (3) In-depth study of specialized topics selected from disciplines across the curriculum. Critical thinking, writing, and discussion skills are emphasized. Topics and instructors vary by semester. Course required of all sophomore students in Honors Programs. Other students may enroll with permission of instructor and Director of Honors Programs. Course may be repeated with total hours not to exceed six hours.

367 United States Travel-Study (3) Course designed to enhance student understanding of and appreciation for the various cultural, historical, artistic, literary, scientific, etc. elements of selected areas or regions of the United States. Topics, instructors, and course requirements announced in advance. Students may repeat course, but only one course may be counted towards completion of Honors core curriculum. Requires approval of instructor and Director of Honors Programs.

368 International Travel-Study (3) Course designed to enhance student understanding of and appreciation for the various cultures and societies
of the world. Through travel to different countries and regions, students will gain an interdisciplinary understanding of international societies and peoples. Topics, instructors, and course requirements announced in advance. Students may repeat course, but only one course may be counted towards completion of Honors core curriculum. Requires approval of instructor and Director of Honors Programs.

## Honors (HNRS)

101 Great Works - The Ancient World and Classical Antiquity (3) A course designed for University Scholars in the first semester of their first year. Introduction to historical, philosophical, and literary analysis as a means of developing highlevel critical thinking and writing skills. Particular emphasis placed on historical processes, philosophical inquiry, and literary analysis. Representative and influential texts and authors from the ancient world. Prereq: Admission to the University Scholars Program.
102 Great Works - Late Antiquity to the Middle Ages (3) A course designed for University Scholars in the second semester of their first year to develop high-level critical thinking and writing skills. Particular emphasis placed on historical processes, philosophical inquiry, and literary analysis. Representative and influential texts and authors from late Antiquity to the Middle Ages. Prereq: HNRS 101 with a grade of C or better.

110 Public Speaking and the Rhetorical Tradition (3) A course designed for University Scholars in the first semester of their first year, HNRS 110 is the study of public speaking through the application of classical rhetorical theory in the preparation, delivery, and criticism of extemporaneous and manuscript speeches. All course content and staffing is left to the discretion of the Department of Communications. Prereq: Admission to the University Scholars Program. Coreq: (if not already satisfied) English 111 or English 111H.

## 120 Development of Mathematical Enquiry

(3) A mathematics course designed for University Scholars in the second semester of their first year, HNRS 120 focuses on the methods, practices, and historical development of Mathematics from Classical Antiquity to the Enlightenment. Emphasis on
the development of problem solving techniques and the nature and purpose of mathematical enquiry's application in cultural development. Texts taken from representative mathematical works from Euclid through Newton. A mathematics course taught by and content approved by the Department of Mathematics and Statistics. Prereqs: Admission to the University Scholars Program AND one unit of high school geometry, two units of high school algebra, and a satisfactory placement score.
201 Great Works - Late Middle Ages to the Renaissance (3) A course designed for University Scholars in the first semester of their second year, HNRS 201 is designed to expand and build on the first-year HNRS Humanities sequence and to continue developing high-level critical thinking and writing skills. Particular emphasis placed on historical processes, philosophical inquiry, and literary analysis. Representative and influential texts from the late Medieval to the late Renaissance periods. Prereq: HNRS 102 with a grade of C or better.

## 202 Great Works IV - The Enlightenment to

 Modernity (3) A course designed for University Scholars in the second semester of their second year, HNRS 202 is devoted to the study and exploration of texts that have fundamentally shaped the central intellectual, social, and cultural movements from the Enlightenment to Modernity. Particular emphasis placed on exploring the relationship between the individual and society and the context of major developments in the social and behavioral sciences. Prereq: HNRS 201 with a grade of C or better.210 Development of Scientific Enquiry (3) A course designed for University Scholars in the first semester of their second year, HNRS 210 focuses on the nature of scientific investigation and understanding, its historical development, and current scientific laws through a concentration on a select scientific discipline. Emphasis on understanding the relationship between refinements in scientific investigation and understanding,, and cultural development. Texts taken from representative scientific and historical works. Selected scientific discipline may vary by instructor. Course designed and taught by faculty from the College of Engineering and Natural Science and the College of Agriculture and Applied Sciences. Prereq: HNRS 120 with a grade of C or better.

## Honors Seminar (HSEM)

108 Honors Seminar (1) Freshmen in the Honors Seminar Program can receive one semester hour of credit for fulfilling the requirements of the Honors Seminar Program. Freshmen in the Honors Seminar Program participate in a series of seminars with a distinguished campus visitor and attend the public addresses of distinguished visitors throughout the academic year. A research paper is required. Students enroll in this course during the fall semester and complete program requirements during spring semester. An S grade will be assigned for the fall semester and changed to P or F at the end of spring semester when program requirements are completed. Under some circumstances, the course might be completed in one semester with the instructor's approval. This course is graded on a Pass/Fail basis.

208 Honors Seminar (1) Sophomores in the Honors Seminar Program can receive one semester hour of credit for fulfilling the requirements of the Honors Seminar Program. Sophomores enrolled in this course participate in a series of seminars with a distinguished campus visitor and attend the public addresses of distinguished visitors throughout the academic year. A research paper is required. Students enroll in this course during the fall semester and complete program requirements during spring semester. An S grade will be assigned for the fall semester and changed to P or F at the end of spring semester when program requirements are completed. Under some circumstances, the course might be completed in one semester with the instructor's approval. This course is graded on a Pass/Fail basis.

308 Honors Seminar (1) Juniors in the Honors Seminar Program can receive one semester hour of credit for fulfilling the requirements of the Honors Seminar Program. Juniors enrolled in this course participate by attending public addresses of distinguished visitors throughout the academic year. Submission of a course paper is also required. Students enroll in this course during the fall semester and complete program requirements during spring semester. An S grade will be assigned for the fall semester and changed to P or F at the end of spring semester when program requirements are completed. Under some circumstances, the course might
be completed in one semester with the instructor's approval. This course is graded on a Pass/Fail basis.

408 Honors Seminar (1) Seniors in the Honors Seminar Program can receive one semester hour of credit for fulfilling the requirements of the Honors Seminar Program. Seniors enrolled in this course participate by attending public addresses of distinguished visitors throughout the academic year. Submission of a course paper is also required. Students enroll in this course during the fall semester and complete program requirements during spring semester. An $S$ grade will be assigned for the fall semester and changed to P or F at the end of spring semester when program requirements are completed. Under some circumstances, the course might be completed in one semester with the instructor's approval. This course is graded on a Pass/Fail basis.

S (Satisfactory) Grade-For an explanation of this grade, see Grades section of university catalog.

## Hospitality Management (HPMG)

## 101 Introduction to the Service Industry (2)

Study of hotels, restaurants, tourism and the hospitality industry. Emphasizes development and history, ethical issues, and professional opportunities.

## 300 International Culture, Diet, and Cuisine

 (3) This course will analyze how models of diet and nutrition assert themselves in the food selection and culinary styles of various cultures. Students will explore principles underlying traditional diets in discussions of health, wellness, and nutrition, as well as in the preparation of representative dishes. The study of cultural cuisine through the use of seasonal, local products will help students understand how diet plays a key role in quality of life. The course will include culinary classes, visits to local food sources, and study of food/culinary history of various regions of the world.301 Culinary Arts Techniques I (3) Introduction to culinary science and professional food preparation techniques. Students will develop fundamental culinary skills. One one-hour lecture and two twohour labs.

302 Culinary Arts Techniques II (3) Study of specialty foods, garnishes, and dessert creation including design techniques, and display of fine foods. One one-hour lecture and two two-hour labs.

## Human Learning (HLRN)

311 Technology Integration (3) Overview of methods for integrating technology into the K-12 curriculum. Emphasis is on the application of technology-based strategies to support K-12 student learning and classroom management.

325 Educational Psychology (3) An overview of the application of psychology to the teaching/learning process. The creation of an effective learning environment is emphasized through the study of the teaching process, human development, learner differences, learning theory and motivation.

## Human Performance (HPER)

302-303 Fitness and Health Promotion Practicum $(2,2)$ An introduction to a variety of career opportunities, developing a professional resumé, professional philosophy, professional goals and objectives and a professional portfolio. Includes a 45 hour supervised study and experience with a cooperating agency. Application must be approved and liability insurance purchased before student may enroll. Prereq: Student must be a Department of Health and Human Performance major.

315 Historical and Philosophical Perspectives of Health, Physical Education and Sport (3) A review of the heritage of health, physical education and sport and quest for understanding the philosophical perspectives that have evolved throughout history.

327 Principles of Fitness Training (3) An introduction to principles of fitness and fitness training with an emphasis in fitness programming, assessing and instructing activities that promote fitness, and developing strategies for healthy behavior change.

350 Motor Development and Learning Across the Life Span (3) An examination of the motor development and motor learning principles as they relate to the teaching-learning process for human movement
from birth to old age. Includes discussion regarding the maintenance of motor skills and activities of daily living throughout middle and older adulthood.

360 Firearm and Boating Safety (3) Various techniques in firearm and boating safety instruction. The participant will receive student certification in the areas of hunting and boating safety through the Tennessee Wildlife Resource Agency. Teaching instructor rating will also be available.

415 Professional Leadership (3) Emphasizes the leadership skills and behaviors necessary to succeed in health and human performance related professions. Includes leadership concepts and practice exploration, personal and professional ethics, and professional preparation. Prereq: Senior standing or instructor approval.

432 Sport and Exercise Psychology (3) The emphasis of this course will be on the current issues and challenges facing active populations and their individual differences and behaviors. Intervention techniques and social-environment will be discussed as to their effects on sport behavior and performance.

435 Nutrition for Health, Fitness and Sport (3) Examines the role of nutrition for the physically active individual as it relates to health-related fitness and athletic performance. Topics include the human energy system, macro and micronutrients, weight management, hydration and nutritional supplements. Prereq: NUTR 100; EXSC 430 or any buman anatomy and/or physiology with a lab, or instructor's approval.

440 Evaluation in Human Performance (3) Overview of the procedures and instrumentation required in the administration of psychomotor skills, measurement, evaluation an assessment. Emphasis is on proper selection and administration of tests, appropriate evaluation of test results using basic statistical procedures (e.g., random sampling, correlation, t-tests, ANOVA).

485 Workshop in Human Performance [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours of workshop credit may be applied to an undergraduate degree in Education.

491 Internship (12) One semester work experience with a cooperating agency. Application must be approved and liability insurance purchased before
student may enroll. Prereq: Must have all core coursework per discipline completed.

## Information Systems (INFS)

## 205 Introduction to Productivity Applica-

 tions (3) This course provides an introduction to electronic office applications with emphasis on spreadsheet and database application skills.235 Advanced Productivity Applications (3) This course builds intermediate and advanced spreadsheet and database skills. Students will extend their knowledge and understanding of spreadsheet and database tools to support problem solving and data analysis. Prereq: CSCI 201 or INFS 205.

## 255 Digital Writing with Business Grammar

(3) This course provides a comprehensive study of the subject of business English, including grammar, mechanics, and punctuation with an introduction to writing digital correspondence.

## 290 Topics in Information Systems [Topic

title] (1-3) Lectures and/or special projects related to specialized topics in information systems. Course may be repeated for a maximum of six (6) credit hours. May be offered on Pass/Fail basis. Prereq: Departmental approval required.

## 310 Management Information Systems (3) A

 comprehensive overview of the use of management information systems and their applications to all functional areas of business including technical foundations and implementation of management and support information systems. Prereq: Junior standing.315 Introduction to Internet Programming for
E-business (3) Introduction to web-design, internet technologies and development issues within an e-business setting. Overview of internet technologies including browsers, FTP clients, mailers and search engines. Web page development using HTML, cascading style sheets, tables, frames, and forms using freely available and commercial web editors. Prereq: CSCI 201,or CSCI 220 or CSCI 221 or INFS 205.

330 Employability Skills and Business Presentation (3) This course assists with the development of employment documents, interpersonal skills, in addition to the study and creation of professional,
persuasive presentations designed to promote a professional image in the world of business.

## 336 Microsoft Office Suite Applications (3)

This course provides microcomputer knowledge and skill development using Microsoft Office Suite applications in workplace simulation format. Students taking this class will be prepared for MOS certification. Prereq: INFS 205 or permission of instructor.

351 Business Communication (3) Communication of business information through oral presentations and written letters and reports, including research papers/formal reports. Prereq: ENGL 112 and junior standing.
361 Network Administration (3) Introduction to concepts, terminology and application of network administration. Topics include network architectures, security, services and administration. Prereq: INFS 310.

371 Object-Oriented Systems Analysis and Design (3) Study of the systems development life cycle system, various types of systems including business and government. Methods of designing systems, data management, input and output design, hardware selection and methods of information processing. Prereq: CSCI 220, CSCI 221 or CSCI 250.

410 Data Base Management Systems (3) Fundamentals of data base processing. Network, hierarchical and relational data bases. Comparison of data base systems. Data base implementation. Prereq: CSCI 220, CSCI 221 or 250.

415 Internet Programming for E-business 2
(3) This second class builds on the knowledge and skills gained in INFS 215. Prereq: INFS 315.

420 Information Systems Security (3) Course content includes the Information Systems security, threats and vulnerabilities, techniques to defend against various threats and vulnerabilities, and disaster recovery.
460 Issues in Business Communication (3)
This course will apply written, oral, and nonverbal communication skills for business purposes. Students will discuss current issues in business communication including legal topics, ethics in communication, social media use, conflict management documentation, and emerging technologies and their effect on communication.

465 Professional Presence and International Protocol (3) This course provides a study of professional presence as related to business attire, appearance, behavior, and protocol and its impact on interpersonal and professional relationships in both national and international arenas.

480 Internship in Management Information Systems (1-9) Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. May be repeated for up to a total of nine hours internship credit. A maximum of six hours may be used to fulfill degree requirements. Prereq: Departmental approval is required; at least Junior standing.

485 Advanced Business Communication (3) This course will assist students in further developing writing skills through the application and study of problem-solving strategies, research, and analytical skills. Topics in this class are chosen based on student and faculty interest. Prereq: INFS 255 or equivalent, INFS 351 or permission of instructor.

## 490 Advanced Topics in Information Systems

[Topic title] (1-3) Lectures and/or special projects related to specialized advanced topics in information systems. Course may be repeated for a maximum of six (6) hours credit. May be offered on a Pass/Fail basis. Prereq: Departmental approval is required.

491 Current Issues in Management Information Systems (3) Seminar in current issues in management information systems. Students are required to research topics, write reports and give technology-assisted oral presentations. Prereq: INFS 371 or INFS 310.

761 Information Systems (3) An advanced seminar in information systems and their applications to all functional areas of business.

## Instructional Design and Technology (IDT)

710 Foundations of Distance Learning (3) This course will present the historical, theoretical, and philosophical foundations of distance education; an overview of distance education technologies; an exploration of the literature of the field; and an examination of effective techniques for learner-
centered instruction within the distance education environment. An overview of course management will be presented.

720 Instruction Design (3) This course examines the process of instructional design with an emphasis on distance learning course development. The course involves the application of instructional design principles in solving performance and instructional problems. Various instructional design models used to develop courses will be investigated. Emphasis will be placed on the design of a Webbased course module.

730 Teaching and Learning at a Distance (3)
This course examines online pedagogy and practical strategies for teaching in the online environment. The course includes discussion of online course management, teaching techniques, and technology tools that promote critical thinking, interactivity, collaboration, and effective communication. The course will also examine the context in which distance teaching and learning occurs, including the needs of diverse learners. Emphasis will be placed on the implementation of a Web-based course module. Prereq: IDT 720.

## 740 Creating Collaborative Learning Environ-

 ments (3) This course examinesWeb-based technologies that enhance teaching practices and student learning through the use of tools that allow users to publish and interact in new ways. Emphasis will be placed on tools that encourage the development of collaborative learning communities that strengthen critical thinking, reflection, and interactive learning in the distance learning environment.

750 Educational Technology (3) This course provides a research-based overview of the use of a variety of media and technology tools as an integrated part of the teaching and learning process. Emphasis is on current technology-related issues in schools and the use of technology to promote learner-centered classroom environments. Credit cannot be received for both EDST 750 and IDT 750.

## Interdisciplinary Studies (IDST)

110-120 Introduction to Leadership $(2,2)$ Academic and experiential knowledge of leadership theory and practice to guide the student in developing his or her leadership skills, understanding and analyzing leadership issues and appreciating the responsibilities for serving as a leader of a group or organization. Requirements include oral and written work as well as demonstration of skill development. Graded on Pass/Fail basis.

150 Introduction to the Canadian People and Their Culture (1-3) An overview of Canada today, with emphasis on the life-styles, customs and values of the Canadian people and their attitudes towards the United States. This course is designed as an introduction to Canadian Studies and students are encouraged to take it in conjunction with other approved courses in the Canadian Studies program. Students who complete additional assignments in French (readings and written critiques) will receive two or three credits for this course.

250 Foundations in Canadian Studies (3) An in-depth study of Canada as it has developed on the North-American continent from pre-colonial times to the present. Equal emphasis will be placed on Canadian geography, history, politics, literature and culture. Special attention will be given to the role played by Quebec in the formation of Canada and in Canadian society today.

450 (650) Energy Studies (3) A multidisciplinary course presenting the realities of diminishing fossil fuels, environmental consideration associated with energy resources and emerging sources of energy. Lectures and field excursions. For additional information about these courses and the frequency with which they are offered, contact Department of Agriculture, Geosciences, and Natural Resources.

490 Senior Seminar (3) The capstone course associated with the Bachelor of Interdisciplinary Studies major. A theme-based writing seminar designed to promote scholarly expression; to synthesize connections among experiences outside of the formal classroom; to make connections across disciplines; to solve difficult problems; to clearly express inter-
dependence of language, thought, and expression; to develop a sense of self as a learner building on prior experiences; and to draw conclusions by combining more than one field of study or perspective. this course is required for all Interdisciplinary Studies majors and should be taken in their last semester of study and completed with a grade of C or better. Prereq: Interdisciplinary Studies major.

711-712 Environmental Studies (2, 2) An interdisciplinary study of a natural ecosystem involving biology, chemistry, geology, mathematics and physics. The course, a combination of lectures, lab and field work, is taught during the summer only. For additional information about these courses and the frequency with which they are offered, contact the Chair of the Department of Biological Sciences. Prereq: K-12 science and/or mathematics teacher; and consent of instructor(s).

## International Studies (INST)

## 200 Introduction to International Studies (3)

An interdisciplinary course to introduce students to the important large scale issues and conditions which are active in the contemporary world. Included are global perspectives dealing with cultural, ecological, economic, geographical, political and social issues.

## 410 International Studies Internship (1-3)

Designed to offer experience related to one or more of the three International Studies concentrations (International Business and Development, International Diplomacy and Strategy, and International Diversity and Multiculturalism) under the direction of faculty members and field supervisors. Amount of credit granted depends upon the nature of the projects undertaken. Course may be repeated for up to a maximum of three hours under course number, and only three hours of INST 410 may count towards the International Studies major. Prereq.: Instructor's approval.

## 485 International Studies Senior Capstone (3)

A capstone course in the International Studies major. Designed to help students show their understanding and evaluation of contemporary world issues and reflect on their achievements and goals in the major.

Students will have readings, presentations and a major paper. Prereq.: Senior standing.

## Japanese (JAPN)

111 Elementary Japanese (3) An introductory course emphasizing listening, speaking, reading and writing. May be used to remove a language deficiency or for students with no prior experience in the language. Three classroom hours.
122 Elementary Japanese (3) An introductory course emphasizing listening, speaking, reading and writing. Three classroom hours. Prereq: JAPN 111 or the equivalent as determined by the department.

222 Intermediate Japanese (3) Grammar review, reading, writing and conversation. Three classroom hours. Prereq: JAPN 122 or equivalent as determined by the department.
250 Japan Today: The People and Culture of Japan (3) An interdisciplinary study of Japan today, with emphasis on the life-styles, customs, mentality and overall culture of the Japanese people. Discussion of current trends in politics, education, media, religion, literature and the arts (including popular culture), especially as they illustrate important cultural values and attitudes. Consideration of the attitudes of Americans towards the Japanese people and vice versa. Taught in English.

300 Intensive Conversation in a Foreign Country (3) In-residence training in the foreign language of the area visited. The course elected must be approved in advance by the Chair of the Department of English and Modern Foreign Languages. Prereq: JAPN 222 or equivalent.

315 Intensive Reading in Japanese (3) Emphasizes receptive skills. Readings from formal to informal written texts. Selection of contemporary written materials, including literary works, poetry and original texts from magazines, as well as newspapers, instructional business materials and technical explanations.

341 Advanced Conversation (3) Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency and conversational strategies. Study of the phonetic system of the Japanese language and exercises to improve pronunciation.

Grammar appropriate for oral Japanese. Discussions utilizing reading and electronic media such as videos and the Internet. Heritage speakers and those with near-native abilities in Japanese are not eligible to take this course. Prereq: JAPN 222 or instructor's approval.

342 Advanced Composition (3) Emphasizes composition skills, Written practice to extend range of topics, vocabulary, fluency and compositional strategies. Grammar and stylistics appropriate for written Japanese. Practice writing expository and creative prose, translations as well as use of Internet discussion lists. Emphasis on the customs, mentality and contemporary culture of Japan. Prereq: JAPN 222 or instructor's approval.
360 Studies Abroad (3) In-residence study of the literature, language, or civilization of the area visited. Relevant field trips. Must be approved in advance by the Chair of the Department of Modern Foreign Languages. Prereq: JAPN 222 or department approval.

370 Travel Study [Topic Title] (1-3) a combination of travel and study experiences in the U.S. or abroad designed to enrich students' knowledge of the target foreign language and culture. May be taught as an organized study tour under faculty supervision or as an independent travel and study project with prior department approval. Topics, prerequisites and course requirements announced in advance. Students may repeat course with change of topic for a maximum of six hours credit. Chair of the Department of Modern Foreign Languages approval must be obtained for travel-study courses to count toward minor, major, or Recognition of Proficiency. Not regularly offered.

401 Foreign Language Internship (3) Utilization of the target foreign language in a monitored work environment. Appropriate placements may be found locally, nationally, or abroad. Students may or may not be paid. Evaluation by both supervising instructor and on-the-job supervisor. Chair of the Department of English and Modern Foreign Languages approval must be obtained for internships to count towards minor, major, or Recognition of Proficiency. Prereq: JAPN 341 or 342.

495-496 Topics in Japanese Language, Literature, or Civilization (1-3) Study of selected
aspects of Japanese language, literature, or civilization. Taught in Japanese. Topics and prerequisites announced in course schedule. Students may repeat course with change of topic. Only six hours of topics courses may count towards a minor or recognition of proficiency. Not regularly offered.

## Leadership (LDSP)

321 People, Power, and Change (3) Analysis of social and scientific leaders. Special focus shall be placed on resources, innovation, control, power, influence, and the role ideas play in cultural development. Students will combine selected readings, films, and lecture materials to better grasp fundamentals of leadership. This academic approach to the study and researching of leadership will provide students with a firm understanding of the subject matter as well as an appreciation for the opportunities all challenges supply. Emphasis will additionally be placed on individual leadership development within our modern and emerging American political-economic environment.

322 Leadership: Theory, Innovation and Policy
(3) This course provides a practical introduction to leadership. Special emphasis and understanding will be placed on the nature of leadership, understanding the theories behind their current and future political and economic environments, individualism vs. narcissism, researching the will and will power, free will and determinism, action and consequences, enthusiasm, honesty, liberty and responsibility, self-presentation and attitude, interpersonal relationships, creativity, and technology and advancement. Students will culminate this knowledge in regard to leading within their social, political and economic environment. Development of unique personal leadership initiatives within their discipline through research and design of a strategic leadership plan of action. Prereq: LDSP 321 or consent of instructor.

## 323 Leadership: Global and Local (3) This

 course will offer students a comprehensive understanding of globalization and the modernization process. Comparisons between underdeveloped parts of the United States and other underdeveloped parts of the world will be made. Students will develop a firm understanding of what liberties they have as well as what resources are available and needed in acompetitive global environment. Special focus will be placed upon culture, community, creativity, capitalism, and democracy, as well as the role of traditional and emergent leaders.
410 Leadership Applications (3) This course will explore a variety of leadership principles and theories with heavy emphasis on application of leadership theories, including, but not limited to: personal leadership development, characteristics of effective leaders, leadership styles, leadership in group and team settings, conflict resolution, ethics, and leadership obstacles. Prereq.: Junior standing or permission of instructor.

## Library Service (LIBS)

## 414 (614) Librarianship and the Administration of the School Library and Media Center

 (2) An introduction to the history and rules of libraries, media and information centers; consideration of the nature of the discipline of library and information science; current professional issues. Organization, services, functions and administration of the school media center.425 (625) Technical Services I (2) Technical services, principles and techniques for operating a school library. Includes acquisitions, basic manual and computer cataloging using the Dewey decimal system, structures and use of library catalogs and basic subject organization.
426 (626) Technical Services II (2) Introduction to cataloging systems other than the Dewey decimal system, including the Library of Congress system, development of library records, vertical file, computer and manual cataloging of non-print materials, the development of policy statements, collection evaluation and weeding.

## 433 (633) Information Resources and

Services (2) Nature of information resources and reference services; study of all types of these materials in specific fields for schools and community use; content, evaluation, organization and utilization.
451 (651) Children's Literature (3) Survey of the history of children's literature and examination of materials suitable for children in grades K-9 to use for leisure time or classroom activities. Criteria for selecting books, magazines, recordings, films, videos
and computer software. Story telling and other strategies for developing appreciation of literature.

## 452 (652) Books and Non-Print Materi-

 als for Adolescents and Adults (3) A survey and examination and study of print and non-print materials suitable for young adults in grades 5-12 with an emphasis on developing these materials for practical use in the classroom for leisure time or classroom activities and for adults' recreational and informational activities. Criteria for selecting books, magazines, recordings, films, videos and computer software. Strategies for encouraging literacy and principles of materials selection.
## 475 (675) Introduction to Educational Media:

 Materials, Techniques and Preparation (3) Designed to introduce prospective teachers to the problems of educational communication, the materials for use and the significant characteristics of these materials and competencies necessary for effective use of the media and technology. Special emphasis given to preparation of media materials.
## 476 (676) Advanced Educational Media

Production (3) The theory, art and technology of planning and producing visual and auditory materials for instruction. Emphasizes advanced production techniques for transparencies, slides, audio tape, graphics and video. Culminates in the production of multi-media self-instructional learning package.

## 715 Foundations of Library and Informa-

tion Services (3) An introduction to library and information science that particularly examines the historical development, structure, and function of school libraries. The evolution of information science; information representation, organization, and search retrieval of information as well as the trends and protocols for provision of library services will be explored.

## 725 Information Representation, Access, and

Retrieval (3) An introduction to principles and practices of information description, organization, access, and retrieval by examining the representation of information through metadata records, indexes, and abstracts, as well as the operations, standards, tools, systems of categorization, bibliographic systems and methods of organizing and retrieving information sources.

735 Resource Organization, Description, Access and Analysis (3) Bibliographic description and subject analysis theories and practices will be examined. Description, organization, and access of both print and electronic information will be investigated, including use of Resource Description and Access (RDA) standards, Anglo-American Cataloging Rules, Dewey Decimal Classification, Library of Congress Classification, and Library of Congress Subject Headings. Prereq: LIBS 725 or consent of instructor.

## 745 School Library Administration and Man-

 agement (3) An introduction to the basic elements of school library administration and management. Students will examine the functions of planning, organization, and staffing a school library as well as the theories of effective library management.755 Children and Adolescent Literature (3) An examination of the selection and historical development of literature for children and adolescents. Candidates will identify how to foster a positive climate that supports a literacy-rich learning environment. Candidates will develop the ability to critically evaluate literature for children and adolescents using quantitative and qualitative measures, and reader and task considerations to analyze text complexity.

## 765 School Library Internship (Grades Pre-

K-6) (3) Candidates who are earning an endorsement will be provided a 100 -hour faculty-supervised field experience internship with opportunities to apply classroom theories and techniques in real-world educational environments. The internship experience for candidates earning initial licensure in School Library Information Specialist will consist of 7.5 weeks of full-time field experience for each internship class for a total of 15 weeks, as required for state initial licensure standards. On-site educational activities will be completed under the direction of a qualified cooperating library information specialist in an approved Pre-K-6 school library.

## 766 School Library Internship (Grades 7-12)

(3) Candidates who are earning an endorsement will be provided a 100 -hour faculty-supervised field experience internship with opportunities to apply classroom theories and techniques in real-world educational environments. The internship experience for candidates earning initial licensure in School Library

Information Specialist will consist of 7.5 weeks of full-time field experience for each internship class for a total of 15 weeks, as required for state initial licensure standards. On-site educational activities will be completed under the direction of a qualified cooperating library information specialist in an approved 7-12 school library.

## Management (MGT)

300 Management and Behavior (3) This is a study of managerial functions and decision-making and how these affect human behavior within organizations. This course also includes consideration of organizational structure and organizational dynamics relative to the environments. Prereq: Math 110 or bigher; ECON 201 or ECON 202; have earned a minimum of 45 bours credit.

301 Organization and Management (3) Management processes and functions in manufacturing and service organizations. Analysis of organization structure, management practices of planning and control. Motivation and leadership practices. Introduction to techniques and tools of decision processes. Students are required to write case reports and give oral presentations. Prereq: ECON 201 or 202; ACCT 201 or 300.

303 Organizational Behavior and Theory (3) An advanced study of analyzing, directing and changing organizational structure and organizational dynamics relative to the environment. Prereq: MGT 300 or 301.

304 Introduction to Entrepreneurship (3) This course provides the student with fundamentals of entrepreneurship and covers the entrepreneurial process from conception to harvest of the new venture. The student will be involved in writing a business plan. It concentrates on identifying the attributes of entrepreneurs, the process of searching for opportunities, evaluating the viability of a new venture, financing, starting and operating the new venture. Prereq: Junior standing or instructor's permission.

305 Creativity and Innovation (3) Intensive practice in the use of contemporary approaches to the creative process, including use of proven aids for developing innovative ideas. The generation of creative designs of products, processes and services with emphasis on commercial applications
is stressed. Considerable emphasis on intellectual contribution that can be patented or copyrighted. Prereq: Junior standing.

## 307 Small and Family Operated Businesses (3)

 Course is designed for students interested in the issues, problems and unique concerns of family business involvement and management. Cases, videos, readings and guest lectures focus on critical aspects of family business management. Course is organized around the following themes: understanding the family business systems theory, culture and stages of evolution; individual development and career planning; management of family structure, conflicts and relationships; and organizational issues including succession and estate planning, strategic planning and formalizing the firm. Prereq: Junior standing or instructor's permission.310 Operations Management (3) Management of business transformation processes. A survey of the basic concepts, principles and practices involved in the design, implementation, operation and control of business processes (operations) in contemporary business organizations. Emphasis is placed on the integration of the operation function with other disciplines to foster achievement of strategic and tactical goals in both manufacturing and service organizations. Topical coverage includes operations strategy, product/service design, process design, contemporary quality management, forecasting, capacity planning, facility location and layout, work design and scheduling, production planning and control with a broad emphasis on goal-driven process and productivity management and quality management. Prereq: MATH 210 and either MGT 300 or MGT 301, or ENGR 311 and Instructor Approval. (Same as INEG 310)
312 Introduction to Management Science (3) Introduction to quantitative methods used in business decision making. Topical coverage includes mathematical programming, dynamic and network programming, multi-objective decision modeling, decision theory, simulation, inventory models and waiting lines. Computer software will be used to analyze application problems in business and economics. Prereq: CSCI 201 and MGT 310, or INEG 310.
(Same as INEG 312)

## 320 Data Analysis for Managerial Deci-

sion Making (3) Managerial decision making is emphasized based on the detection and evaluation of patterns in multiple factor databases related to particular managerial problems. Given the nature of the data, appropriate hypothesis tests and statistical tests of hypotheses will be applied including regression and correlation analysis, analysis of variance, crosstabs and multivariate regression. Use of standard computer programs to analyze the data will be incorporated. Prereq: MATH 210 or equivalent.
330 Process Control and Improvement (3)
A methodology for selecting, defining, measuring, stabilizing, evaluating and improving both production and service processes is presented. A variety of analytical methods are utilized in the sequence of instruction including the seven simple tools of quality, metrology, SPC, process capability analysis and experimental design. Prereq: Junior standing. (Same as INEG 330)

340 Labor Relations Management (3) An analysis of the relationship between management of private and public sector enterprises and labor organizations. The examination of the development, government and functions of labor unions, the legal environment of labor relations, union organizing campaigns and the collective bargaining process. Prereq: ECON 201-202.

350 Human Resource Management (3) Personnel principles, functions and practices, relating to managing human resources in organizations, the development of personnel practices and currently accepted practices in personnel management. Prereq: MGT 300 or 301 or SPMG 290.
405 Leadership (3) A study of the major theories of leadership with references to application of these theories. Prereq.: Junior standing or permission of instructor.

412 Service Operations Management (3) A study of operations management specific to the service sector. Emphasis is on formulating service strategy, designing and improving the service delivery system, and matching supply and demand in service operations. Topics include strategic positioning and service strategy, internet strategy, environmental strategy, new service development,
managing service experiences, front- and back-office interface, offshoring and outsourcing, analyzing processes, service quality, yield management, inventory management, and waiting time management. Prereq: MGT 310 or INEG 310. (Same as INEG 412)

425 Intrepreneurship (3) Contemoprary issues in integration of creativity, innovation and technology in small and large organizations. This will include development of research and development options and new systems, products and services within existing organizations. Prereq.: Junior standing or permission of instructor.
430 Quality Management in Business (3) A study of the continuous improvement process utilized in the management of quality in both production and service organizations. Emphasis will be placed on the involvement of all in the organization in planning, documenting, implementing quality assurance procedures and verifying that goods/services meet specified requirements while satisfying customers. Issues on Quality System Certification processes to meet industry and international standards will also be addressed. Prereq: MGT 310.

440 Staffing and Performance Appraisal (3) Analysis of the development of a qualified applicant pool and the selection of the applicants for positions or assignments. Additionally, analysis of establishing written standards of performance criteria and conformance to employment laws. Prereq: MGT 350.
450 Compensation Management (3) A study of the design and administration of compensation systems. Examination of job analysis, job evaluation, compensation research, pay structure design and employee benefits management. Prereq: MGT 350.
461 International Management (3) A study of the rapidly changing global environment and the ability of organizations to adapt to these changes. This study of changes includes developing countries, legal and political issues, ethical values and social responsibility, strategic and operational decisions and the role of culture in motivating and building an effective workforce. Students will complete projects and presentations that will demonstrate understanding and application of concepts and theories. Prereq: MGT 300 or MGT 301.

462 Sustainable Management Practices (3) This course investigates the evolving understanding of what it means to manage social systems sustainably, in a world of finite resources and rapid innovation. Prereq: Junior standing or instructor's permission.

470 Training and Development (3) Analysis of a systematic process of changing the behavior, knowledge and motivation of present employees to improve the match between employee characteristics and employment requirements. Prereq: MGT 350.

471-479 Topics in Management [topic title] (3) Selected topics in management offered on an occasional basis for qualified students. Admission by permission of instructor only.
480 Internship in Management (3, 6, 9) Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. Prereq: Departmental approval required; at least junior standing. May be repeated for up to a total of nine hours credit.

## 481-482 Independent Study in Management

$(3,3)$ Special research projects undertaken individually under the supervision of the faculty. Maximum credit available for independent study courses is six hours. Prereq: Senior standing.

485 Internship in Management (3, 6, 9) Supervised work experience in business establishments, institutions, or other organizations matched to the student's curriculum. Prereq: Departmental approval required; at least junior standing. May be repeated for up to a total of nine hours credit. This course will be graded as pass/fail.

490 Business Policy (3) A capstone course focusing on policy, strategy and the integration of all business functional areas, including analysis of the implications and relevance of social, ethical, environmental, competitive and international considerations for top-level organizational decision making. Students are required to write case reports and give oral presentations. This course may be taken only by students majoring in business disciplines. Students must take this course during their last semester of study. Prereq: ACCT 201, 202; BLAW 201 or 301; ECON 201, 202; FIN 301; INFS 310 or ACCT 461;

INFS 351; MGT 300, 310; MKTG 301. Coreq: BADM 490.

## 491 Current Issues in Human Resource

Management (3) Seminar in current issues in the human resource environment. Students are required to write reports, develop solutions for contemporary human resource issues and give oral presentations. Prereq: Departmental approval required; MGT 350.

710 Organizational Theory and Design (4) This course will address the theory of how organizations are structured. The course explores the behavioral side of organizations at both the macro and micro levels. The evolving body of empirical, literary, philosophical and case/experiential knowledge will be discussed to enhance appreciation for the role of human action in the design and function of organizations, including leadership and teamwork..

## 720 Statistical Tools of Quantitative Analysis

(3) Designed to give students the statistical skills necessary for advanced work in the functional areas of business administration.

## 730 Operations Management: Analytics and

 Applications (3) Introduction to Operations Management concepts and problem-solving techniques in production and service operations management. Topics include demand forecasting, capacity management, resource allocation, inventory management, applications of linear programming, supply chain planning and data analytics, quality control, and project management.(3) Contemporary issues in development, introduction, justification, acquisition and maintenance of creativity, innovation and technology in small and large organizations.750 Human Resource Management (3) An investigation of practices and problems associated with the management of people in contemporary organizations. Consideration is given to both individual and collective relationship situations. A case study approach is extensively utilized, including coverage of Human Resource Management Information Systems and union-management relations.

## 790 Strategic Management and Business Policy

(3) An advanced case study, integrating marketing, management, economics, finance and accounting of selected problems encountered in the management
of typical organizations engaged in the production of goods and services. Problem analysis and decisionmaking skills are emphasized in the context of the existing international environment. M.B.A. students must take this course during their last scheduled semester. Approval from the Graduate Coordinator is required before registering for this course.

## Marketing (MKTG)

105 Introduction to Marketing (1) A course designed to acquaint students with the role of marketing in society. Brief introduction to activities involved in product planning, distribution, promotion and pricing. Students may not take this course for credit after Principles of Marketing (MKTG 301).

205 Business Tools and Technologies in Marketing (3) Provides intermediate and advanced, hands-on education in word processing, presentation, spreadsheet, database, social media, electronic communication, and other technologies that are commonly used in marketing and other business professions. Students will learn the capabilities and efficiencies of these tools for communicating with internal and external stakeholders. Specific emphasis will also be placed on effective and professional use of these technologies.

301 Principles of Marketing (3) Introduction to the complexity of the modern marketing systemwhy it is essential and how it performs. Identification and examination of business activities involved in the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organization objectives. Prereq: Math 110 or higher, ECON 201 or ECON 202, have earned a minimum of 45 bours credit.
302 Personal Selling (3) Theories, concepts and practices essential for successful application of the personal selling function. Attention to sales-force management and sales-presentation techniques. Prereq: Junior standing.
310 Retailing (3) A study of the fundamentals of successful retail strategic management and merchandising. Topics addressed will include a consideration of the current retail environment, retail performance evaluation, store location decisions, merchandise
management, store management and operations, store layout and visual merchandising. Prereq: MKTG 301 and either ACCT 201 or 300.

320 Consumer Behavior (3) An analysis of consumer buying behavior, including attitudes, perception, learning, involvement, personality, culture and subculture, reference group and family influence and group communication. These are studied in the context of marketing decision-making, particularly decisions about market segmentation, product positioning, advertising and research. Prereq: MKTG 301.

## 330 Advertising and Promotion Management

(3) Study of the theory and practice of advertising and other promotion mix elements as they relate to the development of an integrated marketing communication program. Application of advertising theory to current advertisements. Emphasis on the use of advertising and the promotion mix in developing marketing strategy from a managerial perspective. Prereq MKTG 301.
340 Logistics Supply Chain Management (3) An introduction to logistics management. A study of the decisions involved in the flow and storage of goods, services and information from supplier to the end user. Topics include purchasing and materials management, transportation decisions, quality, customer satisfaction and the nature of relationships between firms within the channel of distribution. Prereq: Junior standing.
350 Service Marketing (3) A study of marketing concepts and the extension of the marketing management process beyond the traditional role in the physical products area. To develop an understanding of the creative translation required in the supplemental and core marketing mix for services. Emphasis on the development of marketing strategy and analysis of the distinctive aspects of service marketing, including the role of internal relationships. Prereq: MKTG 301.

360 Marketing Research (3) A study of marketing research as an aid to marketing decision making. Emphasis will be placed on problem defining, data collection and analysis of data applied to the solution of marketing problems. Students are required to develop and present written marketing research reports and make oral presentations. Prereq: Junior standing.

370 Marketing International Travel Study (1-3) A combination of travel and study experiences designed to enrich students' knowledge of International Marketing. Emphasizing the problems and decisions facing marketers of international businesses, the environment in which these businesses operate and ways of coordinating marketing in diverse markets. Particular emphasis is placed upon recognition of relevant cultural factors which affect marketer's decisions. Topics, prerequisites and course requirements announced in advance. Not regularly offered.

371 Forensic Marketing (1) The study of the marketing failures which is beyond the traditional method of studying business or product success. The flawed development of marketing strategy which resulted in mistakes and failures will be analyzed. Emphasis on marketing decision making in a changing environment. A lecture/case analysis/ seminar format will be used. Prereq: MKTG 301.

372 Sports Marketing (3) Addresses the application of strategic marketing and the traditional "four Ps" of marketing (Product, Place, Promotion, Price) within the sports industry. Topics include an examination of internal and external forces that impact sports marketing strategy development, market research, sports consumers and target market selection decisions. Prereq: MKTG 105 and SPMG 305; or MKTG 301. Students may not receive credit for both MKTG 372 and MKTG 373.

374 Marketing and Society (1) This course examines the interaction between marketing and society. The scope of marketing as a manager's tool for achieving business goals in enlarged and placed in the context of the goals of a society. The reactions of society to marketing's role in the economy are introduced, such as consumer responses or public policies. The roles of marketing in diffusing social goods as well as the de-marketing of social "bads" are considered. Prereq: MKTG 301 or consent of instructor.
375 Travel and Tourism Marketing (1) An examination of marketing applications within the travel and tourism industry. Topics include tourist market segmentation, intermediaries and distribution channels within travel and tourism, the tourism "product" (transportation, accommodations, attractions
and entertainment, destinations) and service quality. Prereq: MKTG 301.
376 Executive in Residence Seminar (2) This course features interaction with business practitioners. Students will participate in small group discussions and hear presentations on current business topics. Prereq: MKTG 301; MGT 301 or MGT 300; FIN 301. Course may be repeated once for credit.

## 377 Events Planning (3) Principles of events

 planning within organizations are discussed using a combination of lecture and real-world event planning projects. The course covers event definition, client expectation definition and refinement, design selection, site selection, planning and production timelines, and event management, as they apply to marketing and event promotions. Prereq: Junior standing.410 International Marketing (3) Emphasis on the problems and decisions facing managers of international marketing across national boundaries, the environment in which international marketing takes place and ways of integrating and coordinating marketing programs in many diverse markets. Prereq: MKTG 301.
430 E-Commerce Marketing (3) This course is a study of the foundations of doing business in a networked economy. Electronic commerce (Ecommerce) can be defined as technology-mediated exchanges between parties as well as the electronically based intra-or inter-organizational activities that facilitate such exchanges. Focus is on what a future practitioner needs to know about Internet infrastructure, online consumer behavior, strategy formulation and implementation, technology concepts and public policy issues in order to make effective business decisions. Emphasis is on strategy and marketing issues in a technology-mediated environment, which are presented and compared with the "offline" economy. Prereq: Junior standing.
440 Marketing, Business and Environmental Ethics (3) To develop the ability to recognize ethical issues in business and the interrelationship of business ethics and social responsibility. To present guidelines and a framework which is designed to identify and analyze ethical issues in organizations. To CRITICALLY assess the different ethical theories used in business decisions and to consider individual
diversity of values. To examine the consequences of individual business ethical situations through VCR and case analysis. Prereq: MKTG 301.

450 Business to Business Marketing (3) Exploration of the environment that businesses operate within when marketing to other businesses or distribution channel members. Includes an emphasis on organizational purchasing behavior, the global nature of the business marketplace and the processes involved in understanding, creating and delivering value for business customers. Dynamics of the marketing mix, strategy development and buyer-seller relationships are studied within this environment. Application oriented through the use of case analysis and/or computer simulation. Emphasis on group work and communication skills. Prereq: MKTG 301.

460 Social Media and Digital Marketing (3) An examination of the concepts, strategies and applications involved in social media and digital marketing, including social media strategy, planning, audits and metrics, advertising on social media, paid search and digital analytics. Measurability, accountability, list and database management and the integration of social media and digital marketing programs into the promotion mix and the marketing mix with an emphasis on marketing strategy. Prereq: MKTG 205, MKTG 301.

465 Marketing Management (3) Application of analytical skills and strategic perspective in the development and implementation of marketing strategy and plans in a competitive environment. Emphasis on marketing concepts, competitive decision making, the development of marketing strategy and plans and group interactions in a changing environment.
Prereq: MKTG 301, MGT 301, ACCT 201, and senior. standing.

470 Marketing Channels (3) This course explains how to build, modify, and maintain efficient and effective channel structures and helps to improve ability to use the already acquired knowledge in practice using case study.

471-476 Current Topics in Marketing (1-3) Selected topics in marketing offered on an occasional basis. Prereq: MKTG 301.
480 Internship in Marketing (1-9) Supervised work experience in business establishments,
institutions, or other organizations matched to the student's curriculum. May be repeated for up to a total of nine hours credit. Prereq: Approval of the department chair and marketing faculty.
481-482 Independent Study in Marketing (1-3, 1-3) Special research projects undertaken individually under the supervision of the faculty. Maximum credit available for independent study courses is six hours. Prereq: Senior standing.
710 Marketing Strategy (4) This course is a seminar in history of marketing thought and current perspectives with managerial application. Topics will include marketing theory and philosophy, the creation of value through integrating the conception, production, distribution and exchange of goods, services and ideas, marketing planning, market identification and environments, product strategy, price strategy, channels strategy, promotional strategy and marketing assessment and control.

720 Services Marketing Management (3) A study of the marketing management process designed to identify both commonalities and distinctive aspects of service and physical product marketing as they affect service marketing strategy development and implementation. Attention is given to the creative balance of all elements of the core and supplemental marketing mix and marketing concepts related to successful marketing of services, including health care and social causes. Extensive case studies and presentations are utilized to illustrate appropriate decision making skills and strategies in a seminar environment.

## 730 Channel Strategy and Business Market

Management (3) An application-oriented study of alternative marketing strategies available to manufacturers, Emphasis on the relationships between channel members, from supplier to end user. Studies will include an investigation of the impact of customer analysis, competitor analysis and marketing mix components on decisions related to channel development and management, channel strategy and organizational marketing. Extensive use of computer simulation and readings. Prereq: MKTG 301 or MKTG 710.

## Mathematics (MATH)

## 100-110 Essentials of Algebra I, II (4, 4)

Functions and their graphs (including polynomial,
rational, exponential, and logarithmic), exponents, roots, radicals, rational expression, factoring polynomials, zeroes of polynomials, solutions of linear and nonlinear equations and inequalities, systems of equations and inequalities, matrices and determinants, inverse functions. Three hours of lecture and two hours of lab. In order to proceed to MATH 110, students must complete MATH 100 with a grade of C or better. MATH 100 may not be substituted for MATH 110. MATH 100 cannot be used to satisfy the general education requirement. Credit may not be received for both MATH 100-110 and MATH 140. Credit may not be received for both MATH 100-110 and MATH 185.

130 The Nature of Mathematics (3) Selected topics from algebra, geometry, number theory, logic, probability, statistics, management science, finance, computing and numerical techniques. Modeling and problem solving techniques will be illustrated to give students insight into what mathematics is, what mathematics attempts to accomplish and how mathematics is used to solve real life problems. May not be used to satisfy degree requirements for the B.S. degree. May not be taken for credit by any student who has successfully completed a higher-numbered mathematics course. Prereq: One unit of high school geometry, two units of high school algebra, and a satisfactory score on the placement test OR completion of Math 100 with a grade of C or better..
140 Precalculus College Algebra (3) (TBR:
MATH 1710) Functions (e.g., polynomial, exponential and logarithmic). Zeroes of polynomials. Solutions of systems of equations and inequalities. Selected topics from algebra such as matrices and determinants and arithmetic and geometric sequences. Prereq: Two units of high school algebra, and appropriate mathematics placement. Credit may not be received for both MATH 140 and MATH 100-110. Credit may not be received for both MATH 140 and MATH 185.

## 160 Calculus for Business and Life Sciences

(3) (TBR: MATH 1830) Average and instantaneous
rates. The derivative and its application to curve tracing and max-min theory. Antiderivative, area under a curve, fundamental theorem. Natural logarithm and its application to interest, growth and decay. Prereq: Appropriate mathematics placement or a grade of C or better in MATH 110 or 140 or 185.

170 Precalculus Trigonometry (3) (TBR: MATH 1720) Trigonometric functions, identities, graphs, equations, harmonic motion, trigonometric form of complex numbers, vectors, dot product, and conic sections. Applications of trigonometric functions. Prereq: EITHER two units of high school algebra, one unit of high school geometry, and appropriate mathematics placement OR completion of MATH 110 or 140 with a grade of C or better. Credit may not be received for both MATH 170 and 185.
185 Precalculus (5) Algebraic properties of real numbers. Solutions of equations and inequalities. Logarithmic and exponential equations. Survey of conics. Trigonometric functions, identities, graphs and equations. Trigonometric applications. Prereq: Two units of high school algebra, one unit of high school geometry, and appropriate mathematics placement. Credit may not be received for MATH 100-110 or MATH 140 or MATH 170 after completing MATH 185 and credit may not be received for MATH 185 after completing MATH 100-110 or MATH 140 or MATH 170.

## 191-192 Principles of Mathematics (3, 3)

 (TBR: MATH 1410-1420) Algorithms for four basic operations, systems of whole numbers and integers. Relations and functions. Greatest common factor and least common multiple. Fractions, decimals, percent, ratio and proportion. Statistics and probability. Metric system, measurement, area, volume, informal plane and solid geometry. These are manipulative and activity based courses. Courses must be taken in sequence. Prereq: MATH 100-110 or 140 or 185 or 251.210 Elementary Statistics and Probability (3) (TBR: MATH 1530) Descriptive measures, elementary probability, sampling, random variables. Discrete probability distributions, normal probability distributions and introduction to inference theory. Prereq: MATH 100-110, or 130, or 140, or 170, or 185, or 251 or appropriate mathematics placement.

## $\mathbf{2 1 0 H}$ Honors Elementary Statistics and

Probability (3) Descriptive measures, elementary probability, sampling, random variables. Discrete probability distributions, normal probability distributions and introduction to inference theory. Limited class size allowing in-depth discussions, projects, and presentations. Prereq: MATH 140, or 170, or 185, or 251, or appropriate mathematics place-
ment; AND ACT composite score of 28 or above or departmental approval.
251-252 Calculus I, II (4, 4) (TBR: MATH 19101920) Limits and continuity. Derivatives and integrals of polynomial, exponential, logarithmic, trigonometric and hyperbolic functions. Techniques of integration, conics, parametric and polar equations, indeterminate forms and improper integrals. Infinite series, including Taylor's series. Must be taken in sequence. Prereq: Either two units of high school algebra, one unit high school geometry, $1 / 2$ unit high school trigonometry, and appropriate mathematics placement OR completion of EITHER MATH 170 with a grade of C or better OR MATH 185 with a grade of C or better. A grade of C or better in MATH 251 is required to enroll in MATH 252.
251H Honors Calculus I (4) Limits and continuity. Derivatives and integrals of polynomial, exponential, logarithmic, trigonometric and hyperbolic functions. Applications of differentiation and integration. Limited class size allowing in-depth discussions, projects, and presentations. Prereq: Appropriate mathematics placement AND either ACT composite score of 28 or above or departmental approval.
291 Special Topics in Mathematics (1-3) Lectures and/or lab work relating to specialized topics in mathematics. Course may be repeated with total credits not to exceed six (6) hours. May be offered on a Pass/Fail basis. Prereq: Departmental approval.
310 Linear Algebra (3) Vectors, matrices, systems of linear equations, determinants, inverses of matrices, vector spaces, linear transformations, eigenvalues and eigenvectors. Prereq: MATH 160 or 251 or 314.

314 Foundations of Mathematics (3) Proof techniques, sets, propositional calculus, functions, relations and properties of integers. Prereq: MATH 251 or departmental approval.
315 Mathematics and Statistics Career Preparation (1) Formal mathematical and statistical written and verbal communication including, but not limited to, preparing presentations and written papers in the mathematical and statistical sciences. Assistance in preparing resumes and the various requirements, procedures, and guidelines of graduate school applications. Two one-hour labs. Prereq: MATH 314 and MATH 320.

320 Multivariate Calculus (4) (TBR: MATH 2110) Vector-valued functions, functions of several variables. Differentials, gradients and extremes. Multiple integrals, line and surface integrals. Prereq: A grade of C or better in MATH 252.

## 330 Differential Equations I (3) (TBR: MATH

2120) Setting up and solving first order equations, applications of first order equations. Wronskians, use of operators and the exponential shift theorem, solutions of higher order equations with constant coefficients, systems of first order equations, solutions in series, Laplace transform methods. Prereq: MATH 252.

331 Differential Equations II (3) Analysis techniques including phase portraits, bifurcation diagrams, Lypanov functions, stability of steady-state solutions, introduction to partial differential equations including separation of variables, Fourier series, heat equation, wave equation, Laplace's equation, transport (advection) equation, method of characteristics, numerical solution techniques. Prereq: MATH 320 and MATH 330.

340 (540) Numerical Analysis (3) Formulation of numerical problems for solution on a digital computer. Error analysis and control, nonlinear equations, differentiation, integration, systems of equations, differential equations, curve fitting and eigenvalue problems. Prereq: CSCI 221 and MATH 252; CSCI 301 or MATH 310. (Same as CSCI 340/540).

350 Number Theory (3) The integers: well-ordering, different bases, divisibility, primes and factoring. The fundamental theorem of arithmetic and the division algorithm. Diophantine equations and applications of congruences. Pseudorandom numbers, pseudoprimes and cryptography. Prereq: MATH 314.
351 Graph Theory and Combinatorics (3) An introduction to the methods and ideas of graph theory and combinatorics. Topics include trees, connectivity, circuits, planar graphs, graph colorings, the pigeonhole principle, recurrent relations, inclusion-exclusion, and generating functions. Prereq: MATH 252 and MATH 314.

410 (610) Geometry (3) Euclidean geometry (Birkhoff's and Hilbert's Postulates), non-Euclidean geometries (hyperbolic and elliptic), finite geometries, transformational geometry and theory of area. Prereq: MATH 314.

420 (620) History of Mathematics (3) Study of the development of mathematics from ancient to modern times through problem solving. The investigation of the lives and works of specific mathematicians with particular attention to the development of ideas, notation and the influence of mathematics on society. Prereq: MATH 160 or 251.
430 (630) Complex Variables (3) Algebraic operations and geometry of complex numbers, definitions of limit, continuity and analytic functions, differentiation, mapping of simple functions, line integrals, Cauchy integral formula, Laurent series, evaluation of real integrals using residue theorem. Prereq: MATH 320.
451 (651) Applied Mathematics I (3) Practical applications of mathematics including optimization, interpolation and best fit, simulation, dimensional analysis and graph theory. Mathematical model building including problem identification, model construction or selection, fine tuning and validation. Prereq: MATH 310 and 320.

452 Applied Mathematics II (3) Continue practical applications of mathematics including optimization, interpolation and best fit, simulation, dimensional analysis and graph theory. Derive, analyze, and validate all types of models in the sciences and engineering using software packages and programming languages; a major project is required. Prereq: MATH 451.

471 (671) Abstract Algebra I (3) Equivalence relations and partitions. Properties of the integers. Elementary theory of groups and rings. Polynomial rings, integral domains, divisibility, unique factorization domains, fields, vector spaces and linear transformations. Students are required to submit written work and make an oral presentation. Must be taken in sequence with MATH 472. Prereq: MATH 310 and 314.
472 (672) Abstract Algebra II (3) Equivalence relations and partitions. Properties of the integers. Elementary theory of groups and rings. Polynomial rings, integral domains, divisibility, unique factorization domains, fields, vector spaces and linear transformations. Students are required to submit written work and make an oral presentation. Must be taken in sequence with MATH 471. Prereq: MATH 310 and 314.

481-482 (681-682) Real Analysis I, II (3, 3)
Sets and countability. The real number systems. Sequences, limits, infinite series, metric spaces, continuous functions, uniform continuity and convergence. Riemann and Lebesgue integration. Students are required to submit written work and make an oral presentation. Must be taken in sequence. Prereq: МАТН 314 and 320.

## 491-492 (691-692) Special Topics [Topic

title] (1-3) Selected topics in mathematics, student research, or seminar. Course may be repeated with total credits not to exceed six hours. Prereq: MATH 320 and departmental approval.

## 498 Undergraduate Research Experience I

(2) Introduction to research methodologies and tools including LaTeX and MathSciNet. Presenting mathematics in written and oral formats. Ethics in research. This course includes substantial directed individualized study leading to the preparation of a significant paper. Prereq: consent of the department chair. Cannot receive credit for both MATH 498 and STAT 498. Grading on a pass or fail basis.

## 499 Undergraduate Research Experience II

 (1) The presentation of mathematics works in both oral and written formats. This course will finalize the significant paper begun in MATH/STAT 498 and based on the student's individual research. This will require that it be presented at a regional or national meeting. Prereq: MATH 498 and consent of the department chair. Graded on Pass/Fail basis.710 Selected Topics in Number Theory for Teachers (3) Selected topics in number theory through student research, seminars, or workshops. Prereq: Departmental approval.

## 720 Selected Topics in Algebra for Teachers

(3) Selected topics in algebra through student research, seminars, or workshops. Prereq:
Departmental approval.

## 730 Selected Topics in Geometry for Teachers

(3) Selected topics in geometry through student research, seminars, or workshops. Prereq:

## Departmental approval.

740 Selected Topics in Applications of Mathematics for Teachers (3) Selected topics in applications of mathematics through student research, seminars, or workshops. Prereq: Departmental approval.

750 Selected Topics in Probability and Statistics for Teachers (3) Selected topics in probability and statistics through student research, seminars, or workshops. Prereq: Departmental approval.

## Meteorology (METR)

160 Weather and Agriculture (2) An introduction to meteorological phenomena and information resources that are relevant to agricultural production.

320 Physical Meteorology (3) Expanded study of basic atmospheric processes. Special emphasis is placed on boundary layer structure, development, and processes. Atmospheric pollutants and their impacts and optical phenomena present within the atmosphere are also presented. Prereq: GEOS 140 or 140 H and, either MATH 140 or 140 H and 170 , or MATH 185 or higher.

330 Mesoscale Meteorology (3) An examination of meteorological phenomenon on the mesoscale with particular emphasis on convection and severe weather. Other meteorological phenomena such as cold air damming, dry lines, gravity waves, and lake effects snows are discussed. Prereq: GEOS 140 or 140 H .

## 340 Synoptic Meteorology and Weather Analy-

 sis (3) Study of synoptic-scale weather features including cyclones, anticyclones, fronts, jet streams, and other phenomena. This course incorporates a lab intended to provide the student with hands-on work in weather analysis. Methods of gathering information within the troposphere will be paired with the necessary skills to detect important features at both the surface (fronts, pressure cells, air masses) and aloft (troughs, ridges, jet streams). Students will utilize upper-air charts, upper air soundings, and surface weather maps for feature location. Identification of features and the structure of synoptic and mesoscale systems is emphasized. Three-hour lecture, one two-hour lab. Prereq: GEOS 140 and MATH 251 or equivalent honors courses.350 Weather Forecasting (3) This class is intended to provide the student with a basic overview of the art/science of forecasting meteorological conditions on a daily, weekly, and seasonal basis. Emphasis will be placed on forecasting winter weather, severe
weather, and tropical activity. Long-term forecasting (weeks, months) will be addressed through the topic of teleconnections. Prereq: GEOS 140 or 140H and 340.

360 Satellite and Radar Meteorology (3) The purpose of this course is to instruct the student on the principles or radiation, different types of radars and satellites, how both radar and satellite operate, how the imagery they provide can be used in both analyzing, identifying, and forecasting the meteorological phenomena, and to provide information on future developments in remote sensing technology. Prereq: GEOS 140 or 140H, METR 340. GEOG 364 preferred, but not required.

401-402 Research Participation (3, 3) Application of the scientific method and techniques of research to investigation of problems in the field of meteorology. Restricted to students with demonstrated ability to conduct a supervised research project. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellow Research Program. Prereq: Permission of instructor.

405 Aviation Weather (3) This course focuses on the particular weather features and processes that impact aviation. Topics include a review of the structure and composition of the atmosphere, especially density, vertical motion, weather at standard flight levels, and hazards specific to aviation such as icing, turbulence, wind shear, fog, thunderstorms, crosswinds, and extreme temperatures. The course will also give students hands-on training in interpreting coded observations and forecasting codes, weather briefings and flight planning for pilots, and include the use of available aviation weather resources.
Prereq: GEOS 140, MATH 140 or equivalent honors courses.

415 GIS for Meteorology (3) This course examines how meteorological and climatological data are integrated within a Geographic Information Systems (GIS) environment. Students will gain skills in finding and incorporating meteorology-specific data formats into GIS geodatabases for analysis and modeling applications. Students will also gain familiarity in understanding how GIS can incorporate
weather radar and weather satellite data for further analysis and modeling. Prereq: GEOS 140 or 140H, GEOG 310 or permission of instructor.

420 Applied Meteorology and Climatology (3) This course surveys the applications of meteorology and climatology to societal and environmental issues. Topics covered in the course include application of climate and meteorology to agriculture, forestry, urban environments, architecture, transportation, energy, and human health. Prereq: GEOS 140 and MATH 210 or equivalent honors courses or permission of instructor.
430 Statistical Analysis in Meteorology and Climatology (3) A survey of statistical techniques in climatology and meteorology including the use of statistics in assessing probabilities of weather phenomena, in weather and climate forecasting, in forecast verification, and in time series analysis. An emphasis of this course is the examination of weather events in the context of multi-year climate variation. Prereq: GEOS 140 and MATH 210 or equivalent bonors courses.

435 Tropical Meteorology (3) Study of the synoptic and mesoscale tropical environment, as well as the conditions necessary for the genesis, development, and propagation of tropical cyclones. Prereq: GEOS 140 or 140H, METR 320, METR 340, and METR 360.

440 Thermodynamics (4) This course examines the processes and laws of energy transfer throughout the atmosphere, including a detailed examination of atmospheric stability and how it applies to a variety of weather phenomena. Prereq: METR 320 and MATH 252.

## 445 Weather for Agriculture and Natural

Resources (3) A study of how weather and climate impacts agriculture, forestry, fishing, and water resources. Weather and climate events that impact soil and plant energy budgets, temperatures, moisture availability and water budgets in agricultural and natural environments are emphasized. Prereq: GEOS 110 or 110H or NRM 100.

455 Field Experiences in Meteorology (3)
Direct observation of meteorological phenomena. Will include not less than one week of classroom instruction on the phenomenon to be observed.

Will include at least 1 week of practical field work. Prereq: GEOS 140 and METR 330, or consent of instructor. Students will be required to complete an application process prior to admission to the course.

460 Dynamics (4) This course examines the fundamental physics and mathematical laws governing motion in the atmosphere. Emphasis will be given towards the physical interpretation of the mathematical equations related to hydrostatic, geostrophic, and thermal wind balances, vorticity, cyclone development, planetary waves, and local, regional, and global wind patterns. Prereq: METR 320, METR 440, and either MATH 330 or ENGR 315.

465 Internship (3-9) Provision for an advanced meteorology student to benefit by supplementary practical experiences in a particular branch of meteorology. Specific assignments are arranged in consultation with an adviser during the semester preceding that in which the student expects to enroll in this course. Course performance is based on specific academic and work assignments. Grades will be based upon academic performance and work evaluation by a job supervisor. The internship may or may not include monetary compensation. May be repeated for credit. Prereq: Permission by supervising instructor and Junior standing.
470 Climatology (3) A non-mathematical analysis of systematic and regional atmospheric behavior. The first part of the course deals with basic physical laws affecting the elements of weather. The second part of this course examines the distribution of climates and the impact of climates on human activity. Completion of GEOS 140 or 140 H and Junior standing is recommended. (Same as GEOG 472).
481 Research Practicum (3) A seminar course in which upper-division students undertake a research project under faculty supervision and guidance. Students will be responsible for the project selection, a literature review, research design, analysis, and a final written report. Students may also be required to present an overview of their project through an oral presentation to a faculty committee. Prereq: Senior standing and permission of instructor.
491-492 Special Topics in Meteorology (1-3)
Seminars or guided readings on a selected topic in
meteorology. A maximum of six credit hours can be counted towards a major. Prereq: Permission of instructor.

## Microbiology (MBIO)

251 General Bacteriology (4) (TBR: BIOL 2230)
Fundamentals of microbiology with emphasis on morphology, classification, nutrition, mechanisms of pathogenesis and body defenses. Meets the needs of all programs requiring one course in microbiology. Three one-hour lectures and one two-hour lab. Students may not receive credit for both MBIO 251 and MBIO 310.

## 310 (510) General Molecular Microbiol-

 ogy (4) An introductory, molecular oriented course dealing with bacterial structure, nutrition and growth, metabolism of heterotrophic bacteria and bacterial and bacteriophage genetics. Meets the needs of all programs requiring one course in microbiology. Three one-hour lectures and one two-hour lab. Students may not receive credit for both MBIO 251 and MBIO 310. Prereq: Grades of C or better in the following courses: BIOL 140 and either CHEM 112 or 122.311 (511) Public Health Microbiology (4) Public health microbiology dealing with epidemiology, sterilization and disinfection, common pathogenic bacteria and viruses, mechanisms of pathogenesis, methods of isolation and identification of pathogens, mechanisms of action of selected antibiotics and water and food microbiology pertaining to public health problems. Three one-hour lectures and one two-hour lab. Prereq: MBIO 251 or 310 with grade of $C$ or better in either course.

401 (601) Immunology (3) An introductory course dealing with the functions and effects of the immune system. Emphasis on humoral immunity, cellular immunity, serology, hypersensitivities, autoimmunity and immunodeficiency. Three one-hour lectures. Prereq: MBIO 251 or MBIO 310 with grade of $C$ or better in either course.

402 (602) Immunology Laboratory (1) A lab course designed to introduce students to commonly used immunologic techniques, including antibody purification, immunodiffusion, SDS-polyacrylamide gel electrophoresis, western blotting and enzyme-
linked immunosorbent assay. One two-hour lab. Prereq/coreq: MBIO 401.

410 (610) Applications in Food Microbiology (4) Advanced microbiology with a focus on microorganisms that are associated with foods, used to produce food products, or are foodborne pathogens as well as their toxins. Lectures cover aspects of food safety, the natural microbial flora of foods, spoilage microorganisms, preservation methods, common fermentations, and prevalent foodborne illness-causing microorganisms and their symptoms. Laboratory exercises isolate microorganisms from various food products as well as produce food products through fermentations. Three one-hour lectures and one two-hour lab. Prereq: A grade of C or better in the following courses: MBIO 310 or MBIO 251, and CHEM 112 or CHEM 122.

## Military Science and Leadership (MSL)

## 101 Foundations of Officership (3) Examines

 the unique duties and responsibilities of officers, discusses organization and the role of the Army, reviews basic life skills pertaining to fitness and communication and analyzes Army values and expected ethical behavior. Three hours lecture/lab. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section. Prerequisite for entry into advanced program unless waived by the Professor of Military Science.102 Basic Leaderships (3) Presents fundamental leadership concepts and doctrine, practices effective skills that underlie problem solving, applied active listening and feedback skills, examines factors that influence leader and group effectiveness and examines the officer experience. Three hour lecture/ lab. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section. Prerequisite for entry into advanced program unless waived by the Professor of Military Science.

201 Individual Leadership Studies (3) Develops knowledge of self, self-confidence and individual leadership skills. Develops problem solving and
critical thinking skills and applies communication, feedback and conflict resolution skills. Two $50-\mathrm{min}-$ ute lectures and one two-hour lab. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section. Prerequisite for entry into the advanced program unless waived by the Professor of Military Science.

## 202 Leadership and Teamwork (3) Focuses

 on self-development guided by knowledge of self and group processes. Challenges current beliefs, knowledge and skills. Provides equivalent preparation for the ROTC Leader Development and Assessment Course and the Leader's Training Course. Two 50 -minute lectures and one two-hour lab. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section. Prerequisite for entry into the advanced program unless waived by the Professor of Military Science.291 Basic Camp (6) Training normally is taken during the summer between the second and third years by those students who have not completed basic military training or the required basic military science courses for advanced course enrollment. Training is conducted at a designated U.S. Army installation and includes hands-on, practical leadership training with intensive counseling and feedback. The course focuses on confidence, leadership and team building, along with training skills in basic rifle marksmanship and land navigation. The highlight of the course is a six-day field phase where students will experience a series of challenging leadership opportunities while being mentored and counseled by cadre. The student must register for this course following successful camp completion in order to receive the appropriate credit. A letter grade will be awarded by the Professor of Military Science based on camp results. Prereq: Approval of the Professor of Military Science.

## 301 Leadership and Problem Solving (4)

Examines basic skills that underlie effective problem solving, analyzes the role officers played in the transition of the Army from Vietnam to the 21st century, reviews the features and execution of the Leadership Development Program, analyzes military missions and plans military operations and executes squad
battle drills. Two 75 -minute lectures, one two-hour lab and three hours physical training. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section.
302 Leadership and Ethics (4) Probes leadership responsibilities that foster an ethical command climate, develops leadership competencies, prepares for success at the ROTC National Advanced Leadership Camp, recognizes leader responsibility to accommodate subordinate spiritual needs and applies principles and techniques of effective written and oral communication. Two 75 -minute lectures, one two-hour lab and three hours physical training. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section.

## 310 American Military History (3) American

 military history from the American Revolution to the present. Evaluation of significant battles from the viewpoints of the participants, their resources, decision-making techniques and the nine principles of war. Discussion of all of America's wars. Emphasis on the Civil War, World War I, World War II, Korea and Vietnam. (Same as HIST 310)401 Leadership and Management (4) Builds on the National Advanced Leadership Camp experience to solve organizational and staff problems and discusses staff organization, functions and processes. Analyzes counseling responsibilities and methods, examines principles of subordinate motivation and organizational change and applies leadership and problem solving principles to a complex case study/ simulation. Two 75 -minute lectures, one two-hour lab and three hours physical training. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section.

402 Officership (4) Capstone course exploring topics relevant to second lieutenants entering the Army. Describes legal aspects of decision making and leadership, analyzes Army organization for operations from the tactical to strategic level, assesses administrative and logistics management functions, discusses reporting and Permanent Change of Station process, performs platoon leader actions and examines leader responsibilities that foster an ethical
command climate. Two 75 -minute lectures, one twohour lab and three hours physical training. Students must meet enrollment and continuation requirements outlined in the Department of Military Science and Leadership section.

421 Contemporary Developments in the U.S. Army (3) A survey of current programs and issues affecting readiness of the Army today. Included is mobilization and deployment of reserve component forces, force modernization and combined arms operations. Student presentations on selected subjects. Three hours lecture/conference. Prereq: Approval of the Professor of Military Science.
442 Nurse Summer Training Program (6) Provides Army ROTC nurse cadets with clinical experience in a hospital setting while introducing them to the duties, roles, responsibilities and expectations of an Army Nurse Corps officer. Exercises leadership skills in a hospital environment by planning, organizing, decision making, implementing and being accountable for the outcome of nursing care. Encourages students to develop leadership strategies through learning experiences throughout this clinical program. Collaborate with health care professionals on decisions related to patient care, management, unit issues and strategies utilized in the provision of medical care to a select population. A minimum of 40 hours per week for three weeks. Prereq: Contracted cadet; completion of MSL 301, 302 and 491; enrolled in the nursing program; and approval from the Nursing Department Chair and the Professor of Military Science and Leadership.
491 Advanced Camp (6) Training program normally taken during the summer between the MS III and MS IV years. Training is required by all contracted cadets seeking enrollment as an MS IV student. The student must register for this course following successful completion of camp in order to receive the appropriate credit A letter grade will be awarded by the Professor Military Science based on camp results. Prereq: Approval of the Professor of Military Science.

## Music (MUS)

108 Introduction to Technology in Music (1) An introduction to computer software for use in music.

111 Masterpieces of Music (3) (TBR: MUS 1030) A survey of world masterpieces of music before 1900.
111H Honors Masterpieces of Music (3) A survey of world masterpieces of music before 1900 for students in good standing in Honors Programs.
112 Music in Our Time (3) A study of music in various cultures circa 1900 to the present. For students in curricula other than music. May not be used toward a major in music.

112H Honors Music in Our Time (3) A study of music in various cultures circa 1900 to the present for students in good standing in Honors Programs. For students in curricula other than music. May not be used toward a major in music.

## 113 Survey of Western Masterpieces and World

 Music (3) A survey of significant and historical Western Masterpieces and World Music where students listen to, describe and respond aesthetically to musical works. Students will develop a personal aesthetic perspective of music through studying its function in various cultures and societies, especially as music relates to humanity's ability to represent cultural values through musical expression. Students are expected to be able to read music. Prereq: MUS 120 or MUS 131.114 Historical Survey of Jazz (3) A historical survey of the development of jazz beginning with its roots in African music, blues, and ragtime, and progressing through Dixieland, swing, bebop, cool jazz, modal jazz, and fusion. The course will include a discussion of musical terminology, form and style, prominent performers, as well as cultural influences on this American art form.

## 115 Historical Survey of Popular Music (3) An

 exploration of popular folk music throughout history. Topics will include the dissemination of secular music through medieval troubadours in Western Europe, the origins and influences of African-American slave song, and the influence of modern era politics on musicians such Woody Guthrie and Bob Dylan. A special emphasis will be placed on the study of rock and roll and its derivative subgenres.120 Fundamentals of Music Theory (3) Basic music theory skills, including music notation, scales, key signatures, triads, intervals and rhythms. Music majors and minors only.

123 Aural Skills I (1) The study of ear training and dictation. Prereq: Passing score on departmental theory entrance exam or grade of $C$ or better in MUS 120. In order to proceed to MUS 124, students must complete MUS 123 with a grade of C or higher.

124 Aural Skills II (1) Continuation of the study of ear training and dictation. Prereq: MUS 123. In order to proceed to MUS 223, student must complete MUS 124 with a grade of C or higher.

131 Music Theory I (3) Brief review of music fundamentals, followed by a sequential study of harmonic progression, part writing procedures and stylistic elements. Prereq: Passing score on departmental theory entrance exam or grade of C or better in MUS 120. In order to proceed to MUS 132, students must complete MUS 131 with a grade of C or higher.
132 Music Theory II (3) Continued sequential study of harmonic progression, part-writing procedures and stylistic elements. Prereq: MUS 131. In order to proceed to MUS 231, students must complete MUS 132 with a grade of C or higher.

161-162 Diction for Singers I and II $(1,1)$ English and Italian diction (161) German and French diction (162) and their special requirements as related to the singing voice. For applied voice students. Other students must have the instructor's approval. Must be taken in sequence.
191, 192, 193 Topics in Music (1, 2, 3) Specific selected topics in music. Topics and prerequisites to be announced. May be repeated for credit.

223 Aural Skills III (1) Continued development of sight-singing and aural skills needed by musicians. Prereq: MUS 124. In order to proceed to MUS 224, student must complete MUS 223 with a grade of C or higher.
224 Aural Skills IV (1) Continued development of sight-singing and aural skills needed by musicians. Prereq: MUS 223. Students must complete MUS 224 with a grade of C or higher.

231 Music Theory III (3) Advanced study of harmonic progression, part writing procedures and stylistic elements. Prereq: MUS 132. In order to proceed to MUS 420, students must complete MUS 231 with a grade of C or higher.

232 Analysis of Post-Tonal Music (3) A study of analytic techniques and their application in posttonal music.

251 Music History and Literature I (3) A survey of the development of music from earliest known examples through the middle of the 18th century. Students are required to write reports and give oral presentations. For music majors and minors. Prereq: MUS 113 with a minimum grade of C; MUS 131.

252 Music History and Literature II (3) A survey of the development of music from the middle of the 18th century to the present. Students are required to write reports and give oral presentations. For music majors and minors. Prereq: MUS 132, MUS 251.

261 Music of the World (2) An exploration of living music from around the world and the colorful and complex cultures that bring this music to life. Designed for students that embrace cultural diversity and seek an increase in global ethnic awareness. Countries include Japan, Iraq, Brazil, Mexico, Trinidad, India, China, and Java as well as other regions across the world. Topics include ideas about music, the social organization of music, the variety of musical sound, performance practices and musical acculturation.

301 Beginning Improvisation (1) This course will introduce students to the methods and pedagogy of jazz improvisation on their applied instruments. Content will include jazz harmony and scales, ear training, jazz form, repertoire and discography, and functional jazz piano. Prereq: MUS 131.

302 Orchestration (2) Scoring for small instrumental combinations, full band and orchestra. Prereq: MUS 231.

303 Choral Arranging (2) Scoring for the choral ensemble with emphasis on voice ranges and other elements relating to various kinds of choral organizations. Prereq: MUS 231.

333-334 Piano Literature (2, 2) Standard piano repertoire from early keyboard works customarily played on the piano today to the present.

335-336 Vocal Literature (2, 2) Repertoire for the solo voice from 1600 to the present Includes opera and oratorio, but with particular emphasis on the
art song. Practice and interpretation illustrated by recordings, class members and instructor. Prereq: Upper-division standing or instructor's approval.

## 337-338 Instrumental Literature (2, 2)

Repertoire for string, brass, woodwind, or percussion from the earliest music currently performed on these instruments to the most recent. Specific instruments designated by section.

## 343 History of Church Music and Liturgical

Practices (3) History of music in the church and related liturgical practices from the tenth century to the present. History and practices relevant to major contemporary Christian denominations.

344 Hymnody, Sacred Repertoire and Church Music Techniques (3) The practices and sources of sacred hymnody from its origins in the fifteenth century to the present. Examine music which would be appropriate for use in church. Discuss and explore techniques relevant to directing a church music program.

353 Choral Conducting and Literature I (2) The development of the fundamentals of conducting; selection and teaching of choral literature for typical school and/or church ensembles; sequencing and teaching curriculum for the choral ensemble. Prereq: MUS 132. In order to proceed to MUS 453, students must complete MUS 353 with a grade of C or higher.

354 Instrumental Conducting and Literature
I (2) Establishment and development of basic conducting skills with emphasis on metrical patterns, fundamental baton technique, non-verbal communication, development of expressive gestures, the fundamentals of score study and the development of a working knowledge of the concert repertoire for beginning and middle level bands. Prereq: MUS 132. In order to proceed to MUS 454, students must complete MUS 354 with a grade of C or higher.

363-364 Piano Pedagogy (2, 2) Materials and methods for class piano and studio teaching.
365 Voice Pedagogy (2) The mechanics of respiration, phonation and articulation as related to singing and care of the voice. Methods and materials used in the teaching of singing and a survey of various national schools of singing styles.

366-367 Instrumental Pedagogy (2, 2) Materials and methods for teaching string, brass, woodwind, or percussion. Specific instruments designated by section.

## 371 Recording Technology and Entrepreneur-

ship (2) An introduction to entrepreneurship as a way of thinking and acting that can serve as a springboard for a self-sustaining, creative career. It provides students with insight into how arts, entertainment, and media professionals turn ideas into a business, and how various elements of an organization fit together to become a viable venture, whether in the profit or non-profit world. Students learn to recognize and evaluate opportunities; problem-solve and manage risks; plan and manage time effectively; leverage resources; craft business models; and develop audiences to support their work. The course also focuses on Pro Tools skills for recording and examines the skills and responsibilities of music editors/managers in the entertainment industry. Students will also understand negotiations involving contractual fees; the dynamics of working with composers, music supervisors, and other personnel involved in the editing environment.

391, 392, 393 Topics in Music $(1,2,3)$ Selected topics in music. May be repeated for credit. Topics and prerequisites may be announced.

401 Independent Study (3) Directed reading or research by arrangement. May be repeated for credit. Permission of department chair required.

420 Form and Analysis (2) Units of structure, song forms and single movement forms representing a variety of musical idioms, styles and periods. Special focus on 20th century practices and techniques. Prereq: MUS 231.

430 Internship in Church Music (3) Supervised experience with a practicing church music director.

435 Internships in Music (1-3) The goal of the internship program in the University of Tennessee Martin Department of Music is to support lifelong learning by helping students develop tools and resources to become critical thinkers, creative problem solvers, and effective communicators as they transform into responsible citizens in the work place. The internship program will provide professional training and real-world experiences that will
equate to marketability and success in the field of music.

440 Senior Project in Music (1) Culminating project for music majors in the Bachelor of Arts degree with a Major in Music. Taken by arrangement with a faculty member approved by the Chair of the Department of Music.

453 Choral Conducting and Literature II (2)
Advanced concepts of teaching, rehearsing and administrating a choral program; advanced conducting techniques in choral conducting and rehearsing; selection of appropriate literature for choral groups. Prereq: MUS 231, MUS 353 with a minimum grade of C, MUED 260.

454 Instrumental Conducting and Literature II
(2) Continued development of baton technique and score study skills learned in MUS 354. Students will develop aural and interpretive skills, learn a methodology to develop a personal expressive vocabulary, expand rehearsal techniques necessary to conduct an instrumental ensemble, and develop a working knowledge of the concert repertoire for high school bands. Prereq: MUS 231, MUS 354 with a minimum grade of C, MUED 260.
463 Practicum in Piano Teaching (2) Supervised teaching in the piano class and private studio. May be repeated for credit.

## 466 Practicum in Instrumental Teaching (2)

Supervised teaching in brass, woodwind, percussion, or string instruments. Specific instruments designated by section. May be repeated for credit.

481-482 Piano Tuning and Technology (2,2)
Physical properties of tuning and temperament, tuning technique, action regulation, voicing, stringing and rebuilding. Prereq: MUS 122 or instructor's approval.

## Music, Applied (MUAP)

Non-music majors may not enroll in applied music classes, either class or private instruction, without approval from the department chair.

## Class Instruction

Lower-division (two class hours per week.)

101 Piano Class I (1) Class instruction. In order to proceed to MUAP 102, students must complete MUAP 101 with a grade of C or higher.

102 Piano Class II (1) Class instruction. Prereq: MUAP 101 with a minimum grade of C. In order to proceed to MUAP 201, students must complete MUAP 102 with a grade of C or higher.
201 Piano Class III (1) Class instruction. Prereq: MUAP 102 with a minimum grade of C. In order to proceed to MUAP 202, students must complete MUAP 102 with a grade of C or higher..

202 Piano Class IV (1) Class instruction. Prereq: MUAP 201 with a minimum grade of $C$.
103 Voice Class ( 1 credit per semester)
Upper-division (two class hours per week.)
301 String Class (1)
302 Woodwind Class (1)
303 Brass Class (1)
304 Percussion Class (1)
305 Topics in Applied Music (1-3)

## Private Instruction

Study of technique and repertoire appropriate to the instrument or voice including improvisation studies. Lesson and practice requirements for each major are as follows:

## Non-music Curricula or Secondary Instrument within Music Curricula

$1 / 2$ hour of instruction and five hours individual practice per week. (Register for MUAP courses ending with 0. .)

## Minor in Music

$1 / 2$ hour of instruction and five hours individual practice per week. (Register for MUAP courses ending in 1.)

## Bachelor of Arts in Music, Bachelor of Music, Music Education Option

1 hour of instruction and 10 hours individual practice per week. (Register for MUAP courses ending in 2.)

Bachelor of Music, Music Performance Option

Instrumental Emphasis, Piano Emphasis, or Voice Emphasis: 1 hour of instruction and 20 hours individual practice per week. (Register for MUAP courses ending in 4.)

Instrumental Pedagogy Emphasis or Piano Pedagogy Emphasis: 1 hour of instruction, 20 hours of individual practice per week for lower-division study and 15 hours of individual practice per week for upper-division study. (Register for MUAP courses ending in $\mathbf{4}$ for lower-division study and MUAP courses ending in $\mathbf{3}$ for upper-division study.)

Permission from the faculty is required for students to advance to the upper-division level. A Bachelor of Music major may not study more than six semesters in the lower-division of the major applied voice or instrument. May be repeated for credit. Applied music fee required.

Non-music Curricula or Secondary Instrument within Music Curricula

100 Piano (1)
120 Voice (1)
140 Flute (1)
150 Double Reed (1)
160 Clarinet (1)
170 Saxophone (1)
180 Trumpet (1)
190 French Horn (1)
210 Trombone (1)
220 Euphonium (1)
225 Composition (1)
230 Tuba (1)
235 Guitar (1)
250 Percussion (1)
255 Violin (1)
260 Harpsichord (1)
265 Viola (1)
270 Organ (1
275 Cello (1)
285 Double Bass / Electric Bass (1)
295 Harp (1)

## Minor in Music

111, 311 Piano (1)
121, 321 Voice (1)
141, 341 Flute (1)
151, 351 Double Reed (1)

161, 361 Clarinet (1)
171, 371 Saxophone (1)
181, 381 Trumpet (1)
191, 391 French Horn (1)
211, 411 Trombone (1)
221, 421 Euphonium (1)
226 Composition (1)
231, 431 Tuba (1)
236, 436 Guitar (1)
251, 451 Percussion (1)
256, 456 Violin (1)
261, 461 Harpsichord (1)
266, 466 Viola (1)
271, 471 Organ (1)
276, 476 Cello (1)
286, 486 Double Bass / Electric Bass (1)
296, 496 Harp (1)

## Bachelor of Arts in Music, Bachelor of Music, Music Education Option

112, 312 Piano (1)
122, 322 Voice (1)
142, 342 Flute (1)
152, 352 Double Reed (1)
162, 362 Clarinet (1)
172, 372 Saxophone (1)
182, 382 Trumpet (1)
192, 392 French Horn (1)
212, 412 Trombone (1)
222, 422 Euphonium (1)
227, 427 Composition (1)
232, 432 Tuba (1)
237, 437 Guitar (1)
252, 452 Percussion (1)
257, 457 Violin (1)
267, 467 Viola (1)
277, 477 Cello (1)
287, 487 Double Bass / Electric Bass (1)
297, 497 Harp (1)

## Bachelor of Music, Performance Option

## Instrumental Emphasis, Piano Emphasis, or Voice Emphasis

114, 314 Piano (2)
124, 324 Voice (2)
144, 344 Flute (2)

154, 354 Double Reed (2)
164, 364 Clarinet (2)
174, 374 Saxophone (2)
184, 384 Trumpet (2)
194, 394 French Horn (2)
214, 414 Trombone (2)
224, 424 Euphonium (2)
229, 429 Composition (2)
234, 434 Tuba (2)
239, 439 Guitar (2)
254, 454 Percussion (2)
259, 459 Violin (2)
269, 469 Viola (2)
279, 479 Cello (2)
289, 489 Double Bass / Electric Bass (2)
299, 499 Harp (2)
Instrumental Pedagogy Emphasis or Piano
Pedagogy Emphasis
114, 313 Piano (2)
124, 323 Voice (2)
144, 343 Flute (2)
154, 353 Double Reed (2)
164, 363 Clarinet (2)
174, 373 Saxophone (2)
184, 383 Trumpet (2)
194, 393 French Horn (2)
214, 413 Trombone (2)
224, 423 Euphonium (2)
234, 433 Tuba (2)
238, 438 Guitar (2)
254, 453 Percussion (2)
258, 458 Violin (2)
268, 468 Viola (2)
278, 478 Cello (2)
288, 488 Double Bass / Electric Bass (2)
298, 498 Harp (2)

## Recital

395 Junior Recital (1-2) Preparation of a solo public performance. Final approval for presentation will be given by the faculty. Student will receive upper-division private instruction during the term in which the performance is given.

495 Senior Recital (1-2) Preparation of a solo public performance. Final approval for presentation will be given by the faculty. Student will receive upper-division private instruction during the term in which the performance is given.

## Music Education (MUED)

260 Introduction to Music Education (2)
Exploration of the field of music education and basic concepts in the musical education of children and adults. Philosophical, psychological and social aspects of music as a basic part of the intellectual and physical development of children. This course includes a minimum of 10 hours of field experience observations and five hours of community service.

310 General Music (3) Skills and methodologies utilized by specialists in the teaching of general music in classroom settings. Includes traditional western music as well as music of diverse, non-western sources. This class requires a field experience (i.e., practicum) that occurs BEFORE the fall semester. This course includes a minimum of 10 hours of field experience. Prereq: MUED 260.
391, 392, 393 Topics in Music Education (1, 2, 3)
Selected topics in music education. Topics and prerequisites to be announced. May be repeated for credit.
401 Independent Study (3) Directed reading or research by arrangement. May be repeated for credit. Permission of department chair required.
405 Secondary Instrumental Methods (3) This course will develop the skills necessary to administer and instruct an instrumental music program. Emphasis will be given to developing a philosophy of instrumental music education, selection of quality literature, creating a budget, designing curricula, developing rehearsal techniques, assessment, and evaluation of instrumental concert, jazz, and marching ensembles. Teaching and conducting experiences will be part of this course. This course includes a minimum of 10 hours of field experience. Prereq: MUED 260, MUED 310, MUS 454.

406 Secondary Choral Methods (3) This course will explore practical and pedagogical techniques to developing and running a choral program in the secondary schools. Issues including literature, rehearsal planning, lesson planning, and program development will be covered. Additionally, broad issues of program management, budgets, library development, and technology tools will be covered. This course includes a minimum of 10 hours of field experience. Prereq: MUED 260, MUED 310, MUS 453.
417 Marching Band Methods (1) Developing
instrumental marching units and designing show productions. Prereq: MUED 260 and MUED 310.

450 Senior Seminar in Music Education (3) Current issues in the profession of music education, review of national standards and the relationship of aesthetic education to the overall development of young people. Historical, philosophical, psychological and social aspects of music in the curriculum. Measurement and evaluation of music instruction. This course includes a minimum of 10 hours of field experience. Prereq: MUED 310, MUED 405, and MUED 406.

453 Instructional Strategies in Music Education (2) Field-based experience for music education, emphasizing lesson planning, instructional strategies, implementation, assessment and evaluation. 30 hours of field-experience are required for this course. Prereq: MUED 260, MUED 310, MUED 400, and MUED 405 or 406.

461 Internship in Teaching Music (12) Supervised experience (one semester) of music in off-campus centers. Must be taken concurrently with MUED 462. Prereq: Admission to Educator Preparation Program (EPP), TCED 301, 302 and all required music methods courses. (Application for internship must be filed no later than two semesters prior to enrolling.)

462 Seminar in Teaching Music (3) Philosophical and social aspects of music as a part of basic education and intellectual development. Organization, structure and evaluation of sequential music curricula. Professional organizations and continual professional growth. Implications of the Tennessee Instructional Model and the Tennessee Career Development Program for Music Education. Evaluations about music and specific techniques to produce expressive performances. Must be taken concurrently with MUED 461.

## 471 Student Teaching in Music-Grades K-6

(6) Supervised student teaching of music in grades K-6 in off-campus centers for a minimum of 6.5 weeks. (Normally taken concurrently with MUED 472.) Prereq: Admission to Educator Preparation Program (EPP), TCED 302 and all other required courses in the Professional Education core.

472 Student Teaching in Music-Grades 7-12
(6) Supervised student teaching of music in grades

7-12 in off-campus centers for a minimum of 6.5 weeks. (Normally taken concurrently with MUED 471.) Prereq: Admission to Educator Preparation Program (EPP), TCED 302 and all other required courses in the Professional Education core.

## Music Ensembles (MUEN)

Study and performance of music appropriate to each ensemble including both traditional repertoire and music of diverse cultures. Membership is open by audition to all students. May be repeated for credit.

## Major Ensembles

151, 351, 451 Marching Band (1, 1, 0)
352, 452 Wind Ensemble (1, 0)
358, 458 Concert Band $(1,0)$
362, 462 University Singers ( 1,0 )
371, 471 University Orchestra $(1,0)$
Independent Ensembles
305 Topics in Music Ensembles (1-3)
353, 453 Concert Jazz Band (1, 0)
356, 456 Percussion Ensemble (1, 0)
365, 465 New Pacer Singers $(1,0)$
367, 467 Lyric Opera Theatre ( 1,0 )
372, 472 Contemporary Music Group $(1,0)$
391, 491 Contemporary Music Group (1, 0)

## Chamber Ensembles

368, 468 Chamber Ensemble (1, 0) Individual ensembles will be determined by section number.

## Homogenous

Tuba/Euphonium
Piano
Clarinet
Flute Choir
Saxophone \& Double Reed
Trombone Choir
Brass Quintet
Open
Heterogeneous (Mixed)
Small Jazz Combo
Brazilian Choro
Open

## Natural Resources Management (NRM)

100 Introduction to Natural Resource Management (3) Survey of natural resources management career opportunities; a history of resource management; forests, wildlife, soils and recreation components; government and private management entities; commercial, conservation and preservation philosophies of land management discussed.
101 Wildlife, Conservation and Environmental Issues (3) This course is intended for students who are interested in wildlife and conservation issues. Includes a review of wildlife and resource history and a survey of current resources at global, national and regional scales. Issues will be discussed including biological diversity and endangered species, pollution and habitat loss, values of natural resources to humans and human philosophies and perspectives on conservation.

180 Topics in Natural Resources Management [Topic title] (1-3) Study of special topics, lab, or field experiences at an introductory level. Topics include, but are not restricted to: Agricultural Economics, Animal Science, Plant and Soil Science, Agricultural Education, Agricultural Engineering Technology, Natural Resources Management, Chemistry, Physics, Biology. This course may be repeated for credit with adviser's approval. The course is graded pass/fail. (Same as AGRI 180)
200 Natural Resource Interpretation Practicum (3) Application of service learning activities off campus in cooperation with other agencies such as Tennessee State Parks, Tennessee Wildlife Resources Agency, U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, etc. Students will assist in public outreach activities such as interpretation and work on special projects related to natural resource management.
210 Human Dimensions in Natural Resources Management (3) A communications and critical thinking course involving current conservation issues-relating to forestry, wildlife, fisheries, agriculture (and other land use), human population growth, air and water pollution, as well as other natural resource concerns. This course will involve
interpersonal, oral and thinking skills leading to mediating environmental conflicts. There will be active group interaction and student participation during class. Open to all students, regardless of major.
225 Introduction to Aquatic Science (3) Introduction to the physical, chemical, and biological components of freshwater. Examining lake formation, hydrology, water chemistry, and ecology and diversity of food webs. Field sampling techniques for lake and streams will be demonstrated. This course requires fieldwork involving physical activity. Two one-hour lectures and one two-hour lab.

## $\mathbf{2 3 0}$ Travel Studies in Agriculture and Natural

 Resources (1-3) Travel course to study topics in Agriculture and Natural Resources either domestic or international. Requires travel to another region or country and presentation of oral and written reports. May be repeated one time for credit. Prereq: Instructor's approval. (Same as AGRI 230).
## 250 Global Perspectives in Natural Resource

 Based Recreation (3) This course will provide an examination of the political, economic, and cultural factors that shape the use of the world's natural resources for recreation. There will be a review of the values involved and the benefits derived in different societies around the world. The roles of government agencies and non-governmental organizations will be discussed. There will be a survey of the major issues facing the sustainable use of natural resources for recreation. Students will be exposed to current research and service-learning opportunities.301-302 Special Problems[topic title] (1, 1) Independent study projects for students exhibiting special interest and abilities in selected subject areas. Written project outline and report of results required. Taught only by arrangement prior to registration.
315 Restoration of Freshwater Habitats (3) Restoration of streams, lakes, and wetlands with special attention given to the restoration and fluvial geomorphology of channelized streams in West Tennessee. Social, biological, and political forces that affect the success of a restoration project will be explored. This course requires fieldwork involving physical activity. Two one-hour lectures and one two-hour lab.

350 Environmental Regulation (3) Students will be introduced to environmental regulation and the role of environmental professionals in the workplace. Emphasis will be placed on the interrelationships among businesses, federal and state regulatory programs. Examples will come from current regulatory programs and emerging areas on concern. The perspective will be that of environmental professionalism including responsibilities and ethics. Prereq: Junior standing.

375 Environmental and Agricultural Law (3) Survey of law and its application to agricultural and natural resource management. Property, contracts, torts, drainage and water rights. Environmental law, land tenure, employment, forms of business organization, estate planning, regulatory law and other selected topics. (Same as AGEC 375)

## 390 Career Planning in Natural Resources

Management (1) Assessment of personal and academic potential for professional careers by Natural Resources Management graduates. Efforts directed toward preparation of resumes and cover letters, interviewing, and securing positions. Discussion of qualifications including employment and volunteer experience; knowledge, skills, and abilities; communication skills, and other pertinent qualifications. Prereq: Junior standing.

## 401-402 (601-602) Research Participation

$(3,3)$ Application of the scientific method and techniques of research to investigation of problems in major subject areas of natural resources management. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. Only 401-402 may be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program. Prereq: Senior standing and minimum GPA of 2.75 .
410 (610) Silviculture (3) Principles of forestry and the management of forestland. Multiple uses of these forests and how to market and harvest products from them. How to protect them, improve their quality and keep records. (Same as PLSC 410/610)
420 Supervised Field Experience (3, 4) Minimum of one semester (or two semesters for four hours credit) of supervised study and experience
cooperative with approved university biological stations, governmental agencies, or private enterprises at off-campus locations. Term paper describing application of resource management techniques required. Joint evaluations by on-the-job and academic supervisors. Prereq: Instructor's approval.

330 Natural Resources Research (3) Foundations and application of the scientific method in natural resources studies. Hypothesis formation, literature review, experimental and sampling design, pilot studies and power analysis, data collection, analysis and interpretation of results, written and oral presentation components. Prereq: PARK 200 or MATH 210 and junior standing.
355 Ethics and the Environment (3) Discussion of major ethical issues regarding nature and the environment, including the value of nature, human treatment of animals, natural resource management, anthropocentrism, species and biodiversity, population growth, global poverty, and climate change. (Same as PHIL 355)

440 (640) Regional Studies in Natural Resources Management (3) Evaluation of natural resources and administration on a regional basis by visits to selected public, private and commercial agencies and lands.

## 450 (650) Dynamics and Development of Leadership in Natural Resources Manage-

 ment (3) A study of the dynamics, strategies and parliamentary procedure skills needed by leaders of occupational, civic and social organizations. Practical approaches through group interactions and participation. A detailed examination of organizations and individuals within organizations. Students are required to write reports and give oral presentations. Prereq: Junior standing. (Same as AGRI 450/650)460 (660) Agroecosystems Analysis Field School (3) This course provides a field-based opportunity to develop a deeper conceptual and analytical framework for understanding agroecosystems in Tennessee and the mid-south region. The course is founded on the concept of community learning, providing interactive and experiential opportunities while expecting all participants to engage in the discussions and other activities as colleague learners. (Same as AGRI 460/660)

461 Selected Topics in Natural Resources Management (1) Current and historical topics in natural resources management. Review of literature on classic natural resource issues. Subjects determined by instructor. Active student participation including oral and written presentations. This course cannot be substituted for BIOL 410-411. Prereq: Ma jor in Natural Resources Management, or Biology, or have instructor's approval.

480 (680) Applications of Molecular Biotechnology (3) Advances in computer science, information technology, biology and chemistry have given us the field of biotechnology. This course will explore the technological, cultural and personal aspects of this emerging field as related to the disciplines of agriculture and natural resources. Topics to be covered will include genetic selection as it applies to plant and animal breeding, ethical implications of cloning, metagenomics of ecosystems, forensic applications and industrial processes. Students are required to write reports and give oral presentations. (Same as AGRI 480/680)

701-702 Master's Thesis (3, 1-3) Thesis proposal and research; thesis writing, presentation and defense. May repeat enrollment. P/N only.

## 722 Production of Biorenewable Resources

(3) An exploration of plant species with potential as crops for industrial uses including biofuels. An overview of the chemistry of plant products and extraction techniques for useful products including biofuels, unique fatty acids and pharmaceuticals from new and existing crops. Will include a review of fundamental concepts in bioenergy and biobased products including engineering thermodynamics and organic chemistry. (Same as PLSC 722)

724 Advanced Grazing Management Techniques
(3) An in depth discussion of the integral biological and physical components of pasture systems. Students will learn how soil chemical and physical properties interact with plant growth in the production of forage crops. The focus of the course will be to examine the impact of management practices on the ecology of grazing livestock in pasture systems. Students will evaluate grazing systems and develop a management plan as a part of the course activities. A paper dealing with pasture ecology will be a required component of the course. (Same as PLSC 724)

730 Advanced Natural Resources Economics (3)
Economic principles associated with natural resource use and preservation. Emphasis on economic analysis and policy decision making tools for natural resources and non-market goods. Valuation techniques such as benefit cost analysis, willingness to pay, willingness to accept, hedonic pricing, travel cost models, intertemporal substitution and issues related to economic and social efficiency will be discussed.

## 740 Natural Resource Policy and Administra-

tion (3) This course is designed to provide an understanding of how natural resource policy in the United States is developed. The course examines the intersection of human dimensions and natural systems. The evolution of natural resource policy and participants in policy development will also be studied. Through the use of student led discussion and writing projects, students will examine the application of management decisions within a policy context.

## 755 Global Climate and Climate Change (3)

A study of the physical principles and processes important to understanding past, present, and future climates on Earth. Analyses of data, discussions, case studies, and detailed investigation into the principles that affect global climate systems will be approached from a climatologist's standpoint. Natural and anthropogenic climatic changes and climatic influences on human activity will be studied. (Same as GEOG 755)

## 760 Management of Interpretive Resources

(3) Principles of interpretation and an examination of the resources used for interpretive services. There will be an overview of the application of management principles to interpretive services. Sociological concepts, relevant innovations, resource inventory and master planning will be explored. Emphasis will be placed on the role of interpretation to accomplish an organization's mission. (Same as PARK 760)

## 765 Conservation and Preservation of Historic

 Structures (3) Principles and methods related to the use, preservation and interpretation of historic structures. This will include the application of technology for the identification and cataloging of structures that have historical significance. Relevant laws and regulations will be reviewed. Special attention will be given to construction methods and materials as they apply to preservation. (Same as PARK 765)770 Topics in Natural Resources Management [Title] (1-6) Topics in selected areas of natural resources management. For graduate students in the Master of Science in Agriculture and Natural program. Can be used to meet requirements in the M.S.A.N.R. curriculum. May repeat enrollment up to six credit hours. Prereq: Graduate Coordinator and instructor's approval.

790 Scientific Writing and Presentation (3) A course designed to give graduate students the skills necessary to write a thesis, and to prepare other professional materials for presentation or publication. Topics covered in this course include: searching the scientific literature; scientific writing style; writing graduate level papers, proposals, projects, and thesis components; preparing scientific presentations; presentation of data; using visual aids; and using word processing, spreadsheet, and presentation software. (Same as AGRI 790)

791 Master's Research Project (1-3) A major research project associated with natural resources management. Research projects shall include: a review of literature, data collection methodology, data presentation and a final written report. May repeat enrollment. No more than three semester hours credit will be counted toward requirements for the M.S.A.N.R. degree. P/N only.

## Neuroscience (NEUR)

200 Introduction to Neuroscience (3) This introductory course surveys the structure and function of the nervous system in relation to behavior, including neural development and plasticity, neuronal communication, sensory and motor systems, and behavioral and cognitive functions. Prereq: BIOL 110 and 120 or BIOL 130 and 140, and PSYC 101 with grades of C or better, or instructor's approval.

324 Mindfulness and Meditation (1) This course introduces and explores the practices of mindfulness and meditation. Course content includes discussion and application of mindfulness and meditation toward improving physical and psychological well-being, with an emphasis on stress management and other health benefits. Course requirements include a commitment to practicing mindfulness and meditation outside of the course meetings. In
repeated courses, the instructor will assist the student in learning about new research and developing new practices. Course may be repeated; course may only be taken once per term; total credit hours are not to exceed 3. Prereq: PSYC 101 or instructor's approval. (Same as PSYC 324)

362 Special Topics: Basic Neuroscience (1-3) Subject matter for the course will vary by semester, including topics from biology, chemistry, or physics. Total credits not to exceed three hours toward the minor. Prereq: NEUR 200 and junior standing or instructor's approval.

## 363 Special Topics: Applied Neuroscience

 (1-3) Subject matter for the course will vary by semester, including topics from cognitive, behavioral, functional neuroscience. Total credits not to exceed three hours toward the minor. Prereq: NEUR 200 and junior standing or instructor's approval.365 Special Topics in Neuroscience (1-3) Selected topics in the area of neuroscience. The course subject matter for this class will vary by semester, includes topics not designated as basic or applied. Total credits not to exceed three hours toward the minor. Prereq: NEUR 200 and junior standing or instructor's approval.

410 Sleep and Dreams (3) Lecture/discussion format. Scientific literature, methods, and theories regarding the physiology of sleep, the purpose and meaning of dreams, and sleep disorders and their treatment. (Same as PSYC 410)

455 Neuroscience Travel Study (1-6) A course designed as an educational travel experience in Neuroscience within the United States or internationally under the direction of a university instructor. May be taught as an organized study tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a Pass/Fail basis. Students may repeat course with different topics. A maximum of six credit hours can be counted toward a minor in Neuroscience. Not regularly offered. Prereq: NEUR 200 and Junior standing or instructor's approval.
460 Fundamentals of Clinical Neuropsychol-
ogy (3) Course serves as an introduction to the clinical application of brain-behavior relations including functional neuroanatomy and physiology
of the brain. Reviews clinical effect and assessment of disease, injury, aging or behavior, cognition, and personality. Also introduces students to neuropsychology assessment, methods and treatment. Prereq: completion of PSYC 315, 318, and 350 with a grade of C or better, or consent of instructor. (Same as PSYC 460)

480 Neuroscience Seminar (1) This is a capstone course for neuroscience minors meant to be taken in the student's final year. An application of neuroscience fundamentals to current research and issues in preparation for graduate programs and/or careers in the field. The course requires active student participation including class discussions, written assignments, and oral presentations. Prereq: NEUR 200, and Junior standing or instructor's approval.

## Nursing (NURS)

213 Foundations in Nursing (6) Beginning course in nursing which emphasizes care of adult patients. Core content includes basic psychomotor skills, documentation, patient safety, and infection control in sub-acute and long-term healthcare settings. Three hours lecture and six hours lab. Prereq: Acceptance to clinical nursing program; Basic Life Support for Healthcare Providers certification; Zoology 251, 352; Microbiology 251. Coreq: NURS 215, 222
215 Pathophysiology (3) Presents basic knowledge of pathophysiology as utilized and applied in current nursing practice. Selected major health problems and concepts are explored, including clinical manifestations and treatments. Three hours lecture. Prereq: Acceptance to clinical nursing program; Zoology 251, 352; Microbiology 251; or instructor's approval. Coreq: NURS 213, 222

222 Professional Nursing I (1) Focuses on professional role development in nursing. Content includes the profession of nursing and attributes of professionalism; healthcare competencies, including quality and safety education for nurses; and the healthcare delivery system. Also includes introduction to the UTM Department of Nursing philosophy, curricular framework, competencies, and program outcomes. Two hours seminar. Prereq: Acceptance to clinical nursing program or instructor's approval. Coreq: NURS 213, 215

225 Pharmacology (4) Examines classifications, uses, actions, and effects of major drug groups and nursing responsibilities for safe drug administration, including patient teaching. Includes drugs used for acute, chronic, and mental health care problems. The course also includes information for calculations needed to accurately figure factional dosages, equivalencies, safe dosages, and infusions as needed to safely implement medication administration for patients. Four hours lecture. Prereq: Acceptance to clinical nursing program; Math 100 and 110 or 140 or higher level math course; or instructor's approval. Coreq: NURS 242, 250

242 Health Assessment (5) Emphasizes concepts and skills of health assessment. Prepares the nurse to assess and analyze the physical and psychosocial status of adult patients. Includes interpretation and analysis of laboratory and diagnostic tests. Four hours lecture and two hours lab. Prereq: NURS 213; or instructor's approval. Coreq: NURS 225, 250

250 Adult Health I (6) Introduces prioritization of evidence-based care of adults with common acute and chronic health problems with predictable outcomes. Additional basic psychomotor skills are introduced. Care is provided in acute care settings. Two hours lecture and eight hours lab. Prereq: NURS 213, 215, 222. Coreq: NURS 225, 242

## 280-289 Topics in Health Care [topic title]

(1-3) Group or individually planned topics or projects of concentrated studies in areas of need and interest. May be taken for credit or Pass/Fail. Prereq: Completion of nursing curriculum prior to specific topic level or instructor's approval.

305 Adult Health II (6) Emphasizes use of the nursing process for prioritization of evidenced based care of adults with acute and chronic health problems seen in acute care settings. Collaboration, teamwork in provision of patient-centered care will be utilized for health promotion and attaining optimal health outcomes. More complex psychomotor skills will build upon understanding presented in prior courses. Care is provided in a variety of healthcare settings. Three hours lecture and six hours lab. Prereq: NURS 225, 242, 250. Coreq: NURS 342. Students cannot use credit for both NURS 305 and NURS 351 toward graduation requirements.

313 Health Assessment (5) The course for Registered Nurses expands on concepts and skills of health assessment introduced at the technical level. Provides the RN with a broader knowledge base required in baccalaureate nursing education. Prepares the nurse to assess and analyze the physical and psychosocial status of patients. Four hours lecture and two hours lab. Prereq: Licensure as a Registered Nurse or instructor's approval. Students cannot use credit for both NURS 242 and 313 toward graduation requirements. This course will be taught on demand each semester.

342 Mental Health Nursing (6) Emphasizes concepts and skills necessary to understand patients and families as they progress through life experiences, utilizing evidence based practice for promoting and restoring mental health across the lifespan while implementing therapeutic communication to assist them in meeting their mental health needs. Three hours lecture and six hours lab. Prereq: NURS 225, 242 and 250. Coreq: NURS 305

351 Transition to Professional Nursing (6) A transition course for Registered Nurses taken in place of NURS 305. Expands on nursing content introduced at the technical level to provide the RN with the broader knowledge base required in baccalaureate nursing education. Three hours lecture and six hours lab. Prereq: Licensure as a Registered Nurse or instructor's approval. Students cannot use credit for both NURS 351 and NURS 305 toward graduation requirements. This course will be taught on demand each semester.

352 Evidence Based Practice (3) Introduces students to evidence based practice (EBP) in nursing. Content includes review of the scientific process, introduction of the research process, and major research designs. Students will review and critique selected nursing research studies and develop an evidence based practice project. Emphasis is placed on the application of research studies to nursing practice. Three hours lecture. Prereq: Math 210 and NURS 305, 342; or instructor's approval. Coreq: NURS 355, 363

355 Adult Health III (6) Continues to emphasize use of the nursing process for prioritization of evidenced based care of adults with acute and chronic health problems seen in acute care settings.

Collaboration, teamwork in provision of patient-centered care will be utilized for health promotion and attaining optimal health outcomes. More complex psychomotor skills will build upon understanding presented in prior courses. Care is provided in a variety of healthcare settings. Three hours lecture and six hours lab. Prereq: NURS 305, 342. Coreq: NURS 352, 363

363 Professional Nursing II (1) Builds on the concepts introduced and developed in Professional Nursing I. The professional nursing role is explored further to gain a deeper understanding of additional concepts including technology/informatics and the utilization of healthcare resources. Two hours seminar. Prereq: NURS 305, 342 or instructor's approval. Corequisites: NURS 352, 355
380-389 Topics in Health Care [topic title] (13) Group or individually planned topics or projects of concentrated studies in areas of need and interest. May be taken for credit or pass/fail. Prereq: Completion of nursing curriculum prior to specific topic level or instructor's approval.
405 Population Health (5) Focuses on global health by examining the philosophy, strategies, and priorities of actions to promote equality in health worldwide. Students will use concepts of epidemiology, health disparities, vulnerable populations, community assessment, health program planning, and research to improve health care of groups and populations utilizing community health services in a variety of community settings. Two hours lecture and six hours lab. Prereq: NURS 352, 355, 363. Coreq: NURS 407

407 Maternal-Child Nursing (7) Maternal-Child Nursing examines the normal developmental tasks and related health needs and issues of childbearing and childrearing. Emphasis is placed on the pathophysiologic and psychologic changes during the maternity cycle, neonatal, and childhood periods. Normal growth and development theories are applied to age appropriate care to the acutely and chronically ill child. Students use evidence-based practice to apply the nursing process in providing care to patients. Five hours lecture and four hours lab. Prereq: NURS 352, 355, 363. Coreq: NURS 405
412 Adult Health IV (6) Advanced course in nursing which emphasizes complex collaborative care
of adult patients with emergent and multi-system health problems. Core content includes recognition and treatment of clinical deterioration, prevention of failure to rescue, and emergency triage in a variety of acute/critical care settings. Three hours lecture and six hours lab. Prereq: NURS 405, 407 or 351; or instructor's approval. Coreq: NURS 443, 463; or instructor's approval.

## 443 Leadership and Management (Profes-

 sional Role Development) (5) Facilitates the transition from student to the role of the professional nurse as a leader and manager in the delivery of health care. The course provides a strong emphasis on the development of leadership, including the organization, planning, staffing, managing change, responsibilities in delegation, and patient advocacy. Clinical goals include advanced progression of independence and confidence in nursing practice, implementing clinical decision making, and theoretical application of nursing leadership and management concepts. Two hours lecture and six hours lab. Prereq: NURS 405, 407. Coreq: NURS 412, 463; or instructor's approval.463 Professional Nursing III (Concept Synthesis) (2) Students learn to comprehensively integrate theory and practice as they approach the completion of the nursing major and transition into the role of professional nurse. The focus is on integration of professional nursing skills and concepts developed throughout the nursing program in preparation for entry into practice. Four hours seminar. Prereq: NURS 405, 407; or instructor's approval. Coreq: NURS 412, 443; or instructor's approval.

480-489 Topics in Health Care [topic title] (1-
3) Group or individually planned topics or projects of concentrated studies in areas of need and interest. May be taken for credit or pass/fail. Prereq: Completion of nursing curriculum prior to specific topic level or instructor's approval.

## Nutrition (NUTR)

100 Introductory Nutrition (3) Introduction to macro and micro nutrients, including their role in human nutrition and wellness. Nutrient needs of healthy individuals discussed. Legislation and regulation of U.S. food supply discussed, including impact of global interdependence of food availability.

322 Advanced Nutrition (3) Discussion of the biochemical functions of macro and micro nutrients in the study of human nutrition. Emphasis on digestion and absorption. Exploration of deficiencies and toxicities of macro and micro nutrients. Prereq: BIOL 140; CHEM 111, 112, or CHEM 121, 122; and NUTR 100, or instructor's approval.
400 Preparation for the Registration Examination for Dietitians (1) Lecture, study/review, and online practice tests. Must be in final semester of the dietetics concentration.

414 (614) Sports Nutrition (3) Nutrition strategies for optimal performance across various sports throughout the lifespan for all levels of athlete from recreational to professional. Practical information for health and wellness of athletes from weight management and prevention of chronic diet related disease to working with those with eating disorders and diabetes. Dietary recommendations for vegetarian athletes and the latest research on dietary supplements. Prereq: NUTR 100.
415 Professional Development (2) The dietetics profession and the development of practitioners. Laws, regulations and other factors affecting dietetics practice. Introduction to mentoring and precepting others. Taken during semester when FCS 497 Supervised Field Experience in Dietetics is scheduled. Prereq: BIOL 140, CHEM 111 and 112, NUTR 100, 322, 422, and 433. Student must be admitted to the dietetics concentration within the Department of Family and Consumer Science.
422 (622) Lifespan Nutrition (3) Nutrition needs of selected developmental stages including preconception, pregnancy, lactation, infancy, childhood, adolescence, and adulthood. Prereq: NUTR 100 CFS 100 and 8 hours of biology, chemistry, or zoology; or instructor's approval.
433 (633) Nutrition in Disease (4) Principles of nutrition applied in management of disease syndromes which may be influenced by diet. Emphasis on pathophysiology. Prereq: BIOL 140, CHEM 111, 112, NUTR 100 and 322; or instructor's approval.
443 (643) Community Nutrition (3) Nutrition problems and services in the community. Government and industry sponsored programs. Applications of research methodology to socio-cultural and ethnic food
consumption and trends in consumer issues. Prereq: NUTR 100.

450 Seminar (1) Guidance and instruction for successful navigation of the application process for graduate level supervised dietetics programs. Introduction to mentoring an precepting others and preparing for the registration exam.

## 455 (655) Nutrition Assessment and Coun-

 seling (3) Components of nutrition assessment, theories and practice in nutrition counseling and cultural competence and sensitivity in working with patients. Also includes exercises in the development of critical thinking skills as they apply to nutrition issues. Students must be admitted to the dietetics concentration within the Department of Family and Consumer Sciences. Prereq: NUTR 322; or instructor approval.475 Medical Nutrition Therapy (5) Application of nutrition science in the management of disease syndromes which may be influenced by diet. Emphasis on nutrition assessment, diagnosis, intervention, monitoring and evaluation. Prereq: BIOL 140, CHEM 111 and 112, NUTR 100, 322, 422, and 433. Student must be admitted to the dietetics option within the Department of Family and Consumer Sciences.

700 Vitamins: Fundamental Aspects in Nutrition (3) A discussion of the chemical and physiological properties of vitamins. Vitamin requirements, deficiencies, and toxicities addressed. Investigation of current research in the role of vitamins in disease prevention and/or treatment.

705 Maternal and Child Nutrition (3) The impact of social, educational, psychological, cultural, environmental, economic, demographic, political and genetic factors on nutritional intake and health outcomes of women and children. The impact of normal versus adverse nutritional intake will be explored within a domestic and global framework. Public Health nutrition interventions will be researched and discussed.

706 Advanced Nutrition Principles in Renal Diseases (3) An examination of renal anatomy, physiology, and function as well as conditions and causes of chronic and end-stage renal failure; management of conditions through medical nutrition
therapy using the Nutrition Care Process from the standpoint of the registered dietitian/nutritionist. Prereq: Admission to the Dietetics Concentration in Family and Consumer Sciences or permission of instructor.
720 Human Nutrition (3) Physiologic functions of carbohydrates, proteins, fats, minerals and vitamins. Contemporary problems in meeting nutritional requirements. Prereq: NUTR 422.
723 Advanced Nutrition (3) Applications of research methods to individual problems. Prereq: CHEM 112 or equivalent.
724 Preprofessional Practice II (2) One-hundredeighty hours of supervised practice plus 20 hours of lecture-discussion/independent study addressing the aspects of dietetic practice in community nutrition. This course consists of rotations in public health nutrition/WIC, child nutrition programs, nutrition education for the public, renal dialysis and community private practice. Prereq: Admission to Dietetic Internship and FSMG 714. Coreq: NUTR 764.

## 726 World Food Supply and Human Need

 (3) Food supplies and food practices as related to human nutrition throughout the world. Regional, national and international agencies concerned with food and nutrition problems. Prereq: Six (6) hours in nutrition or food science or consent of instructor.733 Advanced Clinical Nutrition (3) Physiological bases for diets in disease. Recent developments in dietary management of selected diseases. Evaluation of new products and practices.
734 Preprofessional Practice III (3) Two-hundred-eighty hours of supervised practice plus 40 hours of lecture-discussion/independent study addressing aspects of dietetic practice in clinical nutrition. This course consists of rotations in diet office operation, screening/nutritional assessment, gastrointestinal disorders, basic nutrition support and various medical-surgical rotations. Prereq: Admission to Dietetic Internship.

754 Preprofessional Practice V (3) Two-hundred-forty hours of supervised practice plus 80 hours of lecture-discussion/independent study addressing the aspects of nutrition intervention in dietetic practice. This course consists of rota-
tions in developmental disabilities, rehabilitation, outpatient clinics, geriatrics, pediatrics, home health care, clinical management and critical care Prereq: Admission to Dietetic Internship, FSMG 714 and NUTR 734. Coreq: NUTR 724 and NUTR 764.

## 755 Nutrition in Mental Retardation and

 Developmental Disorders (3) Nutrition assessment, feeding skills, nutrient requirement and drug interaction. Joint teaching by nutrition faculty and Infant Stimulation staff.764 Preprofessional Practice VI (1) One hundred hours of supervised practice plus 20 hours of lecture-discussion/independent study addressing the aspects of business and entrepreneurial dietetics practice. This course consists of rotations in entrepreneurial private practice and dietetics practice in business. Prereq: Admission to Dietetic Internship, FSMG 714 and NUTR 734. Coreq: NUTR 724.

## Park Administration (PARK)

## 100 Fundamentals of Park and Recreation

Administration (3) Historical development of recreation, leisure services and recreation resources. Philosophies of leisure, recreation and play. Survey of organized recreation delivery systems in public, non-profit, private and commercial settings. Career opportunities examined.
110 Introduction to Park Management (3) Introduction to planning and organizing a park management program. Methods of maintaining and operating various park and recreation facilities in public and private settings. Includes design and scheduling personnel management and training preventive and/or corrective maintenance, law enforcement, vandalism control, fire protection, litter and garbage control.
200 Recreation Leadership, Programming, and Interpretation (3) Presentation of the concepts, principles, practices and potentials of effective leadership, programming, and interpretation in recreation activities. Techniques of leadership, programming, and interpretation for working with groups and individuals. Application of these techniques to given situations. Two one-hour lectures and one two-hour lab.

220 Outdoor Recreation (3) To develop a wide variety of certifiable skills in a number of outdoor activities such as orienteering, back-packing, camping, rappelling, canoeing, kayaking and problem solving. Weekend camping and canoeing trips required. Prereq: Must be a good swimmer.

## 300 Technological Applications in PARK (3)

Application of the microcomputer technology to several course subject areas taught in PARK to include design, park management, recreation programming, financing, managing and marketing. Two one-hour lectures and one two-hour lab.

310 Recreation Area Design and Comprehensive Planning (3) Principles of planning, design and layout of recreation areas and facilities. Emphasis on site analysis and design of areas and facilities according to function, need, use and spatial arrangement. Special attention will be given to the study of recreation needs analysis for comprehensive recreation plans. Two one-hour lectures and one two-hour lab. Prereq: PARK 300.

## 315 Special Event Management in PRA (3)

Principles and techniques for planning, promoting, marketing and implementing special events in the park and recreation setting. Emphasis will be placed on the practical application of these techniques in special events on and off campus.
321 Landscape Management (3) Principles and techniques for maintenance of residential, commercial and institutional landscapes. Emphasis will be placed on landscape maintenance involving turf, flowers, ground covers, shrubs and trees. Discussion will include maintenance of playgrounds, natural areas, trails, golf courses, pools and other public facilities. Two one-hour lectures and one two-hour lab. (Same as PLSC 321)

400 (600) Advanced Interpretation of Natural and Cultural Resources (3) Advanced principles and techniques used to communicate natural and cultural history, ecological features and environmental awareness to park visitors. Methods of gathering, analysis and presentation of information. Planning, construction, and use of audiovisual equipment, exhibits and related interpretive devices. Students are required to write reports and give oral presentations. Two one-hour lectures and one two-hour lab.
Prereq: PARK 200.

401-402 Research Participation (3) Application of the scientific method and techniques of research to investigation of problems in the field of parks, recreation, and administration. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program.
410 (610) Advanced Park Management (3) Study of financial resources, legal aspects, organization, budgeting and management of parks. Marketing of recreation products and services. An introduction to hospitality services also provided. Prereq: PARK 110.

430 Supervised Field Experience (3-12)
Supervised study in an operational setting with an approved agency. Emphasis on application of principles of park and recreation administration and of selected aspects of park management and preparation of a comprehensive analysis of a specific problem. Joint evaluation by on-the-job and academic supervisors. Prereq: Senior standing and instructor's approval.

## 760 Management of Interpretive Resources

(3) Principles of interpretation and an examination of the resources used for interpretive services. There will be an overview of the application of management principles to interpretive services. Sociological concepts, relevant innovations, resource inventory and master planning will be explored. Emphasis will be placed on the role of interpretation to accomplish an organization's mission. (Same as NRM 760)

765 Conservation and Preservation of Historic Structures (3) Principles and methods related to the use, preservation and interpretation of historic structures. This will include the application of technology for the identification and cataloging of structures that have historical significance. Relevant laws and regulations will be reviewed. Special attention will be given to construction methods and materials as they apply to preservation. (Same as NRM 765)
770 Topics in Park and Recreation Administration [Title] (1-6) Topics in selected areas of park and recreation administration. For graduate students in the Master of Science in Agriculture and

Natural Resources program. Can be used to meet requirements in the M.S.A.N.R. curriculum. May repeat enrollment up to six credit hours. Prereq: Graduate Coordinator and instructor's approval.

## Philosophy (PHIL)

## 110 Adventure of Ideas: Historical (3) A his-

 torical introduction to philosophy course covering classical Greek, Asian, medieval, and early modern philosophical thought. Philosophers covered include Socrates, Plato, Aristotle, Epicurus, Augustine, Aquinas, Descartes, Locke, Hume, and Kant.
## 120 Adventure of Ideas: Contemporary (3)

(TBR: PHIL 1030) A topical introduction to philosophy course covering recent philosophical discussions of God's existence, mind, free will, knowledge, morality and government.

130 Ethics and Race (3) An introductory course which explores the morality of race relations in America, from the points of view of secular and religious value systems. The goal of the course is the enhancement of understanding and philosophical rigor in matters of values among races.

160 Exploring Ethics (3) A topical introduction to the main theories and problems in ethics, including utilitarian, Kantian, and virtue theories, and contemporary issues such as abortion, euthanasia, animal rights and environmental ethics.
300 Questions of Right and Wrong (3) Advanced investigation of questions about the nature and foundations of morality, with applications to contemporary moral controversies. Topics discussed may include religion and morality, gender and morality, moral relativism vs. objectivism, consequentialism vs nonconsequentialism, and applied ethical issues in bioethics and environmental ethics.

301 Major Religions of the World (3) A survey of the history and philosophy of major living religions: Hinduism, Jainism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity and Islam. (Same as RLST 301)

305 Logic (3) An examination of argumentation, with emphasis on identifying, analyzing, and evaluating arguments. Topics include argument diagrams, informal fallacies, syllogistic logic, propositional
logic, truth tables, quantification, inductive logic, and modal logic.

310 Aesthetics (3) A basic course in aesthetics, dealing with such conceptual issues as the criteria of identity for works of art, the idea of style, of expression, the notion of aesthetic attitude, the relevance of artists' intentions to interpretation and truth in literature and the arts. Analysis of these and similar notions with reference to examples from various art forms (painting, music, literature, etc.). Written reports and oral presentations are required. (Same as FA 310)

314 The Ancient and Medieval Mind (3) An examination of the leading philosophical ideas from ancient Greece through the medieval period. Figures may include pre-Socratic philosophers, Plato, Aristotle, Hellenistic philosophers, Augustine, Maimonides, and Aquinas.

315 The Modern Mind (3) An examination of the leading philosophical ideas of the 16 th, 17 th and 18th centuries; the scientific revolution, Descartes, Spinoza, Liebniz, Locke, Berkeley, Hume and Kant.

316 The Contemporary Mind (3) An examination of the leading philosophical ideas of the 19th, 20th, and 21st centuries in both the analytic and continental traditions. Philosophers include Hegel, Nietzsche, Heidegger, Sartre, Derrida, Russell, Moore, Wittgenstein, Quine, Seale.

320 Traces of God (3) An examination of key issues in the philosophy of religion, including arguments for God's existence or non-existence, the nature of God, the relationship between faith and reason, religious diversity, belief in the after-life, and non-Western approaches to religion. (Same as RLST 320)

325 What Do We Know? (3) A course in contemporary epistemology that examines the philosophical questions "What do I Know?" and "What should I believe?" Special consideration is given to knowledge and rational belief in the domains of morality, science, and religion.

330 Love, Sexuality and Living (3) A contemporary study of relationships, particularly those of love, human sexuality, caring, authenticity, friendship, family, fellowship, creative living and appreciation/ manipulation. Position paper required.

340 Death, Suffering and Evil (3) An examination of the problem of evil from theistic, atheistic, theological and skeptical perspectives. May include selections from the Book of Job, Aquinas, Hume, Dostoevsky, Camus, and Wiesel. (Same as RLST 340)

350 Bioethics (3) Discussion of major ethical controversies in biology and health care including abortion, euthanasia, human cloning, stem cell research, genetic manipulation, allocation of medical resources, and medical paternalism.
355 Ethics and the Environment (3) Discussion of major ethical issues regarding nature and the environment, including the value of nature, human treatment of animals, natural resource management, anthropocentrism, species and biodiversity, population growth, global poverty, and climate change. (Same as NRM 355).

370 God and Human Happiness (3) Studies in selected philosophers, religious thinkers and religious texts where a primary concern is the nature of human happiness and its relationships to beliefs about God or the ultimately real. Texts may include works from such philosophers as Plato or Nietzsche, such authors as Tolstoy or 0'Connor and such texts as the New Testament or the Bhagavad Gita. Issues may include the relative importance of moral or nonmoral goodness for happiness, the nature of God or ultimate reality as it bears upon human life and destiny and related issues. Position paper required. (Same as RLST 370)

380 Topics in the Philosophy and History of Religion [Selected Topics] (3) Intensive coverage of issues in the philosophy of religion (such as the theistic attributes, theistic proofs, religious language) or in the history of religion (such as non-Western religious traditions, eras of reform, the history of interpretation). Course may be repeated with total credits not to exceed six hours. (Same as RLST 380)

385 Topics in the History of Philosophy [Selected Topics] [topic title] (3) Intensive coverage of individual philosophers or of periods only surveyed or not covered in PHIL 314, 315, and 316, such as Plato, Descartes, German Idealism, and Wittgenstein. Course may be repeated with total credits not to exceed six hours.

395 Philosophy Goes to the Movies (3) An examination of philosophical elements in film. The course will focus on how these media confront traditional philosophical questions about such issues as good and evil, the existence of God, the possibility of knowledge of self and the real, the nature of time. The ways in which the structure of these media themselves raise philosophical questions may also be addressed. Students will be required to attend out of class screenings of assigned films.
410 Political Philosophy (3) A course covering classical and contemporary political philosophers on key topics such as justice, the social contract, natural rights, revolution, legal positivism, socialism, anarchism, and minimal government. (Same as POSC 401)

430 Science and Human Values (3) A course in philosophy of science that examines the philosophical foundations of science and the philosophical implications of the natural and social sciences for morality, religion, and society.
440 Topics in African-American and Feminist
Studies (3) An examination of the status of African Americans, including a focus on such matters as economic, social, political and educational status. An exploration of the global status of women and the effects on women of major social institutions.

## 450 Existentialism and Human Experience

(3) A course in existentialism and phenomenology:

Topics include existentialism's worldview, human responsibility, the phenomenological method, and the meaning of life. Figures may include Kierkegaard, Tolstoy, Dostoevsky, Nietzsche, Husserl, Heidegger, Sartre, Beauvoir, Merleau Ponty.
460 Mind, Knowledge and Reality (3) A course in contemporary metaphysics and epistemology. Possible topics covered include individuality, externality, temporality, objectivity, the problem of material constitution, minds, persons, freewill, the nature of knowledge, naturalistic epistemology, and skepticism.
470 Internship in Race Relations (3) Experience with local, state, national, and international authorities in matters of race relations. Internship is under the supervision of faculty. Course performance is based on an agreement between student and instructor which stipulates specific academic
and work assignments. Prereq: Approval of instructor and either PHLL 130 or 440.

## 484 Public Philosophy Internship (0-3)

Students working with a professional mentor on a project of local, regional, or national significance that explores the presence of philosophy in public life. Repeatable up to three credits with the permission of the department chair. Prereq:Approval of instructor.

## 490 (690) Topics in Philosophy [Selected

Topics] (3) Studies in selected issues in metaphysics, epistemology, ethics, aesthetics and philosophy of science, such as philosophy of mind, theories of truth, cognitive relativism, concepts of virtues, literary theory and the like, with each seminar devoted to one such topic. Course may be repeated with total credits not to exceed six hours.

## Physical Activity (PACT)

A student may elect a maximum of eight semester hours credit within the service (activity) program to count toward graduation. ONLY two service (activity) courses may be taken during any given semester.

Any service course may be taken either for a letter grade or for Pass/Fail. If the Pass/Fail option is chosen, this option must be declared in writing before the end of the course adjustment period.
112 Scuba I-Open Water (3) Laws of physics that relate to diving, medical aspects of diving, decompression and recompression, aquatic environment and basic rescue techniques Certification: PADI. To be certified, a student must complete a weekend practical exercise at a dive location. Prereq: Instructor's approval. May not be repeated for credit.

## 113 Scuba II-Advanced Scuba and Rescue (3)

Comprehensive study of factors involved in open water diving including the safety factors associated with night diving, search and recovery, compass navigation and natural navigation. Certification: PADI. To be certified, a student must complete a weekend exercise at a dive location. Prereq: Instructor's approval and PACT 112. May not be repeated for credit.

114 Scuba III-Dive Master (3) Knowledge, skill and safety factors involved in conducting underwater tours and dive trips for groups. First aid and CPR
training for diving accidents, emergency entry and retrieval of divers from the water. Certification: PADI. To be certified, a student must complete a weekend practical exercise at a dive location. Prereq: PACT 113 and instructor's approval. May not be repeated for credit.

115 Swimming (2) For all students at the beginning non-swimmer levels. A proficiency test administered the first day of class. May be repeated for credit.

116 Lifeguard Training (3) Provides entry level participants the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for breathing and cardiac emergencies, injuries and sudden illnesses until EMS personnel take over. American Red Cross certification in Lifeguarding, Advanced First Aid, and CPR and AED are available upon successful completion of the course. May be repeated for credit.

117 Water Safety Instructor (3) Prepares instructor candidates to teach American Red Cross swimming and water safety programs to participants of all ages and abilities. Upon successful completion of the course participants will have high-level swim strokes and stroke mechanics as well as possess certification to conduct swimming lessons.
118 Judo I (2) Beginning judo. Course emphasizes physical and mental skills utilized in the judo training. May be repeated for credit.

## 119 Martial Arts I (2) Beginning martial arts.

 Course emphasizes physical and mental skills utilized in the martial arts. May not be repeated for credit.120 Martial Arts II (2) Intermediate and advanced martial arts skill development. May be repeated for credit.
121 Marksmanship/Weapons (2) Instruction in the history of weapons, firearms, safety, various types of military weapons. Basic rifle marksmanship including the various types of firing positions, federal and state firearm laws and the U.S. Army Qualification Course with the M16 rifle. Freshman and sophomores are encouraged to participate because of their eligibility as it relates to possible ROTC financial benefits. Four hours lecture/lab. May not be repeated for credit.

122 Aerobic Walking/Jogging (2) A course designed to promote health and longevity. Emphasis on the development of an individual walking or jogging program as an aerobic activity to promote cardiovascular endurance and flexibility. Emphasis on body composition and diet. May be repeated for credit.

123 Hydrorobics (2) A vital program for health and longevity emphasizing cardiovascular endurance, flexibility, body composition and diet control. An aerobic fitness opportunity for students who cannot participate in traditional aerobic activities due to physical limitations. May be repeated for credit.
124 Rhythmic Aerobics (2) A program of vigorous choreographed movements and steps to music designed to improve or maintain cardiovascular endurance, agility, flexibility, balance, strength, rhythm and coordination. May be repeated for credit.

125 Weight Training (2) Instruction in the safe performance of a variety of resistance training exercises and programs. Emphasis on development of proper training techniques and understanding of fitness training principles for meeting individual fitness goals. May be repeated for credit.
126 Archery (2) Development and refinement of the skills of archery. Emphasis on aiming techniques, safety, rules, equipment and tournament competition. May be repeated for credit.

## 127 Advanced Archery (2) Development of

 knowledge and skills used for hunting and competitive target shooting. May be repeated for credit.128 Badminton (2) Development of the skills and strategies of badminton. Emphasis on rules, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.
129 Advanced Judo (2) Course develops the knowledge and skills required for advanced competence in Judo. Training emphasizes falling, throwing, mat and sparring techniques. Prereq: PACT 118 or instructor's approval. May be repeated for credit.
130 Hapkido (2) Course teaches the basic skills and knowledge of self-defense. Combines the elements of Karate, Judo and other self-defense disciplines and prepares the student for advanced study of Hapkido. May be repeated for credit.

131 Women's Self-Defense (2) This class is designed to provide instruction relative to awareness of potentially dangerous situations. It will also provide the students with the opportunity to learn basic selfdefense skills in the event there is an attack. May not be repeated for credit.

132 Advanced Women's Self-Defense (2) The class is designed to provide continued instruction relative to awareness of potentially dangerous situations encountered on a daily basis. It will provide the student the opportunity to develop intermediate and advanced self-defense skills. May be repeated for credit.

133 Tai Chi (2) Meditation, exercise and stretching and self-defense techniques with emphasis on Tai Chi Chuan Form. This course also includes an introduction to Tai Chi history, types and characteristics. May be repeated for credit.
134 Yoga/Stretching Techniques (2) The practice of yoga techniques has been shown to increase strength and flexibility. In this course students will learn to perform several basic yoga poses as well as breathing techniques to calm, relax and reduce stress. Instruction according to Hatha Style, Iyengar yoga and Paranayama breathing. May be repeated for credit.

135 Golf (2) Development of the skills of golf. Emphasis on rules, safety and sportsmanship. Opportunities to practice at various local golf courses. May be repeated for credit.

136 Intermediate Golf (2) To provide the student with an overview and understanding of golf rules, safety and sportsmanship. Opportunities to practice at various golf courses. May be repeated for credit.

137 Basic Rifle Marksmanship (2) Instruction in firearm safety, maintenance and care, and basic rifle marksmanship. This course is open to all UT Martin students, regardless of their affiliation with the U.S. Army or intention to seek a commission as an officer. Underclassmen are encouraged to inquire about their eligibility for Army ROTC scholarships and other financial benefits. Two hours lecture/lab. May not be repeated for credit.
138 Country/Western and Line Dancing (2)
This course teaches the basic steps for a variety of
dances performed to popular music. Dances will include steps done solo, with partners and in small groups. May be repeated for credit.

139 Soccer (2) Development of the skills of soccer. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.
140 Tumbling and Gymnastics (2) Development of skills and safety in tumbling and gymnastics. Instruction for students with no previous background. May not be repeated for credit.

141 Ballroom/Swing Dance (2) This course is designed to teach the beginning dancer how to perform basic ballroom dance steps. Dances that will be taught include the foxtrot, tango, waltz, cha-cha, rumba, two-step and the east and west coast swing. May be repeated for credit.

142 Intermediate Gymnastics (2) Development of skills and safety in the different gymnastic events for men and women. Beginning instruction at intermediate levels of difficulty. Prereq: PACT 140 or instructor's approval. May not be repeated for credit.

143 Gymnastics for Cheerleading (2) Techniques and skills applicable to cheerleading, including crowd communications, motivation and control, tumbling, partner stunts, jumps and pyramid building. An extension of the UT Martin Cheerleading Scholarship Program. Scholarship recipients take course fall semester only. Prereq: Scholarship recipient or instructor's approval. May not be repeated for credit.
144 Functional Weight Training (2) Functional training attempts to adapt or develop exercises which allow individuals to perform the activities of daily living to move more efficiently, reduce the incidence of injury, improve balance and flexibility, build strength, and improve overall quality of life.
145 CardioKickboxing (2) In this course students will learn and execute stances, hand techniques and leg techniques that boxers and kickboxers use in training. These techniques will be coordinated with music to tone, lose weight, build self-esteem, increase flexibility and relieve stress. May be repeated for credit.
146 Cardio Fitness (2) Designed to promote health and longevity. Emphasizes the development
of individual fitness program to promote cardiovascular endurance, body composition and diet. This course may be repeated for credit.

147 Boxercise (2) Non-combative instruction in the use of Olympic-style boxing for circuit training. Emphasis on proper punching techniques, footwork and exercise for muscular strength and cardiovascular endurance. May be repeated for credit.

148 Pilates (2) Instruction in mind-body exercises for the improvement of body awareness, posture, core strength and flexibility. Emphasizes proper breathing, body alignment and smooth movement techniques. May be repeated for credit.

149 Clay Target (2) The primary focus of this course is to educate students on firearms safety, range safety rules, and regulations governing the sport. Safety training will include portions of the Tennessee Hunter Education course. Trap shooting will be the primary focus but skeet and other disciplines will be covered. Students will be expected to fire live rounds during class sessions held at the range.

150 Pickleball and Paddle Tennis (2) Development of the skills and strategies of pickleball and paddle tennis. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.
151 Faculty/Staff Fitness (2) The course encompasses a variety of different activities led by an instructor, done at your own pace and/or your own physical ability. Classes may include, but are not limited to the use of battling ropes, body bars, body weight, dumbbells, jump ropes, kettlebells, resistance bands and stability balls. Emphasis will be placed on improving or maintaining fitness levels, having fun, and learning about healthy living.

152 Snowskiing/Snowboarding (2) Provides instruction in skiing and snowboarding for all ski levels from novice to advanced performers. In addition to providing instruction in skiing and snowboarding techniques, the course addresses safety considerations and the selection and fitting of equipment. Accompanying the formal instruction appropriate to the skill level will be free time opportunities for practice. This course is conducted at a ski resort during the break between fall and spring semesters. An additional fee is required to cover the expense of the trip. May be repeated for credit.

153 Run Your First 5k (2) A course emphasizing the development of a running program as an aerobic activity to promote health and longevity and to participate in a 5 k race for the first time. This course will focus on periodization, overload, and specificity principles of running. May be repeated for credit.

154 Disc Golf (2) Students will learn the fundamentals of disc golf along with the basic rules and regulations. Students will also learn technique, strategy, etiquette, and physical benefits of the sport. May not be repeated for credit.

155 Racquetball (2) Development of the skills of racquetball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.

156 Advanced Disc Golf (2) Students will learn advanced technique, strategy, and physical benefits of the sport. Students will also learn the different styles of play and formats. The class will cover competitive rules and regulations used by the Professional Disc Golf Association and the National Collegiate Disc Golf Championships. May be repeated for credit.

157 BARRE (2) A course design to provide a low impact workout that works on flexibility, muscular endurance and tone. While it is based in ballet no dance experience is necessary as the movements do not incorporate dance. We will use body weight and light dumbbells for the exercises. May be repeated for credit.

158 Beginning Chess (2) Development of the skills of chess. Emphasis on rules, strategies, and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.

160 Tennis (2) Development of the skills of tennis. Emphasis on rules, strategies, safety and sportsmanship involved in playing both competitively and recreationally. May be repeated for credit.
161 Intermediate Tennis (2) Focus on match play strategy for the intermediate performer in singles and doubles. Prereq: PACT 160 or instructor's approval. May be repeated for credit.

165 Backpacking (2) This course addresses the fundamentals of backpacking including safety and proper use of equipment. The student will gain
actual experience on mandatory field trips. May be repeated for credit.

## 170 Special Topics in Physical Education (1-

3) Selected topics. No more than six hours topics credit may be applied to an undergraduate degree in education. Prereq: Instructor's approval.

175 Volleyball (2) Development of the skills of volleyball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.
180 Intermediate Basketball (2) Development of the intermediate skills of basketball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.
182 Flag Football (2) Development of the basic skills requisite to flag football. Emphasis on rules, strategies, safety and sportsmanship involved in playing both competitively and recreationally. May be repeated for credit.

185 Physical Fitness Training (2) This course is designed to provide the student with the opportunity to participate in a structured physical fitness routine. Components include flexibility, muscular strength and endurance and cardiovascular training. Can be repeated for credit and will provide exposure to Army ROTC procedures and opportunities. Freshmen and sophomores are encouraged to participate because of their eligibility as it relates to possible ROTC financial benefits.

190 Softball (2) Development of the skills of softball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. May be repeated for credit.

195 Varsity Athletics (2) Participation in the development of high level skill strategies and techniques utilized in a selected varsity sport that is nationally sanctioned for intercollegiate competition and an approved sport in the athletic program at UT Martin. May be repeated for credit. 6 hour lab.
214 Master Scuba Diver (3) A course emphasizing the skills necessary to safely become a specialty diver in 5 different specialty areas (Project AWARE Specialty areas, Night Diver, Wreck Diver, Dry Suit Diver, and Enriched Air Specialty Diver) upon cer-
tification. Students must already be a certified diver (PACT 112 or equivalent from certifying agency) to participate in this course.

## Physics (PHYS)

101 Physics in Everyday Life (4) A conceptual, inquiry-based course for students with non-science majors. This course examines familiar objects of everyday experience and leads to an understanding of physical principles that make them work. Topics include motion, forces, energy, fluids and waves. May not be taken for credit by students who have completed a higher number course in physics. This course is taught with an integrated lab and lecture. Students should not attempt PHYS 101 unless the results of Mathematics testing indicate placement in a college level mathematics course.

102 Physics in Everyday Life (4) A conceptual, inquiry-based course for students with non-science majors. This course examines familiar objects of everyday experience and leads to an understanding of physical principles that make them work. Topics include light, electricity, electromagnetism and modern physics. May not be taken for credit by students who have completed a higher number course in physics. This course is taught with an integrated lab and lecture. Students should not attempt PHYS 102 unless the results of Mathematics testing indicate placement in a college level mathematics course.

## 111 Concepts and Problem Solving in Physics

(3) A course stressing introductory concepts and problem solving techniques in physics. Intended for students who have not had high school physics. May not be taken for credit by a student who has successfully completed a higher numbered course in Physics. Prereq/Coreq: MATH 140.

## 150 Concepts and Demonstrations in Phys-

ics (4) A first course in physics primarily designed for modeling instructional activities in physics. The course stresses fundamental physics concepts with demonstration experiments and activities. The course is taught with an integrated lab and lecture.

211 College Physics (4) (TBR: PHYS 2010) A non-calculus introduction to the basic principles of physics, mechanics, elasticity, fluids, wave motion, sound and heat. Three hours lecture and two hours
lab. Prereq: MATH 110, 140, or higher numbered mathematics course.

212 College Physics (4) (TBR: PHYS 2020) A non-calculus introduction to the basic principles of physics, electricity, magnetism, light, optics and modern physics. Three hours lecture and two hours lab. Prereq: PHYS 211; MATH 110, 140, or higher numbered mathematics course.

212H Honors College Physics (4) Algebra-based physics with accompanying laboratory, especially designed for honors students. Topics include electricity, magnetism, light, optics, and modern physics. Presented at an accelerated pace, this course features reading/discussion sessions to supplement the material. Three hours lecture and two hours laboratory per week. Prereq: PHYS 211 and either good standing in Honors Programs or permission of the instructor.
220 University Physics (4) (TBR: PHYS 2110) A calculus-based introduction to the basic principles of physics. Topics include mechanics, elasticity, oscillatory motion, wave motion, sound, fluids and thermodynamics. Three hours of lecture and two hours of lab. Prereq: MATH 251.

221 University Physics (4) (TBR: PHYS 2120) A continuation of the calculus-based introduction to the basic principles of physics. Topics include: electricity, magnetism, basic circuits, geometrical optics and physical optics. Three hours of lecture and two hours of lab. Prereq: PHYS 220 and MATH 252.

305 Introduction to Research in Physics (1)
Students select a research project under the active supervision of a faculty member. Depending on the project they select, students will be introduced to different tools of physics research including instrumentation and/or computational methods, experimental design, literature review, and scientific writing. Students will spend at least three hours on the project per week. Course may be repeated for a total not to exceed three credits. One credit of PHYS 305 may be substituted for one credit of PHYS 491. Prereq: PHYS 211 or PHYS 220 and consent of instructor.
322 Thermodynamics, Waves and Optics (3) A continuation of the calculus-based introduction to the basic principles of physics. Topics include:
fluids, waves, thermodynamics and optics. Prereq: PHYS 212 and MATH 251-252, or PHYS 221.

323 Introduction to Modern Physics (3) A continuation of the calculus-based introduction to the basic principles of physics. Topics include: relativity, radioactivity, nuclear structure, basic quantum mechanics, atomic structure and solid state physics with applications to lasers and semiconductors and elementary particles. Prereq: PHYS 322 or consent of instructor.
324 Electronic Circuits (4) Fundamental physics and applications of semiconductor electronics. Topics selected from: diodes, biasing, and small-signal models of bipolar junction transistors (BJTs) and field-effect transistors (FETs); feedback, oscillation, frequency response, and active filtering with operational amplifiers. Circuits encountered by research and industrial physicists and other scientists will be emphasized. Three hours lecture and two hours lab each week. Prereq: PHYS 221.
326 Introduction to Stellar Astrophysics (3) An introduction to the fundamentals of astrophysics including coordinate systems, telescopes, orbits, spectral analysis, stellar structure, binary stars, stellar parameters, and more. Some emphasis will be placed on computational techniques. Prereq: PHYS 221 and CSCI 221 or consent of instructor.

331-332 (531-532) Mechanics (3, 3) Kinematics and dynamics of point particles and rigid bodies. 331: vector calculus applied to motion of point particles including orbits, harmonic motion, motion of constrained particle. 332: special relativity (fourvectors), motion of rigid bodies, symmetric top, physical pendulum, elastic solids. An introduction to Lagrangian and Hamiltonian formulations. Must be taken in sequence. Prereq: PHYS 220 or 211 and instructor's approval.
333 Mathematical Methods for Classical and Modern Physics (3) Analytical and numerical solutions to differential equations, vector analysis, complex analysis, and vector spaces with emphasis on applications to physical systems. Prereq: PHYS 221.

341-342 (541-542) Electricity and Magnetism $(3,3) 341$ : Quantitative study of electric and mag-
netic fields and their interaction with matter; culminates in the formulation of Maxwell's equations. 342: Application of Maxwell's equations to the generation and propagation of electromagnetic waves through free space and matter. Must be taken in sequence. Prereq: PHYS 221. Students may not receive credit for both 341-342 and 441-442.

343 Methods in Physics Research I (3) An introduction to experimental and theoretical methods in physics research. Topics include: instrumentation, data acquisition and analysis and mathematical and computational methods. Prereq: PHYS 212 and MATH 251-252, or PHYS 221.

## 344 Methods in Physics Research II (3)

Advanced experimental or theoretical/numerical methods in physics with emphasis on system design, equipment or model selection, acquisition and analysis of data. Written and/or oral reporting of results will also be emphasized. Prereq: PHYS 343.

351 Thermal Physics (3) A study of the equilibrium states of matter as governed by the first and second laws of thermodynamics. Emphasis will be placed on the microscopic approach with an introduction to statistical mechanics. Topics selected from the kinetic theory of gases, phase equilibria in pure systems, and an introduction to quantum statistics with applications. Prereq: PHYS 322.

380 Special Topics in Physics [topic title] (3) Special topics in physics such as solid state physics, nuclear physics, optics, laser physics, atomic and molecular physics, etc. Course may be taken twice with a different topic. Prereq: PHYS 221 and consent of instructor.

412 Senior Seminar (1) This course provides students with the opportunity to explore recent research findings in physics with a faculty member in a small-seminar setting. Selected topics will be discussed with presentation of papers by students with the supervision of the faculty. Topics will vary by semester. Prereq: Consent of instructor.

471-472 (671-672) Modern Physics (3, 3) An introduction to quantum mechanics with application to atomic structure, solid state and nuclear physics. Must be taken in sequence. Prereq: PHYS 323 and instructor's approval.

481-482 Quantum Mechanics $(3,3) 481$ : Solutions to Schrödinger's equation for simple potentials in one dimension, operators and eigenvalues, and spherically symmetric systems (hydrogen-like atoms). 482: The second course in the undergraduate quantum mechanics sequence. Topics will be selected from an advanced discussion of operators and commutation rules, angular momentum, spin, matrix mechanics, and scattering. It may include other applications to atomic and molecular physics. Must be taken in sequence. Prereq: PHYS 323.

491-492 (691-692) Special Projects in Physics [topic title] (1-3, 1-3) Research projects or special topics under the active supervision of a faculty member. Prereq: Junior standing and instructor's approval.
710 Selected Topics in Physics [topic title] (1-3) Topics to be announced. May be repeated for a maximum of three credit hours. Prereq: departmental approval.

## Plant Science (PLSC)

## 110 Introductory Plant and Soil Science (3)

Economic importance of plants and their relationship to agriculture and society. Plant structure, physiology and heredity. Factors of the environment in relation to growth, adaptation and management of plants. Utilization of plant products.

## 119 Introductory Plant and Soil Science

Laboratory (1) Provides lab experience on basic concepts of plant structure, physiology, growth and propagation. Includes plant-soil relationships. One two-hour lab. Coreq: PLSC 110.

205 Introduction to Pesticides (3) Manufacture, regulation, marketing and use of pesticides. Structure, mode of action, toxicity, degradation, safety and environmental impact of pesticides commonly used. Biological, chemical and non-chemical approaches and their effectiveness in controlling pests. This course serves as preparation for materials covered on the Pesticide Applicators certification exam. Opportunity will be given to take the Certified Pesticide Applicators exam at the end of the semester if the student desires to become certified.

234 Lawn and Turf Management (3) Principles and practices of identifying, establishing and maintaining
lawns and turfs in the landscape for public and private agencies. Two one-hour lectures and one two-hour lab.
242 Fundamentals of Horticulture (3) Horticulture industry and its contribution to world economy; theoretical and practical aspects of plant growth and development; principles and techniques of plant propagation; pruning and control of growth. Application and use of plant growth regulators in horticulture. Production, storage, processing and marketing of horticultural plants and products. Two one-hour lectures and one two-hour lab.

250 Plant Evaluation (1) Intensive study involving identification and evaluation of agronomic or horticultural plants. Includes seed and plant identification, mathematical applications in plant science, and knowledge of best management practices. Course culminates in participation in local, regional and/or national contests. May be repeated. Maximum of four hours. Prereq: Consent of instructor.
260 Landscape Equipment and Technology (3) Course will introduce students to equipment and technologies used in landscape maintenance and construction. Course will emphasize appropriate uses, equipment maintenance scheduling and safety.

301-302 Special Problems (1, 1) Individual projects for students exhibiting special interests and abilities in soils or in breeding, propagation, or production of agronomic or horticultural plants. Maximum of one hour applicable to concentration requirements. Written project outline and report of results required. Taught only by arrangement prior to registration. Prereq: Consent of instructor.
310 Integrated Pest Management (4) Origins, theory, and practice of integrated pest management. Relationships among crop production and protection practices are explored. Economics of various control strategies are considered. Integrated pest management field projects are studied. Conventional and integrated pest management approaches are compared. Multidisciplinary plant problem analysis is introduced. Three one-hour lectures and 1 two-hour lab. Prereq: Two semesters biological sciences.
321 Landscape Management (3) Principles and techniques for maintenance of residential, commercial and institutional landscapes. Emphasis will be placed on landscape maintenance involving turf,
flowers, ground covers, shrubs and trees. Discussion will include maintenance of playgrounds, natural areas, trails, golf courses, pools and other public facilities. Two one-hour lectures and one two-hour lab. (Same as PARK 321)

322 Introductory Plant Pathology (3) Introduction to basic principles of plant pathology. Diagnosis, cause and control methods of major plant diseases. Major emphasis on agronomic crops. Students are required to write reports and give oral presentations. Two one-hour lectures and one two-hour lab. Prereq: Two semesters biological science.
324 Landscape Construction Techniques (3) An introduction to the landscape construction and contracting industry; a survey of landscape construction materials and methods with emphasis on grading, drainage, wooden structures, cost-estimation and construction document preparation. Practical experience will be provided through implementation of small-scale landscape development projects. Two one-hour lectures and one two-hour lab.
333 (533) Weed Science (3) Economic importance of weeds. Weed identification, weed interference and integrated pest management. Ecology of weed growth, dissemination and competition with crops. Herbicide selectivity, persistence and mode of action. Government regulation of herbicides. Specific recommendations for crop and non-crop usage. Two one-hour lectures and one two-hour lab. A term paper and research project will be required of students receiving graduate credit. Prereq: Two semesters biological science.
341 Dendrology and Forest Ecology (3) The production, identification, management and utilization of important forest trees of the United States, emphasizing native hardwood species common to Tennessee. Two hours lecture and one three-hour lab.

## 342 Fruit and Vegetable Production (3)

Distribution, economic importance and characteristics of important fruit and vegetable crops. Adaptation, culture and management requirements. Disease and insect problems and management. Harvesting and marketing systems. Commercial utilization. Two one-hour lectures and one two-hour lab.

345 Fruit and Vegetable Products (3) Basic principles and practices utilized in handling, pro-
cessing and storage of fruit and vegetable products. Emphasis placed on current technical and applied information. Field trip required. Two one-hour lectures and one two-hour lab.

363 Plant Identification and Propagation (3) Principles and techniques for identifying and propagating native and exotic ornamental plants utilized for functional and aesthetic purposes in residential, recreational and public grounds improvement. Two one-hour lectures and one two-hour lab.

365 Greenhouse Crops and Management (3) Identification, propagation production and postharvest physiology of floral, indoor and ornamental plants. Operation of greenhouses emphasizing state-of-art technologies and management.

## 401-402 (601-602) Research Participation

 $(3,3)$ Application of the scientific method and techniques of research to investigation of problems in major subject areas of plant science. Restricted to students with demonstrated ability to conduct a supervised research problem. Maximum of three hours applicable to concentration requirements. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. Only 401-402 may be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program. Prereq: Consent of instructor.410 (610) Silviculture (3) Principles of forestry and the management of forestland. Multiple uses of these forests and how to market and harvest products from them. How to protect them, improve their quality and keep records. (Same as NRM 410/610.)

420 Supervised Field Experience in Plant Science (4) Supervised study and experiential learning experience within operations for a business or agency. Emphasis on operations in crops, landscape management, golf course management, and/or related plant science industries. Prior approval of arrangements with cooperating employer is necessary. Joint evaluation by on-the-job and academic supervisors. Prereq: Junior standing.
422 (622) Forage Crops (3) Characteristics, distribution and economic importance of forages. Culture, management and utilization of grasses and legumes in forage-livestock systems. Factors affecting
forage quality and utilization by ruminant livestock. Students are required to write reports and give oral presentations. Two one-hour lectures and one twohour lab. Prereq: PLSC 110.

## 431 (631) Principles of Plant Breeding (3)

Principles of reproduction and inheritance of plants and their application to development of improved genotypes for particular uses. Variety evaluation and distribution procedures. Two one-hour lectures and one two-hour lab. Prereq: PLSC 110.
433 (633) Field Crop Production (3) World distribution, economic importance and growth characteristics. Cultural and management requirements, pest problems and control. Harvesting marketing and utilization of major field crops. Two one-hour lectures and one two-hour lab. Prereq: SOIL 210.
442 (642) Crop Adaptation and Ecology (3) Influence of environmental factors and cultural practices on plant growth responses, adaptation and distribution. Study of plant community structure, competitive interactions and their relationship to cycling of energy, nutrients and water in agricultural ecosystems. Two one-hour lectures and one two-hour lab. Prereq: PLSC 110.

## 445 Plants, Environment and Design (3)

Principles of plant composition and theory of plants in design with emphasis on historical and contemporary approaches to planting design. Understanding the functional abilities of plants in altering the environment with emphasis on architectural, engineering, aesthetics and climatological uses of plants.
Plant characteristics, requirements and selection for use in natural and man-made environments with reference to soils, topography, climate, as well as, maintenance issues. Two one-hour lectures and one two-hour lab. Prereq: PLSC 242 and 462.

## 462 Environmental Landscape Design (3)

Theory and principles of landscape design with special emphasis on consideration of environmental factors affecting and affected by the landscape design. Form, structure and function along with visual appeal will also serve as the basis for designing landscapes. Economics of design and long-term project maintenance will also be addressed. Prereq: PLSC 363.

471 Golf Course Management (3) Establishment and management of special purpose grasses for golf courses, greens, fairways and the rough areas. Two one-hour lectures and one two-hour lab. Prereq: PLSC 234 or PLSC 242 or consent of instructor.
475 (675) Grazing Management Techniques (3) Principles of forage crop growth, pasture soil characteristics, livestock grazing behavior and pasture utilization through grazing. Methods of designing intensive pasture utilization systems. For graduate credit students are required to complete a capstone grazing system design utilizing concepts developed in the course.

## 722 Production of Biorenewable Resources

(3) An exploration of plant species with potential as crops for industrial uses including biofuels. An overview of the chemistry of plant products and extraction techniques for useful products including biofuels, unique fatty acids and pharmaceuticals from new and existing crops. Will include a review of fundamental concepts in bioenergy and biobased products including engineering thermodynamics and organic chemistry. (Same as NRM 722)

## 724 Advanced Grazing Management Techniques

(3) An in depth discussion of the integral biological and physical components of pasture systems. Students will learn how soil chemical and physical properties interact with plant growth in the production of forage crops. The focus of the course will be to examine the impact of management practices on the ecology of grazing livestock in pasture systems. Students will evaluate grazing systems and develop a management plan as a part of the course activities. A paper dealing with pasture ecology will be a required component of the course. (Same as NRM 724)

## Political Science (POSC)

210 American Government and Politics (3) A survey of the origins, structure and functions of the political system in the United States on the national, state and local levels. Development of American constitutionalism, federalism and intergovernmental relations, parties, interest groups, elections, civil rights and civil liberties.
220 American Political Institutions and Policy
(3) A survey of the origin and structure of political
decision making in the various institutions of American government, including the legislative, judicial, and executive branches. The course also places an emphasis on the public policy process as it relates to issues of domestic and foreign policy.
230 Introduction to World Politics (3) An introductory survey of leading theories and concepts resulting in an understanding of world politics. The course examines domestic and international aspects of global affairs while focusing on democratization, economic development, conflict, and cooperation.

## 303 Scope and Methods of Political Science

(3) An examination of the basic theories, concepts and methods of modern political analysis and the application of various research techniques. Significant writing and oral presentations required. Open only to political science majors and minors with at least junior standing. Prereq: MATH 210, and either POSC 210 or 220 or 230.

## 312 Politics and Government of Tennessee

(3) An examination of Tennessee government and politics, including the state constitution, the three branches of government, political affairs, political issues and local government.

314 Intergovernmental Relations (3) An indepth examination of the historical evolution, growth and contemporary status of fiscal political and legal relationships between the national, state and local governments. The course emphasizes federal policy and financing of state and local governments within the context of grants-in-aid programs.

321 International Relations (3) Principles of theory and practice of international politics. Fundamentals of national power study, diplomacy, foreign policy, as well as the social, cultural, legal and economic aspects of relations among nations. Discussion on several major current international problems each semester.

322 American Foreign Policy (3) A study and critical analysis of major international and domestic factors shaping US foreign relations.

## 333 The President and Congress (3) An

 examination of the structure, roles, powers and functions of the Presidency and Congress. Review of the interactions between the executive and legislative branches with regard to law making, the budgetaryprocess, policy development and implementation, military and foreign policy and other areas of constitutional responsibility.

341 Survey of Comparative Politics (3) A survey of the institutions, processes and policies of various political systems throughout the world from a comparative perspective.
343 Politics, Economy and Society in Contemporary China (3) This course provides students with a systematic and critical understanding of contemporary China from historical, political and economic perspectives. It focuses on China's economic reform, political changes, and social problems, including economic growth, social inequality, labor disputes, and ethnic conflicts. It also examines political and economic conflicts and cooperation between the U.S. and China.
353 Administrative Law (3) A study of the role of government agencies in the legal process. Review of the problems associated with administrative rulemaking and the enforcement methods and extent of checking public agencies.

## 361 Introduction to Public Administration

(3) A study of bureaucracy in the United States. Emphasis on the environment of public administration, management of programs and human behavior in organizations.
362 Introduction to Public Policy (3) A study of the process and substance of contemporary public policies in the nation and states.
363 Public Budgeting and Personnel Management (3) A study of two of the fundamental functions of modern pubic administration. The first portion of the course focuses on the various approaches used in formulating budgets for local, state and national governments, with an emphasis on viewing the budget as reflecting goals of public policy. The second portion of the course provides a survey of the unique legal demands of human resource management in the private sector.
381 American Political Behavior (3) A course designed to study the role of public opinion in American democracy, including the measurement of public opinion and the psychological processes that form political attitudes. The second half of the
course will focus on American elections and voting behavior, including the evolution of voting systems, the puzzle of voter participation, and patterns of voter turnout.

382 Political Parties and Interest Groups (3) A course designed to cover the rise of political parties in America, major states in their development, and the three dimensions of political parties; parties in the electorate, parties as organization, and parties in government. Emphasis will also be placed on the role of interest groups in the American political process and their interactions with political parties at all levels of government.
390 Paralegal Studies: Jurisprudence (3) An introduction to the history and philosophy of law. Particular emphasis on the development of American law from its European antecedents. Examines major categories of contemporary legal practice. Prereq: POSC 210-220.
391 Paralegal Studies: Legal Terminology and Writing (3) An introduction to the legal language and the style of legal writing commonly used legal terms, writing of law office and trial memoranda, trial court briefs, appellate briefs and the abstracting of depositions. Prereq: POSC 210-220 or instructor's approval.
392 Paralegal Studies: Legal Research (3) An introductory overview of the legal research process, both civil and criminal. Introduces students to major legal research sources and seeks to develop their proficiency in utilization of various legal indexing systems. Prereq: POSC 210-220 and POSC 391 or instructor's approval.

## 393 Paralegal Studies Internship in Paralegal-

ism (3) Purpose is to familiarize the student with various day-to-day aspects of the legal system or a law office by placing the paralegal in a law office or legally-related agency for one semester on a parttime basis. Prereq: POSC 391, 392 and department chair's approval.
401 Political Philosophy (3) A course covering classical and contemporary political philosophers on key topics such as justice, the social contract, natural rights, revolution, legal positivism, socialism, anarchism, and minimal government. (Same as PHIL 410)

423 International Organizations and Law (3)
Broad overview of the main actors in the international arena and how they interact including departments of the U.S. government as well as non-governmental organizations, international governmental organizations, multilateral financial institutions, regional organizations, think tanks, multinational corporations and media. The challenges of transitional justice in post-conflict societies will be explored as well as the evolution of international criminal courts of justice. The course will also identify the impact of public international regulations on doing business in a multinational environment.

## 425 Political Simulations and Experiential

Learning (1) Students involved in formal group simulations (including but not limited to TISL, Model U.N., Model Congress, and moot court competitions) may receive 1 hour of credit per activity. Credit may also be given for special research projects (especially those resulting in publications or conference presentations) or other experiential learning activities. May be repeated for up to 3 hours. Prereq: Instructor's approval.
430 Constitutional Law - Governmental Structure (3) An introductory study of the United States Constitution, focusing on the distribution of power among the three branches of the national government and the division of power between the national and state governments.
431-432 American Constitutional Law (3, 3) 431: Civil Liberties. Traditional and newly-emerging issues of civil liberties in such areas as free speech, church-state relations and freedom of the press. 432: Civil Rights. The constitutional rights of certain groups in American society, especially minorities and women.

451 (651) The Judicial Process (3) A study of federal and state court structures and their environments with emphasis on the role that each level of court plays in the American legal system. The staffing of the courts and the process of judicial decision-making.
462 Political Geography (3) A study of the spatial forms and processes of political phenomena. Concepts, models and current literature related to territories such as nation-states and congressional districts, the formation and dissolution of empires, geopolitics and international conflict are examined.

Prereq: Junior standing. (Same as GEOG 462.)
491 Dimensions of Globalism (3) An interdisciplinary study of the many dimensions of globalism, based on the contributions of well known experts with a wide range of professional perspectives.

## Political Science, Independent Study, Internships, Research, Travel-Study and Topics Courses

400 (600) Independent Study (3) Directed readings and discussions of selected topics in political science. Subject to be selected by student in consultation with instructor. Open only to majors or minors of at least Junior standing. Maximum of three credit hours allowed. By permission of Political Science faculty only.

410 Political Science Internship (3-9) Designed to offer experience in governmental service under direction of faculty members and field supervisors. Amount of credit granted depends upon nature of projects undertaken. Course may be repeated up to maximum of nine hours under course number Note: Only 6 hours of POSC 410 may count toward a major; only 12 hours of combined credit in POSC $400,410,425$, and 467 can count toward a major. Students cannot receive credit in both POSC 410 and POSC 420. Prereq: POSC 210-220 unless waived by department chair.

420 Public Administration Internship (3-12) To gain experience in governmental service for public administration concentration. Service position may or may not be compensated. Course performance based on an agreement between student and academic adviser which stipulates specific academic and work assignments. Students may elect a Pass/Fail option. In all cases, grades will be based upon academic evaluation and work evaluation by on-the-job supervisors. Three hours required for Public Administration concentration, additional hours may be taken for elective credit only. Students cannot receive credit in both POSC 410 and POSC 420. Prereq: For public administration concentration only. Normally Senior standing and an overall GPA of at least 2.00 .

467 (667) Travel-Study [Selected Topics] (13) A combination of travel, study and field observation in a geographic area away from campus under
the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a pass/fail basis. Requires instructor's approval. Students may repeat course with different topics. Not regularly offered.
480 (680) Topics in U.S. Political Science: [Topic Title] (3) Classes in one or more of the following areas: (a) interdisciplinary approaches to political issues and (b) specialized topics suitable for indepth study. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses can be counted toward the major or minor. Not regularly offered.

481 Topics in International Security Studies [Topic Title] (3) Classes in one or more of the following areas: (a) interdisciplinary approaches to international security and (b) specialized topics suitable for in-depth study. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses can be counted toward the major. Not regularly offered.

482 Introduction to International Security Studies (3) A survey of the classical concepts of National Security Policy supplemented with current international security issues. An interdisciplinary approach is used, and outside speakers are featured.

490 (690) Topics in Comparative Politics and International Relations: [Topic Title] (3) Classes in comparative or international issues not covered in regular classes. May be repeated for credit (with different topic). Only six hours of undergraduate topics courses can be counted toward the major or minor.

## Portuguese (PORT)

111 Elementary Portuguese (3) An introductory course emphasizing listening, speaking, reading and writing. May be used to remove a language deficiency or for students with no prior experience in the language. Three classroom hours.
122 Elementary Portuguese (3) An introductory course emphasizing listening, speaking, reading and writing. Three classroom hours. Prereq: PORT 111 or the equivalent as determined by the department.

222 Intermediate Portuguese (3) Grammar review, reading, writing and conversation. Three classroom hours. Prereq: PORT 122 or equivalent as determined by the department.
$\mathbf{2 3 0}$ Portuguese for Speakers of Spanish (4) Intensive Portuguese language course with focus on listening, reading, speaking (special attention given to pronunciation), writing and culture. Course taught in Brazilian Portuguese. Advanced proficiency in Spanish required. Three one-hour lectures and two one-hour labs. Prereq: SPAN 222 or equivalent. Native speakers of Spanish are welcome.

341 Advanced Conversation (3) Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency and conversational strategies. Study of the phonetic system of the Portuguese language and exercises to improve pronunciation. Grammar appropriate for oral Portuguese. Discussions utilizing reading and electronic media such as videos and the Internet. Prereq: PORT 222 or instructor's approval.

## Psychology (PSYC)

101 Introduction to Psychology (3) This is an introductory course which surveys the field of psychology including the following major areas: research methods and findings, biological, learning and cognition, developmental, social, personality, and psychological disorders. Student may receive credit for either the PSYC 110-120 sequence or PSYC 101, not both.

## 101H Honors Introduction to Psychology (3)

Limited class size, extensive discussion, and writing assignments are featured. Open to students who have demonstrated superior academic ability. Student may receive credit for either the PSYC $110 \mathrm{H}-120 \mathrm{H}$ sequence or PSYC 101H, not both. Prereq: Departmental approval.

## 165 Special Topics in Psychology [topic title]

 (1-3) Selected topics in the area of psychology. The course subject matter will vary by semester; for example mindful learning, cognitive strategies in the classroom, study habits for the psychology major, etc. Course may be repeated with different topics. Total credits not to exceed three hours.301 Introduction to the Major (3) This course is intended to introduce students to the psychology major, focusing specifically on career planning and development. Topics will include an overview of the undergraduate major in psychology, how to be successful as a psychology major, career options ion psychology and related fields, preparation for employment with a bachelor's degree, preparing for and succeeding in graduate school, and applying for a job or to a graduate school. Intended for psychology majors only. Prereq: PSYC 101 or instructor's approval.

## 310 Human Relations and Personal Adjust-

 ment (3) The psychological study of the principles and practices of human relations skills in organizations and how they impact adjustment in everyday life. Content in the course will primarily focus on concepts that apply to both areas (such as communication, conflict resolution, stress management, diversity, and motivation).311 Human Relations for Staff (3) A course covering principles and practices of human relations skills in organizations. Content of course aimed at administrators and staff in university settings. Motivation and leadership, communication skills and transactional analysis, assertiveness, stress management and self-concept development. Pass/Fail credit.

312 Social Psychology (3) The psychological and sociological study of how people's actions, emotions and moods, and thoughts are influenced by those around them. Content focuses on the three main areas of research in the field: social cognition and perception, social influence, and social interactions and relations. Content in the course will focus on concepts such as interpersonal attraction, prejudice and stereotyping, group influences, conformity, and persuasion but is not limited to these areas. Prereq: Three hours general psychology (PSYC 101) or general sociology (SOC 201, 202, or 308). (Same as SOC 312)

313 Developmental Psychology (3) A theoretical and empirical study of human cognitive, social and personality development spanning prenatal development to death. Primary emphasis on psychological growth and change in infancy, childhood and adolescence. Prereq: PSYC 101.
315 Experimental Psychology I (4) An introduction to statistics in the behavioral sciences. Topics
will include calculating probability, correlation, t tests and ANOVA. Students will conduct computations by hand and with SPSS. Three hours lecture and one two-hour lab. Prereq: PSYC 101 with a grade of C or better; MATH 140 of the equivalent.
318 Experimental Psychology II (4) An introduction to research methodology in the behavioral sciences. Topics will include a scientific overview, ethics, experimental and other designs. Students will complete assignments in the publication format of the American Psychological Association. Three onehour lectures and one two-hour lab. Prereq: PSYC 101 and 315 with grade of C or better; MATH 140 or equivalent.

324 Mindfulness and Meditation (1) This course introduces and explores the practices of mindfulness and meditation, Course content includes discussion and application of mindfulness and meditation toward improving physical and psychological well-being, with an emphasis on stress management and other health benefits. Course requirements include a commitment to practicing mindfulness and meditation outside of the course meetings. In repeated courses, the instructor will assist the student in learning about new research and developing new practices. Course may be repeated; course may only be taken once per term; total credit hours are not to exceed 3. Prereq: PSYC 101 or instructor's approval. (Same as NEUR 324)
325 Health Psychology (3) A course covering psychological, environmental, and behavioral factors as they relate to health concerns. Writing requirements may include essay examinations and research papers.
330 Applied Behavior Analysis (4) An in-depth view of the history, principles, procedures and clinical applications of techniques based on learning theory. The student will be expected to design, conduct and write up several behavioral-intervention projects involving children or adults. Three hours lecture and one two-hour practicum. Prereq: PSYC 315 and 318.

## 340 Industrial and Organizational Psychol-

$\mathbf{o g y}$ (3) The psychological study of workers and the workplace. Content focuses on human resource concerns, social interactions and influences that operate within the organization, and issues related to employee well-being. Content in the course will primarily focus on concepts such as employee
selection, employee training, leadership motivation, and sources of workplace stress but is not limited to those areas. Prereq: PSYC 101.

350 Abnormal Psychology (3) A study of the biological and psychological factors underlying abnormal behavior. The dynamics of psychological models, patterns of abnormal behavior and nontechnical discussion of diagnostic and therapeutic methods. Prereq: PSYC 101.

355 (555) Abnormal Child Psychology (3) A study of the biological and psychological factors underlying abnormal behavior in children. Includes a clinical description (non-technical discussion of etiology, assessment, prognosis and treatment), theories, methods and research dealing with emotional, cognitive and behavioral disorders of children. Prereq: PSYC 101.

360 Drugs and Behavior (3) Effects of recreational and therapeutic drugs on the brain and behavior. Coverage includes depressants, stimulants, narcotics, hallucinogens, and psychotherapeutics drugs. A major component of the course includes understanding addiction and how it is treated. Students may not receive credit for PSYC 360 and HLTH 351.

361 Special Topics: Cognitive Psychology (1-3) Selected topics in the area of cognitive psychology or mental processes. The course subject matter will vary by semester. Prereq: PSYC 101 or instructor approval. Total credits not to exceed nine hours in the group PSYC 361-365 classes.

362 Special Topics: Biological Psychology (1-3) Selected topics in the area of biological psychology. The course subject matter will vary by semester. Prereq: PSYC 101 or instructor approval. Total credits not to exceed nine hours in the group PSYC 361-365 classes.

363 Special Topics: Clinical Psychology (1-3) Selected topics in the area of clinical psychology. The course subject matter will vary by semester. Prereq: PSYC 101 or instructor approval. Total credits not to exceed nine hours in the group PSYC 361-365 classes.

364 Special Topics: Applied Social Psychology (1-3) Selected topics in the area of social psychology. The course subject matter will vary by semester.
Prereq: PSYC 101 or instructor approval. Total
credits not to exceed nine hours in the group PSYC 361-365 classes.

365 (565) Special Topics in Psychology [topic title] (1-3) Selected topics in the area of psychology. The course subject matter for this class will vary by semester; for example, human sexuality, psychology and the media, psychology of aging, autism, or introduction to brain and behavior, etc. Course may be repeated with different topics. Total credits not to exceed nine hours in the group PSYC 361-365 for majors or minors in Psychology. Prereq: PSYC 101 or instructor approval.
370 Psychology of Women (3) This course concerns psychological approaches to studying women. It examines relevant theory and research. Topics include identity and self-concept, relationships and power, sexuality, parenting, work, mental health and diversity.
371 Psychology, Forensics, and the Law (3) The course subject matter examines areas where the fields of psychology and criminal justice intersect. Content from the pychology fields of clinical, cognitive, industrial-organizational, and social psychology will be highlighted as they relate to issues relevant to identification of potential suspects up to and including the trial and sentencing of those convicted of crimes. Coverage will include but is not limited to interrogations, polygraph testing, criminal profiling, eyewitness memory and testimony, competency issues, insanity issues, jury selection and decision -making, and sentencing. Prereq: PSYC 101 or instructor's approval. Students will not receive credit for both PSYC 365 : Special Topics: Psychology, Forensics, and the Law and PSYC 371.

374 Sport and Exercise Psychology (3) An introduction to the area of sport and exercise psychology. Topics include a history of sport psychology, motivation, goal setting, peak performance, arousal and anxiety, psychological skills training (visualization, imagery, mental toughness), team cohesion, leadership, coaching and other current issues. Prereq: PSYC 101 or instructor approval. Students will not receive credit for both PSYC 365: Special Topics: Sport Psychology and PSYC 374.

375 Psychology of Myth (3) Course serves as an introduction to the psychological form and function
of myth and hero as part of the human experience. Existential-psychoanalytic and Jungian applications of the necessity and benefit of myth will be examined. Content includes examination of similarities and differences of myths from around the world, including exploration of Buddhist, Biblically-based, and contemprary American mythologies. Prereq: PSYC 101 or instructor's approval.

400 Psychology of Marriage (3) Explores the psychology of the marital relationship, as well as how marriage is studied and understood from a social scientific perspective. Topics include the history of marriage, marriage across cultures, intimacy in marriage, and marital conflict. Prereq: Junior or senior standing, or instructor's approval.

410 Sleep and Dreams (3) Lecture/discussion format. Scientific literature, methods, and theories regarding the physiology of sleep, the purpose and meaning of dreams, and sleep disorders and their treatment. (Same as NEUR 410)

415 Internship in Psychology (1-3) Supervised internship placements available for students who want to apply clinical or counseling psychology skills and theory in a workplace setting. Student grades will be determined by the instructor's academic evaluation as well as on-the-job supervisor's evaluation of the student intern's work. Course may be repeated with total credits not to exceed six hours. Prereq: Junior or senior standing, minimum GPA of 3.00 or instructor's approval.

418 Advanced Research Methods (3) This course involves the examination of advanced research techniques, including but not limited to ANOVA, MANOVA, Regression, and Factor Analysis. Field and laboratory studies will be designed, implemented, and reported. This course is strongly advised for those wanting to go to graduate school. Prereq: PSYC 101, 315, 318, or by permission of the instructor.

420 Learning and Cognition (4) A survey and critical analysis of theoretical issues, empirical findings and research methods in the psychology of learning and cognition. Coverage includes mechanisms of learning and how learned information is retained, processed and used in memory and other cognitive processes. Students conduct several lab
research projects and write up the results in the publication format of the American Psychological Association. Three hours lecture and one two-hour lab. Prereq: PSYC 315 and 318.

## 445 Undergraduate Research Participation

 (1-3) Experience in active research projects involving supervision of staff members. By arrangement. Course may be repeated with total credits not to exceed six hours. Prereq: Junior or senior standing, minimum GPA of 3.00, instructor's approval.450 Theories of Personality (3) A critical review of historical and contemporary personality theories. Psychoanalytic, constitutional, actualization and contemporary views are examined. Prereq: PSYC 101 or instructor's approval.
455 Psychology Travel Study [Selected Topics] (1-6) A course designed as an educational travel experience in Psychology within the United States or internationally under the supervision of a university instructor. May be taught as an organized studytour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a Pass/Fail basis. Students may repeat course with different topics. A maximum of six credit hours can be counted toward a major in Psychology. Not regularly offered. Prereq: Requires instructor's approval.

## 460 Fundamentals of Clinical Neuropsychol-

 ogy (3) Course serves as an introduction to the clinical application of brain-behavior relations including functional neuroanatomy and physiology of the brain. Reviews clinical effect and assessment of disease, injury, aging on behavior, cognition, and personality. Also introduces students to neuropsychological assessment, methods and treatment. Prereq: completion of PSYC 315, 318, and 350 with a grade of C or better, or consent of instructor. (Same as NEUR 460)470 Physiological Psychology (4) A systematic study of the nervous system and other physiological correlates of behavior. Three hours lecture and onetwo hour lab. Prereq: PSYC 315 and 318.
475 History of Psychology (3) A comprehensive survey of the historical antecedents of modern psychology with emphasis on both scientific and philosophical origins. Essay examinations are given.

Prereq: Completion of PSYC 315 and PSYC 318 with a grade of C or better, or instructor's approval.

480 Senior Seminar (3) A capstone course for the psychology major. A detailed review of methods, content and issues in psychology. Prepares the student for graduate study and/or starting a career in the discipline. This course requires active student participation, including written assignments, oral presentation of papers, and group projects. This course must be taken in the final year. All students are required to take a comprehensive psychology exam. The areas covered on this exam are: Abnormal, Learning, Language, Memory, Developmental, Experimental Design, History and Systems, Cognition, Personality, Physiological, Social and Statistics. For senior psychology majors only. Prereq: PSYC 315 and 318.

490 Field Work in Psychology (1-3) Supervised field work placements available for students who want to explore career options in applied areas of psychology, including industrial organization and health psychology areas. Prereq: Junior or senior standing and instructor's approval. Course may be repeated with total credits not to exceed six hours.

## 701 Directed Studies in Psychology (3)

Directed study into the different subject matter areas of psychology.

## Reading (READ)

100 The Strategic Dimension of Reading (3) A course designed to assist students in using strategies and skills to become life-long readers. Provides intensive practice in the strategic reading of a variety of college-level texts. Focus in this course is on reading strategies, critical thinking, experiences that foster an appreciation of reading and print information and encourage life-long reading.

433 (633) Reading in the Content Area Classroom (3) A study of methods and materials that can be used in content area classrooms to improve vocabulary skills and comprehension and enhance content retention. Students will develop materials for use in their specific areas of content concentration. Must make a C or better.

438 (638) Classroom Approaches to the Teaching of Reading in the Elementary School
(3) A study of various approaches and techniques in the teaching of reading for children including informal identification, analysis and remediation of specific reading difficulties. Prereq: Admission to Educator Preparation Program (EPP). Must make a C or better.

448 Reading Instruction, Assessment, and Intervention in Elementary School (3) This course further develops issues addressed in READ 438, with special emphasis on statewide literacy initiatives, assessment practices, and intervention strategies. Topics explored in this course include reading comprehension, vocabulary development, and response to instruction and intervention (RTI2) Teacher candidates will learn how to integrates research-based practices to promote development in all six strands of language arts: reading, writing, listening, viewing, and visually representing. Prereq: READ 438; admission to Educator Preparation Program (EPP). Must make a C or better.

## 700 Foundations of Literacy Development (3)

 An examination of the theoretical, historical, and evidence-based foundations of literacy and language development. Candidates will examine skills-based and knowledge-based competencies that readers use to make meaning from texts through a diverse lens in an effort to increase access, impact, and student learning through effective literacy practices. Field experience required.710 Assessment, Diagnosis, \& Intervention in the Reading Classroom (3) Study of advanced diagnostic procedures for children who exhibit severe reading difficulties. Candidates will understand, select, and use valid, reliable, fair, and appropriate assessment tools to screen, diagnose and measure student literacy. Field Experience Required. Prereq: READ 700 or equivalent.
720 Practices for Differentiated Literacy Instruction (3) An examination of the historical impact of differentiated instruction leading to expectations in today's classrooms. Candidates will explore researchbased literacy methodologies and best practices to meet the varied needs of today's learners and understand essential concepts of diversity and equity. Field Experience Required.

730 Reading as a Neurologic Process (3) The investigation of current developments in cognitive
psychology and linguistics as they relate to understanding the reading act. Reading theories and models will be compared and evaluated.

740 Literacy Practicum (3) A field-based experience in a school setting. Candidates will identify reading deficiencies, focus on observation, diagnosis, planning and implementing programs designed to improve reading behaviors. Candidates will integrate theory and practice and apply theoretical knowledge with field-based experiences. Field Experience Required.

## Religious Studies (RLST)

## 201 Introduction to Religious Studies (3)

An introduction to the academic study of religion. Attention to definitions, sacred story, ritual, space and time, religious experience, theodicy, organization, politics, and human existence and destiny. Contemporary issues and religious perspectives will be explored.
301 Major Religions of the World (3) A survey of the history and philosophy of major living religions: Hinduism, Jainism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity and Islam. (Same as PHIL 301)

320 Traces of God (3) An examination of key issues in the philosophy of religion, including arguments for God's existence or non-existence, the nature of God, the relationship between faith and reason, religious diversity, belief in the after-life, and non-Western approaches to religion. (Same as PHIL 320)
340 Death, Suffering and Evil (3) An examination of the problem of evil from theistic, atheistic, theological and skeptical perspectives. May include selections from the Book of Job, Aquinas, Hume, Dostoevsky, Camus, and Wiesel. (Same as PHIL 340)

350 The Old Testament/Hebrew Bible (3) A survey of the Old Testament/Hebrew Bible, with attention to the theological perspectives, historical contexts, and literary forms (i.e., narrative, poetry, wisdom, and apocalyptic). An introduction to the methods of biblical interpretation. Attention will be given to the interpretation of these texts by Jewish and Christian communities.

360 The New Testament and Early Christian
Origins (3) A survey of the New Testament, with
attention to theological perspectives, historical contexts, and literary forms (i.e., gospel, history, epistle, and apocalypse). An introduction to the methods of biblical interpretation. Attention will be given to the interpretation of these texts in the early Jesus Movement and by the later Christian community.

370 God and Human Happiness (3) Studies in selected philosophers, religious thinkers and religious texts where a primary concern is the nature of human happiness and its relationships to beliefs about God or the ultimately real. Texts may include works from such philosophers as Plato or Nietzsche, such authors as Tolstoy or 0'Connor and such texts as the New Testament or the Bhagavad Gita. Issues may include the relative importance of moral or nonmoral goodness for happiness, the nature of God or ultimate reality as it bears upon human life and destiny and related issues. Position paper required. (Same as PHIL 370)

375 Church History (3) A general survey of the development of Christianity from apostolic times to the present. Examination of both western and eastern forms of Christianity, the development of beliefs, practices and institutions and Christianity's interaction with society and culture.

## 380 Topics in the Philosophy and History of Re-

 ligion [Selected Topics] (3) Intensive coverage of issues in the philosophy of religion (such as the theistic attributes, theistic proofs, religious language) or in the history of religion (such as non-Western religious traditions, eras of reform, the history of interpretation). Course may be repeated with total credits not to exceed six (6) hours. (Same as PHIL 380)
## Science, Technology, Engineering, Mathematics (STEM)

100 Freshman STEM Academy (1-2) S-STEM Scholars will enroll in a two-week STEM Academy each summer. The academy will review STEM competency and will introduce material and concepts S-STEM Scholars will encounter in their future STEM courses. Prereq: Instructor approval required.

200 Sophomore STEM Academy (1-2) S-STEM Scholars will enroll in a two-week STEM Academy each summer. The academy will review STEM competency and will introduce material and concepts S-STEM Scholars will encounter in their future STEM courses. Prereq: Instructor approval required.

300 Junior STEM Academy (1-2) S-STEM Scholars will enroll in a two-week STEM Academy each summer. The academy will review STEM competency and will introduce material and concepts S-STEM Scholars will encounter in their future STEM courses. Prereq: Instructor approval required.

400 Senior STEM Academy (1-3) S-STEM Scholars will enroll in a two-week STEM Academy each summer. The academy will review STEM competency and will introduce material and concepts S-STEM Scholars will encounter in their future STEM courses. Prereq: Instructor approval required.

## Secondary Education (SEDU)

411 (611) Instructional Strategies: Science (3) Trends in teaching secondary school science grades 7-12. Curriculum, strategies, lab and field experience, materials, computer assisted instruction, evaluation processes, professional associations and safety in science teaching. Directed experiences in public schools. Residency I Course. Prereq for 411: TCED 302 and admission to Educator Preparation Program (EPP). Coreq: TCED 380. Prereq for 611: TCED 705, TCED 780, and admission to Educator Preparation Program (EPP). Coreq: TCED 780. Must make a C or better.

412 (612) Instructional Strategies: Mathematics (3) Trends in teaching secondary school mathematics grades 7-12. Development of strategies, techniques, materials, planning skills and evaluation skills appropriate to the high school mathematics students. Directed experience in public schools. Residency I Course. Prereq for 412: TCED 302 and admission to Educator Preparation Program (EPP). Coreq: TCED 380. Prereq for 612: TCED 705, TCED 780 and admission to Educator Preparation Program (EPP). Must make a C or better.

413 (613) Instructional Strategies: Modern Foreign Language (3) Trends in teaching secondary school Modern Foreign Language grades 7-12; purposes, techniques, materials and evaluation in teaching Modern Foreign Language. Directed experiences in public schools. Prereq for 413: TCED 302 and admission to Educator Preparation Program (EPP). Prereq for 613: TCED 705, TCED 780, and admission to Educator Preparation Program (EPP). Must make a C or better.
414 (614) Instructional Strategies: English (3) Trends in teaching secondary school English grades 7-12. Purposes, techniques, materials and evaluation in teaching English. Directed experiences in public schools. Residency I Course. Prereq for 414: TCED 302 and admission to Educator Preparation Program (EPP). Coreq: TCED 380. Prereq for 614: TCED 705, TCED 780, and admission to Educator Preparation Program (EPP). Must make a C or better.

## 415 (615) Instructional Strategies: Social

 Studies (3) Trends in teaching secondary school social studies grades $7-12$. Purposes, techniques, materials and evaluation in teaching Social Studies. Directed experiences in public schools. Service learning may be required. Residency I Course. Prereq for 415: TCED 302 and admission to Educator Preparation Program (EPP). Coreq: TCED 380. Prereq for 615: TCED 705, TCED 780, and admission to Educator Preparation Program (EPP). Must make a C or better.420 (620) Workshop in Education: [Title of Workshop] (1-3) Workshop on selected topics. Same as ELED 490 (690) if same Title of Workshop. No more than six hours of workshop credit may be applied to an undergraduate or graduate degree in education. Prereq: Instructor's approval.
730 Practical Teaching Applications for the Middle School Classroom (3) Reinforcement and practical application of research-based instructional practices related to the middle school field of study. Supports development of literacy in the content area, problem-solving investigations for increased rigor in the classroom, and diverse teaching strategies to meet the needs of all students. Includes unit planning, writing lesson plans, practical teaching exercises in a micro-environment and field experience.

Prereq: TCED 730 and admission to Educator Prepraration Program (EPP).

731 Advanced Instructional Practices: Teaching in the Secondary Classroom (3) Refinement of secondary instructional strategies and content pedagogy. Links the theoretical foundations of teaching to active and diverse learning using research-based strategies. Includes unit planning, writing lesson plans, practical teaching exercises in a micro-environment, and field experience. Prereq: TCED 730 and admission to Educator Preparation Program (EPP).

793 Student Teaching Grades 7-8 (3) Supervised student teaching in grades 7-8 for a minimum of 7.5 weeks. Must be taken with SEDU 794 .

794 Student Teaching Grades 9-12 (3) Supervised student teaching in grades 9-12 for a minimum of 7.5 weeks. Must be taken with SEDU 793.

795 Student Teaching Grades 7-12 (3) Supervised student teaching in grades 7-12 for a minimum of 7.5 weeks. To be taken by candidates seeking licensure in K-12 programs only.

## Social Work (SWRK)

## 200 Introduction to Social Work and Social

 Welfare (3) Introduces students to the profession of social work and provides an overview of the professional knowledge, skills and values necessary for generalist social work practice. An overview of the historical, philosophical, educational and social dimensions of the social work profession. The origins, structure and characteristics of the American social welfare system. Survey of the needs and problems people bring to social welfare agencies and patterns of societal responses. Special emphasis on rural areas.
## 220 Understanding Human Diversity and

 Oppressed Populations (3) Focuses on the dynamics and consequences of discrimination, economic deprivation and oppression on people of color, women, gay and lesbian persons. Other populations at risk are examined and distinguished by age, ethnicity, culture, class and physical or mental ability. Exploration of personal and professional beliefs, values, roles and norms of culturally different clients and the use of culture in formulating appropriate intervention.
## 290 Social Work Program Orientation (1)

Focused on disseminating specific requirements for students accepted into the social work program including Memorandum of Understanding (MOU), Individualized Student Success Plans (ISSP), and Community Service, Volunteer Placement, and Internship Placement requirements. Prereq: Initial Progression.
300 Social Welfare Policies and Services (3) Focuses on the identification of and relationship between social problems and social welfare policy. Emphasis is on social policy analysis using principles of social and economic justice as well as on intervention strategies at the local, state, national and global levels. Prereq: Approval for initial progression.
315 Social Work in Health Care (3) Provides special emphasis on evidence based practice with the elderly. The role of the social worker relative to the patient and his/her family and to medical personnel, medical terminology and crisis intervention.

## 320 Human Behavior and Social Environ-

ment I (3) Introduction to theories that influence a holistic ecological perspective that includes biological, psychological, social, cultural, and spiritual development through childhood. General systems theory is used to provide a social work orientation to the understanding of human behavior in individuals, small groups, large groups, communities and formal organizations. Social and economic factors as well as sex/gender and race are considered as determinants of behavior. Prereq: Approval for initial progression; ZOOL 201 or 251; PSYC 101.
325 Social Work in Child Welfare (3) Focuses on child neglect and abuse, family treatment, foster care, adoptions and other family and children's services within the child welfare system. Students are introduced to the best practices in child welfare.

## 330 Human Behavior and Social Environment

II (3) Continues the presentation of a holistic ecological perspective which analyzes the life-cycle and organizational functioning focusing on the period from early adolescence through very old age, as well as the effects on systems of diversity, oppression and populations-at-risk. Emphasis is placed on the interactional processes involved in a broad cultural range of socialization of the individual as a member
of the family unit, social groups, organizations and communities. Prereq: SWRK 320.
335 Social Work in Mental Health (3) Focuses on developmental disabilities and mental/behavioral health issues and appropriate interventions with individuals, families, groups, organizations, and communities.

340 Social Work Practice I (3) Presents a generalist approach to the basic principles and concepts of evidence based social work practice. Building on foundation knowledge, values and skills introduced in SWRK 200, an ecological-systems approach to problem solving is emphasized. Introduction of the general methods of social work interaction with individuals is the primary emphasis. Prereq: SWRK 320 and concurrent registration in SWRK 350.

## 345 Juvenile Justice: Social Problems and Legal Issues for Social Work and Criminal

Justice (3) Focuses on the juvenile, the family and the community as related to and interwoven with legal issues, practices and processes encountered by the social work and criminal justice professionals and their clients. Restorative Justice practices are emphasized. (Same as CJ 370)

## 350 Social Work Practice Skills and Tech-

niques (3) Offers lab-like interaction which builds on the theoretical information presented in SWRK 340. Skills and processes of engagement, data collection, assessment, intervention, evaluation and termination phases in service delivery with a variety of systems are included. This course focuses on interviewing and recording techniques which can be applied to all levels of social work practice. Role play and videotaped scenarios assist in development of skills. Student participation in a three hour per week field experience is required. Prereq: SWRK 320 and concurrent registration in SWRK 340.
355 Social Gerontology (3) Focuses on the social, psychological, biological, economic, legal, and health related issues confronting older adults, their families and society in general. Also explored are the service settings responsive to their needs. (Same as SOC 320).
365 Alcohol and Drugs (3) The effects of alcohol and other drugs on the brain and behavior. Takes a look at the components of addiction, and aspects of

AOD treatment, including levels of treatment, genetic components impacting addiction and treatment, and best practices in AOD treatment.

375 Social Work in the School Setting (3) Provides understanding of the social worker's role in the interface between students, parents, schools and communities. Focus on primary prevention and intervention in the school setting.
385 Stress Management (3) Looks at the nature of stress, focusing on the different origins and types of stress, examining the link between stress and one's emotional health and physical health. Identifies how to better cope with stress, including the proper use of relaxation techniques. Investigates the benefits of looking at the treatment of stress management from a multisystem perspective.
400 Social Work Practice II (3) Is the second of three courses providing the framework for evidencedbased generalist beginning social work practice and builds on the foundation provided in SWRK 340. Emphasis on family system. Also, an overview of group work, including a historical perspective and related group models. Focus on group formation, including assessment, composition, working agreement and stages of group development. Nondiscriminatory practice reinforced. Student participation in group observation is required. Prereq: SWRK 340 and approval for advanced progression.
410 Social Work Research and Evaluation (3)
Introduces students to quantitative and qualitative methods of research used in social work. Emphasis is placed on developing the student's ability to ethically use scientific inquiry as part of evidence based social work practice. Specific understanding of steps of evidence based practice are used as a tool for adding to the knowledge base of social work practice, evaluating one's own practice and evaluating social service programs. Prereq: Approval for initial progression.
415 Social Work in Child Welfare II (3) This course is a preparatory course for certification as a child welfare worker. Specific knowledge, skills and values of the Tennessee Department of Children's Services practice model, competencies, and skills assessments are presented. Prereq: SWRK 325 and admission to the social work program. This course may only be taken the semester prior to, or the semester of, enrollment in SWRK 490.

425 Special Topics [topic title] (1-3) Selected topics of current interest and importance. Course may be repeated with different topics. A maximum of nine credit hours can be counted toward a degree in Social Work. Prereq: Instructor's approval.

440 Social Work Practice III (3) Is the third of three courses providing the generalist method as a practice framework for beginning social work practice. Integration of knowledge, values and skills in problem solving, interpersonal helping and evidence-based intervention approaches with individuals, groups and communities. Primary emphasis on communities and organizations, including a global perspective. Ethical implications of practice examined in depth. Student participation in a three hour per week field experience is required. Prereq: SWRK 340 and approval for advanced progression.

455 Social Work Travel Study [Selected Topics] (1-6) A course designed as an educational travel experience in Social Work within the United States or internationally under the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a pass/fail basis. Students may repeat course with different topics. A maximum of six credit hours can be counted toward a Social Work degree. Not regularly offered. Requires instructor's approval.
460 Social Work Senior Seminar (3) Integration of social work professional competency areas as defined by the Council on Social Work Education in a written case study. This course must be taken the semester prior to SWRK 490.
470 Social Work Field Instruction Prepara-
tion (3) A lab course designed primarily to prepare students for field instruction, professional employment and/or continued training. This course must be taken the semester prior to SWRK 490.
490 Social Work Field Instruction (12) Provides
block placement for direct practice experience in a selected social work setting. Students' activities are supervised jointly by a designated agency employee in the work setting and by the Social Work Program Coordinator of Field Instruction or other designated social work faculty. Individual work with
student interns and their supervisors is provided by periodic visits during the semester by faculty. Additional learning and preparation through regularly scheduled seminars. Field Education is designed, supervised, coordinated and evaluated based on criteria by which students demonstrate the achievement of program competencies. Prereq: Completion of all other courses required for graduation and approval for full progression.

## Sociology (SOC)

101 Introduction to Anthropology (3) An overview of four subfields of anthropology focusing on the development of human society through a study of human evolution and cultural change.

201 General Sociology (3) Study of human society and the means by which groups and individuals adjust; the nature of social process, social structure, social organization (institutions) and social change.

202 Social Problems (3) Analysis of selected contemporary social problems in their social and cultural setting. Develop an awareness of local, national and international social problems. Learn and apply sociological perspectives to the analysis of social problems. SOC 202 is a service learning course, and students are required to complete volunteer community service hours and attend an assigned number of campus events.

202H Honors Social Problems (3) Discussionbased version of SOC 202. Limited class size allowing in-depth discussions. Open to students who have demonstrated superior academic ability. Student may receive credit for either the SOC 202 or SOC 202H, not both. Prereq: Departmental approval.

300 Cultural Anthropology (3) An examination of cultural anthropological methods and theory. Students will be required to read ethnographic case studies and excerpts as they explore the behaviors common to all peoples. Prereq: SOC 201 or instructor's approval.

## 304 (504) Race, and Ethnic Relations (3)

Examination of stratification patterns, and functions and dysfunctions of these patterns, current developments in definitions of race and ethnicity, along with analysis of past and current status of selected races/ ethnicities in the U.S. and globally. Prereq: SOC 201.

## 305 (505) Sociology of Deviance and Social

Control (3) Theoretical analysis of the social causes and consequences of deviant attitudes, behaviors, and conditions. Includes an examination of various types of social control and the effects of each on those labeled deviant and deviant groups. Students will critically examine current theories and research concerning deviance and social control. Prereq: SOC 201.

307 LGBT Issues in Society (3) An introduction to LGBT+ studies, this course will examine the global history of sexual minorities, sexual identity formation and change, community formation and maintenance and relationships between LGBT individuals and communities with major social institutions. Prereq: SOC 201 or SOC 202.

## 308 Family and Intimate Relationships (3)

Sociological examination of topics related to intimate relationships, including attraction, dating, cohabitation, marriage and the family, and relationship conflict. Study of changing patterns in intimate relationships, including marriage, cross-culturally and historically.
309 Sociology of Food (3) An holistic introduction to the global food system and food production, distribution, and consumption, this course will examine the economic, political, social, and symbolic dimensions of food in society. This course will also explore the social determinants of hunger, malnutrition, and obesity and individual and cultural relationships to food on the basis of differences such as race and ethnicity, class, gender, and religion.
311 Society and the Individual (3) An examination of concepts related to microsociology, symbolic interaction and the connections between individuals and society. Particular emphasis will be given to the social construction of reality and the negotiation of meanings about objects in the social world through collective action. Topics covered will include socialization, identity, social roles, and human interaction. Recent research findings will be emphasized. Prereq: SOC 201 or 202.
312 Social Psychology (3) The psychological and sociological study of how people's actions, emotions and moods, and thoughts are influenced by those around them. Content focuses on the three main
areas of research in the field: social cognition and perception, social influence, and social interactions and relations. Content in the course will focus on concepts such as interpersonal attraction, prejudice and stereotyping, group influences, conformity, and persuasion but is not limited to these areas. Prereq: Three hours general psychology (PSYC 101) or general sociology (SOC 201, 202, or 308). (Same as PSYC 312)

318 Social Research Methods (3) Introduction to the methods and techniques for conducting empirical research in the social sciences. Topics covered include philosophy of social science methodology, literature reviews, research design, conceptualization and measurement, ethical issues in the social sciences and the collection and use of primary and secondary data. Students may receive credit for either SOC 303 or 318 , not both. Prereq: SOC 201 and 202 with a grade of C or above.

319 Data Analysis (3) An introduction to statistics in the social sciences. Topics will include univariate, bivariate, and multivariate analyses of social science data. Particular emphasis will be placed on using data analysis software and the interpretation of statistical results. Students may receive credit for either SOC 303 or 319, not both. Prereq: SOC 318 with a grade of $C$ or better and Math 110 or 140 .
320 Social Gerontology (3) Focuses on the social, psychological, biological, economic, legal, and health related issues confronting older adults, their families and society in general. Also explored are the service settings responsive to their needs. (Same as SWRK 355).

333 Society and Environment (3) An examination of the interrelated nature of society and the biophysical environment. The course will focus on cultural values and attitudes toward the environment as well as various contemporary environmental issues and problems such as land use patterns, natural resource extraction, economic growth and the environment, pollution, climate change, population growth, and the social distribution of environmental "bads" and "goods."
334 Sociology of Sport (3) Examination of the social institution of sport and its impact on and consequences for American society. Sports, athletics,
play, and participation in professional sports will be analyzed through the lens of sterotypes, violence, class and poverty, racial gender and sexuality based discrimination, and media. Prereq: SOC 201.

## 341 (541) Gender Roles in American Society

(3) An examination of how gender is socially produced and the implications of gender for individuals, social processes and social structure. Prereq: SOC 201.

364 (564) Corrections (3) Provides an overview of the history and various perspectives of incarceration, tracing the development of prisons in America from their earlier roots in Europe. An examination is placed upon prison inmates, correctional staff, correctional treatment and punishment philosophies, political perspectives regarding criminal offenders and special interest offenders such as juveniles and females, as well as capital punishment. (Same as CJ 364/564)

375 Sociology of Popular Culture (3) Examination of cultural theory, specifically the dichotomy of popular culture versus "high" or elite culture. Popular culture will be analyzed through mediums such as television, film, internet, and music, as well as an in-depth focus on identity (race, class, gender and sexuality). Prereq: SOC 201.
381 (581) Special Topics [topic title] (1-3) Selected topics of current interest in sociology. Course may be repeated with different topics. Maximum of six hours of topics/courses can be counted toward the major or minor.

386 Technology and Society (3) This course is an examination of the relationship between individuals, society, and technology. Emphasis will be given to the relationship between individual and global processes that both shape and are shaped by technology. This examination will include both benefits and problems with our dependency on technology, and how controversies such as access to technology, privacy, and ethical concerns are tied to power.

390 Social Movements (3) The study of collective attempts to promote or resist changes in society, culture, and individual behaviors and beliefs. Includes an examination of the dynamics, evolution, and tactics of social movements generally and an application of these issues to major U.S. social movements
of the twentieth and twenty-first centuries.
402 (602) Sociological Theory (3) A survey and analysis of classical and contemporary sociological theory as it applies to both historic and current events. Topics may include inequality, genocide and the role of ideas and class as social forces driving history and theory forward. Prereq: SOC 201 and 202 with grade of C or above, completed 6 hours of upper-division sociology coursework.
404 Stratification and Inequality (3) An emphasis is made upon the class system of the United States with some comparisons to stratification systems of other times and societies. Theory and research appropriate to the analysis of structured social inequality are surveyed. Prereq: SOC 201 or 202.
413 (613) Criminology (3) Problems, theory, cause, control and prevention of criminal behavior. (Same as CJ 325/525)

## 415 Political Sociology: Power in Society (3)

Critical theoretical examination of the social origins and institutional mechanisms through which power is constructed, distributed and maintained in contemporary societies. Investigation of the ways that the state, social movements, propaganda, and culture intersect with power and social change. Prereq: SOC 201 or 202.

425 Family Violence (3) This course will focus on violence within familial and intimate relationships emphasizing the social aspects and consequences of these forms of violence This course will focus on the multiple ways that violence is used and the ways in which those that commit interpersonal violence within a family and/or intimate setting are perceived on a societal level. Patterns of behavior, cultural norms, as well as lifelong consequences will be addressed as well as social institutions where family violence is common.

## 431 (631) Urban and Community Sociology

 (3) Origins and structures of community with special emphasis on the theories and historical trends of urbanization and urban development, and contemporary urban problems and policies including: population, ecology, inequality, and place. Prereq: SOC 201 or 202.455 Sociology Travel Study [Selected Topics]
(1-6) A course designed as an educational travel
experience in Sociology within the United States or internationally under the supervision of a university instructor. May be taught as an organized study-tour or as an independent travel and study project. Topics, prerequisites and course requirements announced in advance. May be offered on a Pass/Fail basis. Students may repeat course with different topics. A maximum of six credit hours can be counted toward a major in Sociology. Not regularly offered. Prereq: Requires instructor's approval.

480 Internship in Sociology (3-6) Application of sociological skills and theory in a supervised workplace setting. Admission to the Internship will be determined by the Faculty Internship Committee based on internship application materials. Internship placement will be determined by the Internship Faculty Coordinator in consultation with the student. The student may or may not be paid. Student grades will be based on the instructor's academic evaluation as well as on-the-job supervisor's evaluation of the student intern's work. Prereq: SOC 201, 202; Sociology major, senior standing; minimum 2.80 overall GPA and 3.20 GPA in Sociology coursework. May only be taken once for credit.

485 Directed Reading and Research (3) A systematic sociological/anthropological study of a selected topic through supervised reading of pertinent substantive and methodological literature, primary data collection or use of secondary data and statistical analysis of data by a Sociology/ Anthropology faculty. Maximum of six hours of primary topic research or different topics can be counted toward major or minor. By arrangement only. Prereq: SOC 201, an additional three credit bours sociology course, minimum cumulative GPA of 3.00 and instructor's approval of topic and research methods.
497 Senior Seminar (3) Readings, discussion of problems, and presentation of papers. This course must be taken in the final semester prior to graduation. Prereq: Sociology major.

## Soil Science (SOIL)

210 Soil Science (4) The nature and properties of soils. Provides an introduction to the characteristics of soils. Discussions of the biological, chemical and physical processes which occur in soil and how these
processes affect plant growth and environmental quality. Three one-hour lectures and one two-hour lab. Prereq: CHEM 111 or 121 or consent of instructor.

250 Soil and Landscape Evaluation (1) Principles of soil morphology as utilized in soil and landscape evaluation in the field. Involves describing, classifying and interpreting soils in preparation for regional and national soil judging contests. May be repeated. Maximum four hours. Prereq: Consent of instructor.

301-302 Special Problems [topic title] $(1,1)$ Individual problems for students exhibiting special interests and abilities in soils, soil morphology and classification, soil fertility, management and conservation. Maximum of one hour applicable to concentration requirements. Written project outline and report of results required. Taught only by arrangement prior to registration.

315 Soil and Water Conservation (3) Problems, principles and control of soil erosion by water and wind; land planning for soil conservation: water management, including irrigation and drainage problems: philosophies of land ethics and stewardship. Students are required to write reports and give oral presentations. Three one-hour lectures. Prereq: SOIL 210.

## 321 Soil Genesis, Morphology and Classi-

 fication (3) Study of the soil as a natural, threedimension system: the effect of geologic, climactic and biotic interactions on soil characteristics and processes of formation and methods of classifying soils. Two one-hour lectures and one three-hour lab. Prereq: SOIL 210.401-402 Research Participation (3, 3) Application of the scientific method and techniques of research to investigation of problems in major subject areas of soil science. Restricted to students with demonstrated ability to conduct a supervised research problem. Maximum of three hours applicable to concentration requirements. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program. Prereq: Senior standing, minimum GPA of 2.75 .

412 (612) Soil Chemistry and Fertility (3)
The principles of soil chemistry as they relate to
ion exchange, nutrient availability and soil fertility. Sources, properties and utilization of fertilizers and other soil amendments by plants. Two one-hour lectures and one two-hour lab. Prereq: SOIL 210.

## 420 Soil Microbiology and Biochemistry (3)

Study of soil microorganisms including their habitats, activities and ecological relationships. Emphasis on microbial interactions and processes which affect both agricultural practices and environmental quality, including: nutrient cycling, decomposition of organic residues and compounds dynamics of soil organic matter: enzymatic activities: potential use of soil organisms for environmental remediation. Three one-hour lectures. Prereq: SOIL 210 and MBIO 251 or 310, or consent of instructor.

## 421 Soil Microbiology and Biochemistry

Laboratory (1) Lab study of soil microbial populations, organic compound decomposition, nitrogen transformations and enzyme activities in soils. One three-hour lab. Prereq: Completion of or concurrent enrollment in SOIL 420.

430 (630) Wetland Science (3) An introduction to the conservation and management of wetland environments. Emphasis will be placed on the role of wetlands in maintaining water quality and strategies for multiple use management of wetland resources. Students will become familiar with basic and applied concepts in hydrology, soils and vegetation of both constructed and natural wetlands. Three one-hour lectures and two Saturday field trips. Prereq: CHEM 111 or 121, BIOL 120 or 140, MATH 140, or consent of instructor. It is the assumption of the instructor that a student has a basic understanding of biological chemistry, for example the processes of photosynthesis and respiration.
440 (640) Soil Physics (3) An introduction to soil as a porous medium that supports the growth of plant roots by retaining air, heat, water and nutrients. These same physical processes govern the movement of chemicals in the environment. The course will cover physical processes and properties and develop the concepts of transport and retention. Two hours lecture and one two-hour laboratory.

## Spanish (SPAN)

111 Elementary Spanish (3) (TBR: SPAN 1010) An introductory course emphasizing listening, speaking, reading and writing. May be used to remove an entrance deficiency or for students with no prior experience in this language. After passing SPAN 111, students will take the second semester of the elementary sequence, SPAN 122 . Three classroom hours.

115 Transitional Spanish (3) A review of listening, speaking, reading and writing for students who have had two years of Spanish at the high school level or equivalent as determined by the department. After passing SPAN 115, students will take the second semester of the elementary sequence, SPAN 122. Three classroom hours.

122 Elementary Spanish (3) (TBR: SPAN 1020) An introductory course emphasizing listening, speaking, reading and writing. Three classroom hours. Prereq: SPAN 111 or 115 or equivalent as determined by the department.
222 Intermediate Spanish (3) Grammar review, reading, writing and conversation. Three classroom hours. Prereq: SPAN 122 or equivalent as determined by the department.
250 Latin America Today: The Peoples and Cultures of Latin America (3) An interdisciplinary study of Latin America today, with emphasis on the life-styles, customs, mentality and overall culture of the peoples of this region. Discussion of current trends in politics, education, media, religion and literature and the arts (including popular culture) especially as they illustrate important cultural values and attitudes. Consideration of the attitudes of Americans towards the peoples of Latin America and vice versa. Taught in English.
300 (500) Intensive Conversation in a Foreign Country (3) In-residence training in the foreign language of the area visited. The course elected must be approved in advance by the Chair of the Department of English and Modern Foreign Languages. Research project required for graduate credit. Prereq: SPAN 222 or equivalent.
321 (521) Introduction to Spanish Civiliza-
tion (3) A descriptive and critical approach to the
instruction of Spanish history, geography, religious, political, social, educational and economic institutions. Research paper required for graduate credit. Prereq: SPAN 341 or 342 or departmental approval.

## 322 (522) Introduction to Spanish American

Civilization (3) A descriptive and critical approach to the instruction of Spanish American history, geography, religious, political, social, educational and economic institutions. Research paper required for graduate credit. Prereq: SPAN 341 or 342 or departmental approval.

## 330 (530) Advanced Spanish Grammar in

Practice (3) Review of basic concepts in Spanish grammar, including verb conjugations, tense, mood, prepositions, and pronouns. Development of reading and critical thinking skills in Spanish. Practice in speaking and comprehension of spoken Spanish. Recommended for majors and minors. Prereq: SPAN 222 or instructor's approval.

341 (541) Advanced Conversation (3) Emphasizes conversational skills. Oral practice to extend range of topics, vocabulary, fluency and conversational strategies. Study of the phonetic system of the Spanish language and exercises to improve pronunciation. Grammar appropriate for oral Spanish. Discussions utilizing readings and electronic media such as videos and the internet. Class presentation of research project required for graduate credit. Heritage speakers and those with near-native abilities in Spanish are not eligible to take this course. If they intend to major in Spanish or earn a Recognition of Proficiency, they should see the department chair for a waiver. Prereq: SPAN 222 or instructor's approval.
342 (542) Advanced Composition (3) Emphasizes composition skills. Written practice to extend range of topics, vocabulary, fluency and compositional strategies. Grammar and stylistics appropriate for written Spanish. Practice writing expository and creative prose, translations as well as use of internet discussion lists. Class presentation of research project required for graduate credit. Prereq: SPAN 222 or instructor's approval.
350 Masterpieces of Spanish and Span-
American Literature (in English Translation) (3)
In-depth discussion of selected literary masterpieces from Spain and Spanish-speaking countries in Latin

America. Emphasis on characters, themes and social trends which reflect the culture and traditions of the Hispanic world. No knowledge of Spanish required; taught in English. Does not count towards major, minor or Recognition of Proficiency in Spanish. Prereq: English 111-112.

360 (560) Studies Abroad (3) In-residence study of the literature, language, or civilization of the area visited. Relevant field trips. Must be approved in advance by the Chair of the Department of Modern Foreign Languages. Research paper required for graduate credit. Prereq: SPAN 341 or 342.

370 (570) Travel Study (1-3) A combination of travel and study experiences in the U.S. or abroad designed to enrich students' knowledge of the target foreign language and culture. May be taught as an organized study tour under faculty supervision or as an independent travel and study project with prior department approval. Topics, prerequisites and course requirements announced in advance. Research paper required for graduate credit. Students may repeat course with change of topic for maximum of six hours credit. Chair of the Department of English and Modern Foreign Languages approval must be obtained for travel-study courses to count towards minor, major, or Recognition of Proficiency. Not regularly offered.

## 381-382 (581-582) Survey of Spanish Litera-

ture $(3,3)$ Selected readings to give students an acquaintance with important personalities, movements and ideas in Spanish literature. 381: Beginning to 17th century. 382: 18th century to present. Research paper required for graduate credit. Prereq: SPAN 341 or 342 or departmental approval.
385-386 (585-586) Survey of Spanish American Literature $(3,3)$ Selected readings to give students an acquaintance with important personalities, movements and ideas in Spanish American literature. 385: Discovery (1492) to Romanticism. 386: Realism (late 19th century) to present. Research paper required for graduate credit. Prereq: SPAN 341 or 342 or departmental approval.

401 Foreign Language Internship (3) Utilization of the target foreign language in a monitored work environment. Appropriate placements may be found locally, nationally, or abroad. Students may or may not be paid. Evaluation by both supervising instruc-
tor and on-the-job supervisor. Chair of the Department of English and Modern Foreign Languages approval must be obtained for internships to count towards minor, major, or Recognition of Proficiency. Prereq: SPAN 341 or 342.
420 (620) History and Phonetics of the Spanish Language (3) Study of the phonemes and rules governing Spanish pronunciation. Detailed examination of the development of Spanish from its Pre-Romanic and Latin origins to the present day, with special attention to morphologic and etymologic change. Discussion of the influence and contributions of other languages, including Arabic, French, Catalan, English, and Amerindian languages. Assignments include phonetic transcriptions of recordings and analysis of prominent Spanish dialects. Research paper and more extensive assignments required for graduate credit. Prereq: SPAN 341 and 342 or instructor's approval.

451 (651) The Language of Business and the Professions (3) Study of the basic terminology and documents of business and various professions as practiced within the Hispanic world. In addition to business, professions such as communications, travel and tourism, agriculture and criminology will be covered. Composition of business letters and resumés, translation and presentation of oral reports. Research paper required for graduate credit. Prereq: SPAN 341 or 342 or instructor's approval.
481 (681) 19th-Century Spanish Literature (3) Study in depth of selected works. Prereq: SPAN 341 or 342 or instructor's approval.
482 (682) Contemporary Spanish Literature
(3) Study in depth of selected works. Prereq: SPAN

341 or 342 or instructor's approval.
486 (686) Contemporary Latin-American
Literature (3) Study in depth of selected works. Prereq: SPAN 341 or 342 or instructor's approval.
491 (691) Spanish and Latin-American Cin-
ema (3) Study of major works in Spanish and LatinAmerican cinema from the 1920s to the present day. The films surveyed will illustrate the development of Spanish and Latin-American cinema and will focus on important socio-political and cultural issues in Twentieth-Century Spain and Latin America.

Research paper required for graduate credit. Prereq: SPAN 341 or 342 or instructor's approval.

## 495-496 (695-696) Topics in Spanish Lan-

 guage, Literature, or Civilization (1-3, 1-3) Study of selected aspects of Spanish language, literature, or civilization. Taught in Spanish. Topics and prerequisites announced in course schedule. Research paper required for graduate credit. Students may repeat course with change of topic. Only six hours of topics courses may count towards a minor, major, or Recognition of Proficiency. Not regularly offered.498-499 (698-699) Independent Study (1-3, 1-3) Directed reading or research under supervision of a staff member. Available only to Juniors and Seniors having completed at least six hours of upper-division coursework in Spanish. Project must be approved by faculty in the discipline concerned and the department chair. Research paper required for graduate credit. Students may take no more than six hours of independent study.

## Special Education (SPED)

## 300 (500) Children with Exceptionalities

(3) An introductory course designed to provide an overview of the field of special education. Principles, characteristics, programs, special needs, legal requirements and instructional strategies related to the education of children with exceptionalities.

386 (586) Practicum in Special Education (3) The initial field experience in special education. Emphasis will be on observation participation. There will be 75 contact hours in P-12, split between at least two settings. Prereq: SPED 300.

387 (587) Practicum in Teaching Children with Exceptionalities (Birth-6) (3) The initial field-based experience in special education. The course will require a total of 75 contact hours split between two different settings. Optional settings will be school, hospital, Children's Center and the Head Start program. Prereq: SPED 300 (500).
415 (615) Characteristics and Needs of Children with Moderate/Severe Exceptionalities
(3) Characteristics of persons with moderate/severe disabilities and the educational strategies appropri-
ate for those persons: fostering family/school partnerships, assessment, teaching strategies, arranging the environment, measuring student behavior and learning, positive behavioral supports, addressing special health care and motor issues, inclusive practices, life skills, communication and peer-support, and transition to post school environment. Field experience required. Prereq: SPED 300 (500).

## 416 Math for Children with Exceptionalities

(3) Strategies for teaching mathematics to students with exceptionalities. Topics include: assessment, error pattern analysis, writing appropriate IEP goals, task analysis, constructivist approaches to intervention, and differentiated instruction.

417 (617) Clinical Field Experience (3) This course is supervised field experience with children with exceptionalities in grades $\mathrm{K}-12$ who have an identified disability. The course emphasizes reflective, culturally sensitive practices, evidence-based practices, and techniques presented in SPED 433 and SPED 435. This course addresses lesson planning and instruction, the special education process, IEP development, effective collaboration and communication skills with diverse learners, families, colleagues, and community stakeholders, and assessments used for eligibility, placement, and curricular decisions. Prereq: SPED 300 (500). Admission to Educator Preparation Program (EPP). Must make aC or better.

418 (618) Clinical Field Experience II (3) This course is supervised field experience with children with exceptionalities in grades K - 12 who have identified disability. This course emphasizes reflective, culturally sensitive practices, evidence-based practices, and techniques presented in SPED 434 and SPED 440/470. This course addresses collaborative teaching models, lesson planning and instruction, adapting assessments, methods and material and progress monitoring. Prereq: SPED 300 (500). Admission to Educator Preparation Program (EPP). Must make aC or better.

## 419 (619) Clinical Field Experience III (4) A

 four-hour credit course is a supervised field experience that engages teacher candidates in working with students with disabilities between grades K -12 in an inclusive classroom to assess literacy abilities, design effective literacy instruction targeted to support stu-dents' literacy development, differentiate instruction, provide effective literacy intervention strategies in a multi-tiered system of support. This course emphasizes reflective, culturally sensitive evidence-based practices, planning and instruction, positive behavior supports, conducting functional behavioral assessments, creating behavior intervention plans, and implementing function-based interventions. Prereq: SPED 300 (500), admission to Educator Preparation Program (EPP). Must make a C or better.
420 (620) Language Development and Disorders (3) Principles of typical speech and language development and intervention approaches for children between birth and age six. Prevalence and types of speech/language disorders in infants, toddlers and preschool children. Emphasis on identification, prevention, intervention and assessment of language developmental delays for children under age six. Prereq: SPED 300 (500).

425 Sign Language (3) A goal of producing effective communicators through a primary approach of Total Communication with a Signed English basis. Promotion of respect for American Sign Language and Deaf Culture. Prereq: SPED 300.

## 430 (630) Early Childhood-Special Education

 (3) This course examines: Growth and development of children from birth to age 9 in the context of family life; etiological factors affecting young children with developmental delays; cultural, familial, educational and legal implications; behavioral characteristics of children in early intervention programs; the philosophy, methods, materials, settings and acceptable standards involved in the intervention and instructional procedures of early childhood-special education programs. Prereq: SPED 300. Recommended prereq: SPED 420.
## 431 (631) Behavior Management for the

 Young Child (3) Understanding behavior in the context of young children's current social conditions, in the context of normal development, in the context of culture and ability/disability, and understanding the assessment methods that are effective with young children. Prereq: SPED 300 (500).
## 432 (632) Educational Procedures for Chil-

 dren with Exceptionalities (4) Examination of the relationship between the characteristics andneeds of children with exceptionalities and specialized instructional procedures. Development of skills in analyzing curriculum requirements, writing individualized education programs (IEP's), teaching effectively and evaluating the legal aspects of special education will be emphasized. Prereq: Admission to Educator Preparation Program (EPP) and SPED 300 (500), SPED 440 (640), and Prereq or Coreq SPED 437 (637).

## 433 (633) Advanced Methods for Teaching Students with High Incidence Exceptionali-

 ties (3) Within the context of persons with high incidence disabilities (Learning Disabilities, Speech/ Language Disabilities, Emotional\& Behavioral Disorders, Intellectual Disabilities, and Autism Spectrum Disorders), this course is designed to provide the student with a model of the teaching process progressing from identification, to instructional design using Universal Design for Learning, to the use of research-validated methods for instructional delivery, law and legal requirements, and the provision of needed educational, social, academic, and behavioral supports. Prereq: SPED 300 (500). Admission to Educator Preparation Program (EPP). Coreq or Prereq: TCED 302. Must make a C or better.434 (634) Literacy Interventions for Students with Disabilities (3) This course is designed to provide a basic background in interventions and materials appropriate for working with students with disabilities at the elementary through secondary level. This course is an integration of concepts fundamental to the development of literacy from birth through secondary grades. It includes a study of language development and communications skills, language arts, content area reading, mathematics, response to intervention, and the assessment and selection of appropriate instructional strategies based upon student need. Emphasis will be placed on collaborative approaches to learning and teaching, specific teaching and learning strategies, and the role of the special educator in the school community. Prereq: SPED 300 (500). Admission to Educator Preparation Program (EPP). Coreq or Prereq: TCED 302. Must make a C or better.
435 (635) Special Education Assessment and Procedures (3) The purpose and scope of this
course is for students to administer, score, and interpret test instruments used in Special Education. Students write individualized education programs, record student progress, and make data-based instructional decisions with emphasis upon the successful implementation and evaluation of individualized educational programs (IEPs). Also included will be an emphasis on the legal aspects of legislation and litigation dealing with exceptional populations. Assembly of a case study to aid in the diagnosis and treatment of the learner will be completed. Prereq: SPED 300 (500). Admission to Educator Preparation Program (EPP). Coreq or Prereq: TCED 302. Must make a C or better.

437 (637) Assessment of Children with Exceptionalities (3) The purpose and administration, scoring, and interpretation of each test instrument. Assembly of a case study to aid in diagnosis and intervention. Prereq: Admission to Educator Preparation Program (EPP), SPED 300 (500) and SPED 440 (640).
440 (640) Inclusive Practices for the Elementary Classroom (3) An examination of the unique needs and particular issues which are specific to students with mild disabilities and at-risk populations. The course emphasizes curriculum approaches, inclusion, Response to Intervention, collaborative teaching, differentiated instruction, universal design for learning modifications and accommodations in general and special education classes in an elementary setting. Prereq: Admission to Educator Preparation Program (EPP), SPED 300. Coreq or Prereq for SPED 440: TCED 302; Coreq or Prereq for SPED 640: TCED 780. Must make a C or better.

450 (650) Characteristics and Needs of the Gifted/Talented (3) Historical and societal perceptions, characteristics, needs, psychological and educational considerations and identification of the gifted/talented. Prereq: SPED 300.
451 (651) Strategies and Programs for Teaching the Gifted/Talented (3) Curriculum development and effective teaching strategies with the gifted/ talented in various educational environments. Prereq: Admission to Educator Preparation Program (EPP), SPED 300 and 450 or instructor's approval. Must make a C or better.

452 (652) Advanced Methods in Gifted Education (3) Topics may include, but are not limited to: assessment and evaluation in gifted education, affective learning and counseling gifted students; working with family and communities to support gifted students; working with unique populations of gifted students; and research-based instructional practices in gifted education. Prereq: SPED 450 (650) and SPED 451 (651).

## 453 (653) Theories and Trends in Gifted

 Education (3) A review of the foundational theories and philosophies underlying the discipline of gifted education, as well as current research and policy affecting the field. This seminar course includes participation in professional development activities relevant to the study of gifted education. Prereq: SPED 300 (500), 450 (650) and SPED 451 (651).
## 460 (660) Behavior Strategies and Interven-

 tions (3) Advanced strategies for managing social behaviors that impact on academic learning of children with exceptionalities. Strategies for conducting functional behavior assessments, increasing socially appropriate behaviors, reducing inappropriate behaviors, assessing and teaching appropriate social skills, writing function-based intervention behavior plans, and developing a classroom management plan. Prereq: Admission to Educator Preparation Program (EPP) and SPED 300 (500) and/or SPED 680. Must make a C or better.470 (670) Inclusive Practices for the Middle and Secondary Classroom (3) An examination of the needs and particular issues which are specific to adolescent students with mild disabilities and at-risk populations. The course emphasizes curriculum approaches, inclusion, Response to Intervention, collaborative teaching, differentiated instruction, universal design for learning modifications and accommodations, and approaches in general and special education classrooms in a middle school or secondary setting. Prereq: SPED 300 (500), admission to Educator Preparation Program (EPP). Coreq or Prereq: TCED 302.
490 (690) Workshop in Special Education: [Title of workshop] (1-3) Workshop on selected topics. No more than six hours of workshop credit may be applied to a graduate degree in education. Prereq: Instructor's approval.

680 Strategies for Differentiation in the Inclusive Classroom (3) Provides an understanding of the components of differentiated instruction and applies these concepts to a multi-tiered system of supports. The course also emphasizes lesson planning design utilizing the Universal Design for Learning (UDL) framework that meets the multiple needs of a diverse groups of learners, collaborative teaching, and delivering accommodations and modifications in the inclusive classroom. This course will be required for job-embedded and masters initial licensure students.

## 701 Workshop in Special Education: [Title of Workshop] (1-3) Workshop on selected topics.

 No more than six hours of workshop credit may be applied to a graduate degree in education. Cannot be repeated for credit under the same workshop title. Prereq: Instructor's approval.
## 702 Advanced Behavioral Interventions in

Inclusive Settings (3) Examines definitions, characteristics, assumptions and basic principles of applied behavior analysis. Describes and applies fundamental elements of behavior change, including reinforcement schedules, modeling, shaping, chaining and other behavior change procedures. Students will learn how to develop an objective, behavioral definition of problem behavior, conduct functional behavior assessments, and generate recommendations for the development of intervention. Activities center on the design and delivery of behavioral interventions with individuals with special needs in inclusive settings.

## 703 Assessment for Individuals with Autism

 Spectrum Disorder (3) Addresses assessment and intervention planning for students with ASD including screening, evaluative assessment, ongoing assessment, using assessment to guide intervention planning, and monitoring progress. Students will explore a variety of methods and tools commonly used with individuals with ASD; specifically standardized assessments, checklists, rating scales, structured observation tools, and curricular based assessments to address the ongoing needs and strengths of individuals with ASD in order to plan successful interventions in further differentiating instruction.704 Introduction to Autism Spectrum Disorder (3) Addresses historical and theoretical foundations
of autism spectrum disorder (ASD), characteristics of children and youth with ASD, current diagnostic criteria, and effective practices and strategies for evidence-based instructional interventions for those with ASD.

709 Practicum in Gifted Education (3) Use of communication techniques in support of gifted students, instruction planning based on curricular goals, and necessary skills for reflective practitioners in gifted education will be addressed. Forty-five hours of practicum experience in a gifted education classroom are required. Prereq: SPED 300 (500), 450 (650), 452 (652), 453 (653) or Instructor's approval.

710 Advanced Practicum in Teaching Children with Exceptionalities (3) Advanced special education field-based experience. Focus on refining skills in the sequence of collecting student assessment data, using assessment data to guide intervention planning, and monitoring progress, as well as examining other facets of special education.

712 Research in Single Case Design (LD, CC, DD, or EBD) (3) Designed to provide students with an understanding of single case study research designs and experience in critically evaluating research that has been conducted using these methodologies. Course will include an examination of in-depth information about the use of single-case experimental designs in educational research across a range of educational settings and students. Students will become familiar with the current research in their area of emphasis (Learning Disabilities, Cross-Categorical, Developmental Disabilities or Emotional/ Behavioral Disorders).

720 Language Development and Disorders of the School-Age Child (3) Examines the methods of assessment and remediation of oral and written language deficits in the school-age child. Oral language assessment includes a narrative analysis case study. Written language assessment and methods of remediation examined including dyslexia, dysgraphia and reading disabilities. Prereq: SPED 300/500 and 420/620.

730 Trends in Special Education (3) Current trends in special education including but not limited to transition services, inclusion, assistive technology, curriculum-based measurement, video self-modeling, communication and collaborative team building with parents, administration and professionals.

## 740 Advanced Methods [in topic title] (3)

Current research in the area of cognitive development and learning theory as it affects the education of children with special learning characteristics. Course will include examination of current research on brain theory, learning theory, metacognition, memory and related aspects of learning. Examine specific methods in student emphasis area (Learning Disabilities, Cross-Categorical, Developmental Disabilities or Emotional/Behavioral Disorders).

## Sport Business (SPMG)

## 290 Introduction to Sport Business and

 Administration (3) Overview of the fundamental principles of management and administration of sport programs. Combines theory and practice related to legal and ethical issues, marketing, finance and organizational structure of sport related services and products.
## 300 Advanced Sport Business and

Administration (3) In-depth study of the fundamental principles of management and administration of sports programs. Combines theory and practice related to ethics, law, finance, marketing, and management of sport entities. Also includes field observation hours in a related area. Prereq: SPMG 290 or instructor's approval.
310 Contemporary Issues in Sport (3) This course will be designed to critically examine contemporary issues that impact the business of sport. It will look at a number of issues that impact the sport industry to day. These topics will include gender equity, race relations, the continuous evolution of college athletics, the concept of economic impact and development through sport, and the future of sport as a commercial enterprise. These issues will be analyzed in terms of their impact on society as a whole and on the business of sport specifically. Prereq: SPMG 290 or Instructor approval for non-SPMG students.

311 Sport Ethics (3) This course will challenge the aspiring sport manager to explore the major ethical theories in sport (especially as applied to the individual's desired sport business career), develop a personal code of ethics related to the field of sport business, and formulate opinion on current issues in
sport based ethical considerations. In addition, the course examines the importance of sport in society as a transmitter of values and the ethical digressions that have created a negative perception of sport at all levels.

35- Topics: [Selected Areas] (2, 3) Topics in contemporary sport business issues. The subject matter is indicated by the third digit: 1 for Human Resource Management in Sport (3 hours); 2 for International Sport Business (3 hours), 3 for Diversity in Sport Organizations (2 hours), 4 for Marketing Aspects of Sport ( 2 hours), 5 for Financing Aspects of Sport (2 hours). May enroll in one or more selected areas.

400 Legal Aspects of Sport (3) This is a study of the legal aspects of sport with a focus on issues such as risk management, negligence, violence in sport, insurance, safety in sport, employment relations, law of contract, and disability rights. Prereq: SPMG 290.

413 Event and Facility Planning (3) Practical application of principles and theory related to the management of sport and entertainment events including small and large scale facilities and event venues. Prereq: SPMG 300 or instructor's approval.

461 International Sport Business (3) The purpose of this course is to introduce students to global sport management principles. The course will also address ethics, marketing, sponsorship, event managment, business, and financial topics as well as challenges and issues in international sport management. Prereq: SPMG 300 or instructor's approval.
480 Internship in Sport Business (1-10) Work experience with cooperating agencies. Liability insurance must be purchased before the student may enroll in the internship. May be repeated but no more than 10 hours may be earned. Prereq: Junior standing; SPMG 300 with minimum grade of $C$.
481 Sport Business Practicum (1-7) An introduction to a variety of career opportunities, developing a professional resume, professional philosophy, professional goals and objectives and a professional portfolio. Includes a 45 hour supervised study and experience with a cooperating agency. Application must be approved and liability insurance purchased before student may enroll. Prereq: Student must be a Sport Business major.

485 Workshop in Sport Business: [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours workshop credit may be applied to an undergraduate degree program.

## Statistics (STAT)

325 Statistical Methods (3) Basic probability distributions, fundamentals of statistical inference, hypothesis testing, one-way classification, analysis of variance, covariance, use of variance components and their estimation, comparative experiments, multiple comparisons and regression. Prereq: MATH 210.

365 (565) Regression Analysis (3) Measuring the relationship among variables using standard regression techniques. Topics include simple, multiple and polynomial regression, model fitting, verification of model assumptions and examination of residuals. Prereq: MATH 251, 310; either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 360 and MATH 365 or STAT 365 (565) will not be allowed.

375 (575) Sampling Theory (3) Mathematical development of sampling. Consideration of simple probability sampling including simple random, stratified random, cluster and multistage sampling. Deriving estimates and variances of estimates for different sampling designs. Prereq: STAT 325 or ENGR 311 or departmental approval.
385 (585) Nonparametric Methods (3) Alternatives to normal-theory statistical methods; analysis of categorical and ordinal data, methods based on rank transforms, measures of association, goodness-of-fit tests, order statistics. Prereq: MATH 251 and either STAT 325 or ENGR 311 or departmental approval.
425 (625) Time Series Analysis (3) Introduction to time series analysis. Autoregressive, moving average, ARMA, ARIMA models. Identification, estimation, validation, forecasting, confidence intervals. Prereq: STAT 365 or departmental approval.

435 (635) Categorical Data Analysis (3) Analysis of categorical data. Contingency tables, exact tests, loglinear models, analyses involving ordinal variables, binary response models and multinomial response models. Prereq: MATH 251 and either STAT 325 or ENGR 311 or departmental approval.

441 Actuarial Science $\mathbf{P}$ (3) The course will help prepare students for Exam P of the Society of Actuaries and/or Exam 1 of the Casualty Actuarial Society. Topics of the course will be those of these professional exams: general probability, univariate probability distributions, and multivariate probability distributions. Prereq: MATH 320.

442 Actuarial Science FM (3) The course will help prepare students for Exam FM of the Society of Actuaries and/or Exam 2 of the Casualty Actuarial Society. This course will cover the fundamental concepts of financial mathematics as they relate to modern actuarial science. Topics of the course will be those of these professional exams: time value of money, annuities, equations of value, amortization, loans, bonds, and other topics of finance. Prereq: FIN 301 and MATH 320.

455 (655) Design of Experiments (3) The design and analysis of experiments. Topics include one and two factor analysis of variance, randomized designs, repeated measures and factorial experiments. Prereq: MATH 251; either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 455 and STAT 455 will not be allowed.

461 (661) Probability and Statistics I (3) Discrete and continuous probability spaces, statistical independence, distributions, discrete and continuous random variables, expectations, moment-generating functions, limiting distributions, estimation of parameters, confidence intervals, hypothesis testing with applications, linear regression and correlation, multiple linear regression. Prereq: MATH 252; either MATH 314 or CSCI 301; either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 461 and STAT 461 will not be allowed.

462 (662) Probability and Statistics II (3) Discrete and continuous probability spaces, statistical independence, distributions, discrete and continuous random variables, expectations, moment-generating functions, limiting distributions, estimation of parameters, confidence intervals, hypothesis testing with applications, linear regression and correlation, multiple linear regression. Prereq: MATH 320 and STAT 461. Credit for both MATH 462 and STAT 462 will not be allowed.

465 (665) Statistical Computing (3) Applications of major statistical software packages. Emphasizes the use of computers to perform statistical procedures and the interpretation of statistical output. Prereq: Either STAT 325 or ENGR 311 or departmental approval. Credit for both MATH 465 and STAT 465 will not be allowed.

491-492 (691-692) Special Topics [topic title] (1-3) Selected topics in statistics, student research, or seminar. Course may be repeated with total credits not to exceed six hours. Prereq: MATH 320; either STAT 325 or ENGR 311; departmental approval.
498 Undergraduate Research Experience I (2) Introduction to research methodologies and tools including LaTeX and MathSciNet. Presenting mathematics in written and oral formats. Ethics in research. This course includes substantial directed individualized study leading to the preparation of a significant paper. Prereq: consent of the department chair. Cannot receive credit for both MATH 498 and STAT 498. Graded on Pass/Fail basis.

## 499 Undergraduate Research Experience II

 (1) The presentation of mathematics works in both oral and written formats. This course will finalize the significant paper begun in MATH/STAT 498 and based on the student's individual research. This will require that it be presented at a regional or national meeting. Prereq: STAT 498 and consent of the department chair. Graded on Pass/Fail basis.
## Sustainability Studies (SUST)

200 Introduction to Sustainability (3) is a required foundational course for the Sustainability Studies minor that provides students from all academic majors and programs an overview of the field of sustainability studies. The study and practice of sustainability is for humanity to meet "the needs of the present without compromising the ability of future generations to meet their own needs." The concept of sustainability is inherently complex and socially constructed and as such, there is much room for competing ideas about how to achieve sustainability. Sustainability seeks to integrate three dimensions: ecological, economic, and social; which
are seen as equally important aspects of a sustainable social system.

## 380 Special Topics in Sustainability (1-3)

Subject area may vary. Total credits not to exceed three hours toward the Sustainability Studies minor. Prereq: SUST 200 or instructor's approval.

450 Sustainability Travel Studies(1-6) A course designed as an educational travel experience in Sustainability within the United States or internationally under the instruction of a university instructor. May be taught as an organized study tour or as an independent travel and study project. Topics, prerequisites, and course requirements announced in advanced. Students may repeat course with different topics. Not regularly offered. Total credits not to exceed six hours toward the Sustainability Studies minor. Prereq: SUST 200 or instructor's approval.

## Teacher Education (TCED)

Note: For student teaching courses (402-412), students should check their program of study sheet and student teaching application for other student teaching prerequisites specific to their major.

211 Introduction to Teaching (1) A course designed to provide prospective Educator Preparation Program (EPP) majors with an introduction to teaching as a profession. Includes an overview of the Educator Preparation Program (EPP) Conceptual Framework and development of the EPP portfolio.
301 Foundations of Education (2) An introductory course designed to provide prospective Educator Preparation Program (EPP) majors with an overview of the history and philosophy of education. This course addresses professionalism, history, philosophy and sociology of education; global understanding; diversity and governance in education. The course includes the initial development of a professional portfolio for each student as part of the requirements for completion of a degree within the College of Education, Health, and Behavioral Sciences.

302 Integrated Teaching Strategies (3) Addresses attitudes, knowledge and skills as defined in the Conceptual Framework: teaching and learning styles; strategies for teaching; planning for teaching;
models of instruction; classroom management of instruction; and computer literacy. This course will also emphasize oral expression and written communication. Requires a minimum of 15 hours of field experiences, directed observations and participation in a public school classroom setting. This course serves as a checkpoint for the Educator Preparation Program (EPP) portfolio. Prereq: Admission to Educator Preparation Program (EPP). Must make a C or better.

303 Diagnosis and Evaluation (3) Designed to develop skills in selecting, constructing, administering and interpreting instruments appropriate for assessing differing needs and achievement of children and youth. Service learning may be required. Prereq: Admission to Educator Preparation Program (EPP). Must make a C or better.

305 (505) Classroom Management (2) A study of skills and techniques facilitative to an effective classroom environment. Emphasis on behavioral management principles, classroom climate analysis and teacher/pupil rapport building. This course serves as a checkpoint for the Educator Preparation Program (EPP) portfolio. Required field experience. Prereq: Admission to Educator Preparation Program (EPP). Must make a C or better.

## 340 Applied Science in Elementary Education

(3) Development of elementary science strategies, materials, and content pedagogy through problem solving, scientific reasoning, communication, and connections. Bridges the theoretical foundations of learning to teach science in an active and diverse learning environment using research-based strategies. Includes unit planning, writing lesson plans, practical teaching exercises, and field experience. Must make a C or better. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302. Residency I Course. Coreq: TCED 342, TCED 350, and TCED 475.

342 Applied Mathematics in Elementary Education (4) Development of elementary mathematics strategies and content pedagogy through problem solving, mathematical reasoning, communication, representations, and connections. Bridges the theoretical foundations of learning to teach mathematics in an active and diverse learning environment using research-based strategies. Includes unit planning,
writing lesson plans, practical teaching exercises, and field experience. Must make a C or better. Prereq: TCED 302 and admission to Educator Preparation Program (EPP). Residency I Course. Coreq: TCED 340, TCED 350, and TCED 475.

## 350 Applied Social Studies and Language Arts

(4) Strategies and materials for teaching social studies and languages arts in K-8 classrooms. Unit and lesson plans, activities and materials for the classroom, peer teaching. Special emphasis on meeting the needs of diverse learners. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302. Residency I Course. Coreq: TCED 340, TCED 342, and TCED 475. Must make a C or better.

## 380 Teaching Strategies in Middle Level

Content (4) Strategies and materials for teaching the core subjects of middle level education (4-8); literacy, math, science, and social studies. Lesson and unit planning with assessment strategies and differentiated instruction. Field experience in a middle level classroom. Prereq: TCED 302 and admission to Educator Preparation Program (EPP). Residency I Course. Must make a C or better.

401 Seminar in Teaching (1) Structured seminar for advanced discussion of instructional and classroom management, variety in methodology, discipline, school law, professionalism and related topics. Emphasis will also be placed on oral expression and written communication. Prereq: Admission to Educator Preparation Program (EPP).
402 Student Teaching Grades 1-4 (6) Supervised student teaching in grades 1-4 for a minimum of 7.5 weeks. Must be taken with TCED 403. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

403 Student Teaching Grades 5-8 (6) Supervised student teaching in grades 5-8 for a minimum of 7.5 weeks. Must be taken with TCED 402. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

404 Student Teaching Grades 7-8 (6) Super-
vised student teaching in grades 7-8 for a minimum
of 7.5 weeks. Must be taken with TCED 405. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

405 Student Teaching Grades 9-12 (6) Supervised student teaching in grades 9-12 for a minimum of 7.5 weeks. Must be taken with TCED 404 or 406. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

406 Student Teaching Grades K-8 (6) Supervised student teaching in grades $\mathrm{K}-8$ for a minimum of 7.5 weeks. Must be taken with TCED 405 or 407. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

## 407 Student Teaching in Special Education

(K-5) (6) Supervised student teaching in special education K-5 for a minimum of 7.5 weeks. Must be taken with TCED 408. Prereq: Admission to Educator Preparation Program (EPP), TCED 302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.

## 408 Student Teaching in Special Education

(6-8) (6) Supervised student teaching in special education setting grades $6-8$ for a minimum of 7.5 weeks. Must be taken with TCED 407 or TCED 413. Prereq: Admission to Educator Preparation Program (EPP), and completion of all specialized teaching strategies courses and Reading requirements. See note above.

409 Student Teaching in Kindergarten (6)
Supervised student teaching in kindergarten for a minimum of 7.5 weeks. Must be taken with TCED 403 or TCED 412. Prereq: Admission to Educator Preparation Program (EPP) and completion of all specialty area and professional education requirements. See note above. (Same as ECED 409)

## 413 Student Teaching in Special Education

(9-12) (6) Supervised student teaching in special education grades $9-12$ for a minimum of 7.5 weeks. Must be taken with TCED 408. Prereq: Admission to Educator Preparation Program (EPP), and comple-
tion of all specialized teaching strategies courses and Reading requirements. See note above.
450 (650) Designing Curriculum for the Early Adolescent (3) Review of the specific characteristics and educational needs of early adolescents (grades 6-9). Describes the current middle school movement, its historical antecedents and the development of curriculum appropriate for early adolescents, emphasizing curriculum integration, authentic assessment, student involvement in planning, etc. Field experience may be required. Prereq: Admission to Educator Preparation Program (EPP) and TCED 302 and 305. Graduate level students will complete an individual project related to middle school curriculum. Must make a C or better

475 (675) Early Literacy Practicum (4) A fourhour credit course that engages teacher candidates in working with students between pre-kindergarten through grade 3 to assess literacy abilities, design effective literacy instruction targeted to support students' literacy development, differentiate instruction, and provide effective literacy intervention strategies. Prereq: for 475-Admission to Educator Preparation Program (EPP); for 675-Admission to Educator Preparation Program (EPP). Residency I Course. Coreq: TCED 340, TCED 342, and TCED 350. Must make a C or better.

701 Workshop in Teacher Education: [Title of Workshop] (1-3) Workshop on selected topics. No more than six hours of workshop credit may be applied to a graduate degree in education. Cannot be repeated for credit under the same workshop title. Prereq: Instructor's approval.

## 705 Advanced Strategies for Classroom Man-

 agement (3) An investigation of theoretically-based strategies for identifying and sustaining effective aspects of existing classroom management structures. Proactive and practical solutions for management of a continuum of behaviors. Application of course content to case studies. Directed experiences in public school. Prereq: TCED 780 or TCED 730; and Admission to Educator Preparation Program (EPP).712 Learning Theory and Cognition Applied to the School Setting (3) The nature of learning processes and conditions for effective learning and implications for teaching exploration of how learn-
ing theory can be applied in the school environment to enhance the learning experience; recent directions in cognitive studies and their general implications for functional classroom use. Projects/activities will be individualized according to the licensure area being sought. Cannot receive credit for both EDPG/ COUN 712 and TCED 712.

716 Growth and Development in School Age Students (3) The physiological, sociological and psychological basis of human behavior with emphasis upon research dealing with the normal student in a school environment. Projects/activities will be individualized according to the licensure area being sought. Cannot receive credit for both EDPG/COUN 716 and TCED 716.

## 725 Teaching Language Arts and STEM for Middle School 5-9 Teachers (2) Common Core State

 Standards in reading, writing, language and speaking and listening are addressed through the STEM content areas. Appropriate practices are presented to promote, develop and integrate strategies for interpreting text across all STEM subject matter areas. Inquiry, application of technology, and problem-solving are incorporated into instruction.
## 726 Engineering and Technology for Middle

 School 5-9 Teachers (3) Real world applications of engineering and technology that promote an understanding of the characteristics, risks, and benefits of technology and engineering. Components of the Engineering Design Cycle are explained using examples from the human-made world. Basic processes and types of technology are demonstrated and the impact of benchmark technologies on society are explored. Inquiry, application of technology, and problem-solving are incorporated into instruction.
## 730 Principles and Practices of Effective

Teaching (3) Introduction to research-based trends and practices in education; introduces concepts and skills in planning, instructional strategies, objectives, assessment, and classroom management for the beginning teacher. Applies theory to a practical classroom environment through a directed field component. Credit cannot be received for both TCED 730 and TCED 780..

## 780 Principles and Techniques of Teaching

(3) The course is designed to provide the graduate
student pursuing initial licensure the opportunity to engage in and become acclimated into the public school environment. Emphasis will be placed on integrating the initial conceptual framework into teaching and learning styles, strategies for teaching, planning for instruction, introductory classroom management, generic methods and development of the Educator Preparation Program (EPP) Program (TEP) portfolio. A minimum of fifteen (15) clock hours of field work in a previously approved grade appropriate diverse public school setting.

## 789 Application of Academic Language for

 Planning and Instruction (3) This course is designed to integrate academic language, planning instruction, understanding of learning segments, teaching planned lessons, assessment and evaluation, and reflective practice. Emphasis will be placed on refining requirements and expectations for the teacher candidate's assessment portfolio and licensure. This class should be taken in the semester immediately preceding student teaching. Job-embedded licensure candidates must take this course in their final semester. Prereq: Admission to Educator Preparation Program (EPP).791 Master's Culminating Experience(3) The culminating professional project for the Master of Science in Education with a major in Teaching Programs. Topics selected reflect student interest in the area of education. That topic is expanded as students explore and assess the information previously examined to develop a research proposal appropriate for an instructional setting. Approval of the Education Graduate Office is required before registering for this course. Course is repeatable but only for those seeking a subsequent degree. TCED 791 from a prior degree cannot be used to satisfy requirement in subsequent degree and therefore must be taken an additional time.

795 Practicum in Initial Licensure (6) Job-embedded field-based experience with a focus on application of knowledge and skills, reflective practice and professional and ethical behavior. Collaboration among the teacher candidate, site-based mentor and university supervisor. Submission of lesson/ unit plans and self-monitoring reflections required. Licensure will be recommended upon successful completion of degree requirements and required

Praxis exams. Prereq: Completion of all course work in the Initial Licensure Major and full-time employment in a SACS accredited K-12 school.

## Teaching English as a Second Language (TESL)

700 Principles of Teaching ESL (3) A comprehensive survey of the second language acquisition process, including linguistic variables which affect second language learning. Federal guidelines and the legal framework for educational services for Non-English language background students will be emphasized. Fifteen (15) hours field experience required.

## 710 Strategies for Teaching English as a Second

 Language (3) The application of various teaching methods in reading, writing, listening, and speaking for English language learners including cultural considerations, multiple learning modalities, and materials adaptation for content area teaching. Fifteen (15) hours field experience required.
## Theatre (THEA)

110 Understanding Theatre (3) (TBR: THEA 1030) An overview of contemporary theatre and drama, initiating basic critical analysis of art and theatre as art in relation to various other art forms and popular entertainment. Particular attention is given to theatre's place in society, its diversity and its relevance to students today. Notable connections are made between theatre and the familiar world of Hollywood, television and film. The roles of the actor, director, playwright and designer are surveyed.

## 110H Honors Understanding Theatre (3) A

 contemporary overview of theatre as an art form. Introduction to the roles of the actor, director and designer. Basic theory and criticism. For students in good standing in Honors Programs.111 Understanding Theatre (3) An overview of the history and literature of theatre with various representative theatre eras presented in a broad social, political and economic context. Critical analysis concerning art and theatre as art in relation to various other art forms and popular entertainment, as it applies to the history of theatre, bringing theatre from the past to life today is a major component of the course.

150 Theatre Workshop (3) Supervised group projects in the construction of sets, painting, lighting and costume making. Six hours of scheduled work per week in preparation for a major production. May be repeated for credit.

201 Theatre Production (1) Practical application of theatre studies in a production environment. May be repeated for credit. Prereq: THEA 220, or DANC 350, or ART 120, or permission of instructor.

220-221 Acting $(3,3)$ Introduction to acting involving improvisation and other exercises. Development of concentration, contact between actors, stage movement, voice production, character/text analysis skills and confidence. May be taken out of sequence.

301 Theatre Production (2) Practical application of theatre studies in a production environment. May be repeated for credit. Prereq: THEA 220, or DANC 350, or ART 120, or permission of instructor.

320 Voice for the Actor (3) Intensive training in the integral use of the voice for the actor; developing skills for vocal relaxation, flexibility, and strength. The development of the voice as a tool for communicating character and subtext. Prereq: THEA 220 or THEA 221.

330 Costuming and Stage Makeup (3) Practical application of costume design concepts and makeup techniques for the stage. Prereq: THEA 110.

360 (560) Stagecraft (3) Principles of technical theatre including scene construction, stage management and dramatic production supervision.

380 Play Interpretation and Direction (3) Play direction studied through a series of exercises and scene work designed to teach the basic tools of stage composition. Focuses on the use of script analysis and its application to performance. Encourages exploration of a personal technique and style. Prereq: THEA 220 and 221. May be repeated for credit.

390 (590) Playwriting (3) Writing exercises, scenes and one-act plays which may be performed in the lab theatre. Prereq: ENGL 111-112 and THEA 110 and 220 or by permission of the instructor. (Same as ENGL 390/590)

391 Special Topics in Theatre (3) Selected topics for intensive study. Topics and prerequisites to be announced. May be repeated for credit.

401 Independent Study (3) Directed study in the area of theatre performance or production. Taught by arrangement. Prereq: THEA 110, 111 and 220. May be repeated for credit.

410 Lighting and Sound Design (3) The design of stage lighting for the theatre environment includes instrument maintenance, lighting control, color media, shop procedures and electricity. A practical study of sound, sound equipment and sound systems utilized in sound design for theatrical productions. Prereq: THEA 110 and 360.

420 Advanced Acting (3) Develops the actor's skill through a systematic course progression of advanced acting techniques. Prereq: THEA 220 and 221. May be repeated for credit.
430 (630) Scene Design (3) Development of the total design concept involved in creating scenery for the stage environment. Prereq: THEA 110 and 360.
460 Senior Project (1) Preparation of any of the following based on the student's area of interest: a portfolio, script, critical research paper, design, acting recital, or direction of a short play. Projects are selected and prepared under the supervision of a theatre faculty member. Mandatory pass/fail.

## University Scholars (UNSC)

118, 128 Seminar (1, 1) Discussion-oriented seminars on interdisciplinary topics and investigations of masterpieces of the heritage of Western thought with professors in the disciplines related to the topic leading discussions. Graded on Pass/Fail basis.

218 Reading-Discussion Groups (1) Each group consists of small groups of students and one or more professors. Each group pursues a different course of study determined by the students and faculty together. Graded on Pass/Fail basis.

228 Project Management (1) Course designed to introduce University Scholars to advanced research methods in advance of the Senior Project. Students will discuss research methods and techniques in several disciplines, receive training in survey and IRB construction, as well as prepare for the Senior Project. Graded on Pass/Fail basis.
318, 328, 418 Specialized Studies $(1,1,1)$
Studies in the student's area of interest with personal
guidance by members of the faculty. A natural outcome of the study should be the emergence of a senior project (488). Taught by arrangement and graded on Pass/Fail basis.

488 Senior Project (3) Students pursue the preparation of significant work under faculty direction (research, artistic performance or composition, creative writing etc.) The senior project must be approved in advance by the Honors Programs Director and is graded on a Pass/Fail basis.

## Veterinary Health Technology (VET)

200 Introduction to Veterinary Technology
(2) Introductory course on the role of the veterinary technician in the veterinary profession. Emphasis placed on ethics, professionalism, legal applications, value of professional organizations, importance of life-long learning, and safety issues. Veterinary office management and computer skills are also covered. Two one-hour lectures.

## 300 Veterinary Technology Medical Terminol-

 ogy (2) Medical terminology in veterinary medicine. Emphasizes the structure of medical terms and determination of meaning based on prefixes, root words, and suffixes. Directional and descriptive terms are covered. Two one-hour lectures.310 Veterinary Technology Advanced Lab Sciences (3) An in depth study of laboratory procedures including lab safety, necropsy techniques, microscopy, sample collection and handling for cytology, microbiology, serology and urinalysis. Appropriate use of tests in view of the veterinary patient are covered. Two one-hour lectures and one two-hour lab. Prereq: VET 200 and VET 300; or permission of veterinary technology program director.
320 Veterinary Technology Lab Animals, Exotics, and Pocket Pets (3) Study of non-traditional pets including species commonly used in research. Students will learn restraint, sample collection and medicine administration. Basic nutrition, husbandry, and diseases are covered. Two one-hour lectures and one twohour lab. Prereq: VET 200 and VET 300, Grade of C or higher in all ANSC and VET courses, minimum GPA 2.80: or permission of veterinary technology program director.

330 Veterinary Technology Diagnostic Imaging (3) A course on appropriate diagnostic imaging skills in veterinary technology. Emphasis placed on diagnostic imaging in the areas of radiology and ultrasonography. Students will learn to safely and properly use standard equipment. Two one-hour lectures, one two-hour lab. Prereq: VET 200 and VET 300, Grade of C or higher in all ANSC and VET courses, minimum GPA 2.80: or permission of veterinary technology program director.

340 Veterinary Technology Animal Nursing (3) A course to develop skills in nursing techniques, restraint and handling of small and large animals, and critical care techniques. Two one-hour lectures, one two-hour lab. Prereq: VET 200 and VET 300, Grade of C or higher in all ANSC and VET courses, minimum GPA 2.80: or permission of veterinary technology program director.

## 350 Veterinary Technology Parasitology (3)

Introduction to parasites including their life cycles, identification, control methods, and zoonoses. Three one-hour lectures.

360 Small Animal Clinical Nutrition in Veterinary Medicine (3) A comprehensive course in small animal clinical nutrition for veterinary science students. The course will focus on basic principles of nutrition and how they apply to feeding small animals. This course will identify the six basic nutrients and their functions, explain how to understand pet food labels, and explore applications of nutrition for wellness, life stages and disease management primarily in dogs and cats.
400 Veterinary Technology Pharmacology (4) An introductory course on development and regulation of drugs and vaccines. Emphasizes calculation of drug dosage using a conversion factor method and uses a body system approach to commonly used veterinary drugs. Three one-hour lectures and one two-hour lab. Prereq: VET 200 and VET 300, and CHEM 111 or 121 and CHEM 112 or 122. Grade of $C$ or higher in all ANSC and VET courses, minimum GPA 2.80: or permission of veterinary technology program director.
410 Veterinary Technology Hematology and Clinical Chemistry (3) Introduction to veterinary hematology including blood and its components and their functions. Students learn how to collect samples,
perform and analyze blood smears. Basic concepts in clinical chemistry as related to organ systems and disease states are also covered. Basic use of laboratory equipment will also be covered. Two one-hour lectures and one two-hour lab.

420 Veterinary Technology Surgery, Anesthesia, and Dentistry (4) A preparatory course on the role of the anesthesiologist and surgical assistant in the veterinary surgical team. Anesthesia equipment, drug protocols, instrumentation and sterile technique are covered as well as responses to emergency situations. An introduction to veterinary dentistry will be included. Three one-hour lectures and one two-hour lab. Prereq: VET 200 and VET 300, and CHEM 111 or 121 and CHEM 112 or 122. Grade of C or higher in all ANSC and VET courses, minimum GPA 2.80: or permission of veterinary technology program director.

## 480 Capstone in Veterinary Technology

(3) Students will apply the skills and knowledge acquired in the veterinary technology program and demonstrate proficiency in key areas. Areas of emphasis will include professionalism, AVMA essential skills review, and VTNE review. This course should be taken by veterinary technology majors in the last semester on campus before completing their internship. Prereq or Coreq: VET 400, VEWT 410, VET 420 and CHEM 111 or 121 and CHEM 112 or 122 and grade of $C$ or higher in all ANSC and VET courses, minimum GPA of 2.80, and permission of veterinary technology program director.

490 Internship in Animal Technology (3) Fulltime work experience to be arranged through an animal related facility by the student and approved by academic adviser. Three hours credit. Can be repeated one time for a total of six hours of credit. Prereq: Senior standing and permission of veterinary technology program director.

## Wildlife Biology (WBIO)

## 240 Fish and Wildlife Management Tech-

 niques (3) This class will expose students to field and lab techniques commonly used in management of fish and wildlife populations. Course content includes methods used to capture, mark and handle animals; determination of age and sex; monitoring of individuals and populations; and population densityestimation. Includes field trips requiring walking through strenuous terrain. Two hours lecture and one three-hour lab. Prereq: Natural Resources Management Major or approval of instructor.

## 250 Principles of Wildlife Management (3)

Current principles and practices used in management of wild animals. Includes historical, biological, behavioral, sociological and economic components. Attention will be given to management tools including control of hunting, predator control, refugia, propagation and environmental controls. Three-hour lecture.

## 300 Principles of Fisheries Management (3)

An introduction to the concepts and approaches in management of fisheries, with emphasis on regionally important sport fishes. Includes coverage of manipulation of populations and habitat and consideration of various user groups such as commercial, recreational and non-consumptive users. Class sessions may involve outdoor activities. This course requires fieldwork involving physical activity. Two one-hour lectures and one three-hour lab.

## 301 Special Problems [topic title] (1-6)

Independent study projects for students exhibiting special interest and abilities in wildlife science. Written project outline and report of results required. Taught only by arrangement prior to registration.

## 311 Game Ecology and Management: [Topics

 title] (3-6) This course will be offered in two sections, each which may be taken for 3 hours credit ( 6 hours total). The first section, Waterfowl, is taught online and deals with the ducks and geese of North America, with an emphasis on those common along the Mississippi Flyway. The second section, General, covers waterfowl, big game, small game, upland gamebirds, and furbearers. The course will provide students with our most up-to-date scientific knowledge of the ecology of those species and with a basic understanding of the tools used by wildlife scientists and managers to maintain healthy populations. Students who successfully complete this course will be able to provide an overview of the range and status of the species of interest at a continental scale; detail the range, life history, behavior and habitat of the species of interest in Tennessee; explain the management history and recovery efforts for the species in Tennessee; understand essential components of habitat management, including establishment ofrefugia, food plots, native habitat provision, etc; and describe harvest management practices and policy.
312 North American Game Management (3) This course will provide a brief overview of the game of North America, and a more in-depth analysis of those present in Tennessee, including big game, small game, upland gamebirds, waterfowl, and furbearers. Course content will include life history and management.

320 White-tailed Deer (1) A complete study of white-tailed deer including biology, behavior, management, history, social impacts and damage control. Status of the population in Tennessee, food habits, management scenarios throughout the country will be considered, along with taxonomy of the species throughout its range.
330 Wildlife Biopolitics (3) Involves the study of special interest/political influences on wildlife management techniques and administration. It specifically outlines cases of management decisions in the Southeast involving big game, small game, furbearers and waterfowl.
340 Wildlife Law Enforcement and Public Rela-
tions (3) Fundamentals and general principles of local, state and federal laws and regulations governing natural resources and their management. Principles and practices of interacting with the public.
375 Human Dimensions of Wildlife (3) This seminar course provides students with popular and technical communication skills in oral and written formats that are necessary in the wildlife profession. Team and collaborative efforts, group dynamics, public forums, and other common communication media are included.

401-402 Research Participation (3) Application of the scientific method and techniques of research to investigation of problems in major subject areas of wildlife biology. Restricted to students with demonstrated ability to conduct a supervised research problem. Preparation of project outline and presentation of written and oral reports are required. Taught only by arrangement prior to registration. May be used for Agriculture, Geosciences, and Natural Resources Fellows Research Program.
405 Principles of Aquaculture (3) Principles and practices involved in the husbandry and production of fish and invertebrates; including nutrition,
site selection and design, water quality, and disease control. Common practices will be explored with the use of indoor and outdoor facilities on campus and around West Tennessee. Two one-hour lectures and one two-hour lab.
420 Wildlife Damage Management (3) Philosophies, principles and concepts related to practical management of wildlife-human conflicts. Includes basic information on the use of traps, toxicants, repellents, exclusion and other wildlife damage control methods that help resolve damage to property and threats to human health and safety. An integrated management approach is used, considering various techniques along with biological, economic and sociocultural aspects. Students will weigh these considerations, then use a Wildlife Damage Management Decision Model in formulating management approaches for real-world wildlife conflict situations. Prereq: Junior standing or permission of instructor.

## 441 Forensic Techniques in Wildlife Biology

(3) Investigative techniques of collecting, preserving and utilizing evidence involving violation of wildlife laws. Includes hair and tissue identification, osteology, wound examination, ballistics, cause and time of death, collecting and handling evidence and expert witness in court.
450 Wildlife Habitat Management (3) This course will provide students with an understanding of relationships between wildlife and forest, farmland and wetland habitats. Models and other methods used to quantify wildlife-habitat associations will be examined. Students will explore the concepts of habitat use, selection and preference; the importance of spatial scale; the significance of plant succession and the methods for manipulating habitats to increase, decrease and maintain wildlife populations. Planning, designing and budgeting wildlife management plans from a private and public land perspective are included. Includes field trips requiring walking through strenuous terrain. Two hours lecture and one three-hour lab. Prereq: Plant Science 341.
730 Wildlife Policy (3) An examination of external social influences on wildlife management and administration. This course utilizes guest lectures and case studies to explore how private and political influences impact science-based management of
wild animal populations. Content includes, but is not limited to, policy research and written reviews and analyses.

770 Topics in Wildlife Biology [Title] (1-6) Topics in selected areas of wildlife biology. For graduate students in the Master of Science in Agriculture and Natural Resources program. Can be used to meet requirements in the M.S.A.N.R. curriculum. May repeat enrollment up to six credit hours. Prereq: Graduate Coordinator and instructor's approval.

## Women's and Gender Studies (WMST)

## 201 Introduction to Women's and Gender

Studies (3) Surveys the study of women in society. The primary goal is to explore how gender shapes our views and understandings. A further goal is to explain how class, race, ethnicity and age shape the female experience historically and across cultures. The relationship between cultural definitions of feminine behavior and the reality of women's lives, roles in work, the family, the arts, politics and the sciences is examined.
450 Travel Study [Selected Topics] (1-3)
Course designed as an educational travel experience under the supervision of a university instructor. Topics, prerequisites, and course requirements announced in advance. Not regularly offered. May be repeated for credit.

460 Independent Study (1-3) Directed reading or research under supervision of a University instructor. By arrangement only. May be repeated for credit. Requires insturctor's approval.

## Zoology (ZOOL)

201 Human Anatomy and Physiology (4) An introductory course surveying the structure and function of human organ systems with major emphasis on the coordinated functioning of the body. Three one-hour lectures and one two-hour lab. ZOOL 201 may not substitute for ZOOL 251 . Student cannot receive credit for both ZOOL 201 and ZOOL 251.

## 251 Human Anatomy and Physiology I (4)

 (TBR: BIOL 2010) This course provides a brief introduction to basic chemistry and the fundamen-tals of cell biology and focuses on the structure and function of the integumentary, skeletal, muscular and nervous systems. Three one-hour lectures and one two-hour lab.

304 (504) Comparative Vertebrate Anatomy (5) Classification and phylogeny of the vertebrates, followed by a detailed study of integumentary and skeletal systems of a variety of forms. Dissections of dogfish shark, necturus and cat, with emphasis on digestive, respiratory, circulatory, urogenital and nervous systems. Three one-hour lectures and two two-hour labs. Prereq: BIOL 130-140 with grades of C or better.
315 (515) Invertebrate Zoology (4) Phylogeny, morphology and ecology of invertebrate animals. This course may require field work involving physical activity. Three one-hour lectures and three one-hour lab classes. Prereq: BIOL 130-140 with grades of C or better.

319 (519) Mammalogy (3) Biology, natural history, classification and identification of mammals with emphasis on the local fauna. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 110-120 and instructor's approval, or BIOL 130-140 with grades of C or better.
320 (520) Ichthyology (3) Identification, classification, distribution, life history and economic importance of fishes. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better.
321 (521) Ornithology (3) Introduction to external structure, classification, migration, behavior and phylogeny of birds. Most lab periods are spent studying birds in the field. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 110-120 and instructor's approval, or BIOL 130-140 with grades of C or better.
322 (522) Herpetology (3) Introduction to the study of reptiles and amphibians including structure, classification, distribution, ecology, behavior and identification. Emphasis is on local species. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better.

323 (523) Field Ornithology (3) A study of the identification, classification, diversity and ecology of birds; taught during the summer at the Reelfoot Lake Environmental Field Station. This course requires field work involving physical activity. Prereq: BIOL 130-140 with grades of C or better or instructor's approval.
325 (525) General Entomology (4) A study of the biology, ecology, morphology, natural history, and taxonomy of insects. Emphasis on positive and negative human-insect interactions and identification of local insect fauna. This course requires field work involving physical activity. Three one-hour lectures and one three-hour lab. Prereq: BIOL 130-140 with grades of C or better.
326 (526) Aquatic Macroinvertebrates (3) An introduction to the study of freshwater macroinvertebrates including structure, classification, ecology and identification. This is a field course taught at the Reelfoot Lake Environmental Field Station in Samburg, TN. The course requires field work involving physical activity. Prereq: BIOL 110-120 and instructor's approval, or BIOL 130-140.
327 (527) Field Herpetology (3) A study of the identification, classification, diversity and ecology of reptiles, taught during the summer at the Reelfoot Lake Environmental Field Station. This course requires field work involving physical activity. Prereq: BIOL 130-140 or instructor's approval.

## 328 (528) Natural History of the Vertebrates

(3) Life modes of various types of vertebrates. Identification of common, local and American species, distributions, life histories and ecology. Recommended for students in elementary or secondary education or biology students who do not intend to take other vertebrate morphology courses. This course requires field work involving physical activity. Two one-hour lectures and one three-hour lab. Three weeks of combined lecture and lab sessions. Prereq: BIOL 110-120 and instructor's approval, or BIOL 130-140 with grades of C or better.

## 352 (552) Human Anatomy and Physiology

II (4) This course focuses on the structure and function of the endocrine, reproductive, digestive, respiratory, excretory, lymphatic, immune and cardiovascular systems, with additional emphasis on
blood, metabolism and the maintenance of fluid and electrolyte balance. Three one-hour lectures and one two-hour lab. Prereq: ZOOL 251 with grade of C or better or instructor's permission. Students may not receive credit for both ZOOL 252 and ZOOL 352.
413 Vertebrate Physiology (3) An introduction to the comparative study of vertebrate physiology. Focus on integumentary, circulatory, respiratory, urinary/osmoregulatory, and digestive systems with an emphasis on the relationships among energetic demand, environment, and physiological divergence. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better.
440 (640) General Parasitology (4) A study of animal parasites. Emphasis on morphology, taxonomy, life history, ecology and host-parasite relationships. Three one-hour lectures and three one-hour lab classes. Prereq: BIOL 130-140 with grades of C or better.
441 (641) Animal Ecology (3) Basic principles of animal ecology and population biology. Prereq: BIOL 130-140 with grades of C or better.

## 442 (642) Animal Ecology Laboratory (1)

Lab studies of the methods of animal ecology. This course requires field work involving physical activity. One two-hour lab. Coreq: ZOOL 441.
443 (643) Animal Behavior (3) A course designed to expose students to the ecological, evolutionary, physiological and psychological aspects of animal behavior in a wide variety of animals. Lab exercises with animals in their natural environment or in a lab setting focus on observational and experimental techniques used in current animal behavior research. This course requires field work involving physical activity. Two one-hour lectures and one two-hour lab. Prereq: BIOL 130-140 with grades of C or better.
461 (661) Histology (4) The study of characteristics and properties of primary normal animal tissues and special histology dealing with the arrangement and adaptations of tissues in organs. Three one-hour lectures and one three-hour lab. Prereq: BIOL 130140 with grades of $C$ or better.
462 (662) Neuroscience (3) This is an upper-division course examining the anatomy and physiology
of the human nervous system from a molecular, cellular, systemic, behavioral and cognitive level. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better and ZOOL 251 with grade of C or better.

463 (663) Endocrinology (3) This course includes the concepts, examples and applications of vertebrate hormones. A focus is placed on the critical roles of receptors and cellular/molecular signaling pathways in the control of physiological/ pathophysiological processes by hormones. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better, and ZOOL 251 and 352 with grades of C or better.

## The Graduate Programs



The University of Tennessee at Martin

## The Graduate Programs

For information regarding the Graduate Programs contact:

Dr. Joey E. Mehlhorn

Interim Dean of Graduate Studies
The University of Tennessee at Martin
554 University Street
227 Administration Building
Martin, TN 38238
731-881-7012
fax 731-881-7499

## Graduate Program in Agriculture and Natural Resources

Master of Science in Agriculture and Natural Resources
Dr. Philip L. Smartt
Interim Coordinator of Graduate Program in
Agriculture and Natural Resources
574 University Street
254 Brehm Hall
731-881-7954
fax 731-881-7968
psmartt@utm.edu

## Graduate Program in Family and Consumer Sciences

Master of Science in Family and
Consumer Sciences
Dr. Lisa C. LeBleu
Coordinator of Graduate Program in Family and Consumer Sciences
538 University Street
330 C Gooch Hall
731-881-7116
fax 731-881-7106
llebleu@utm.edu

## Graduate Program in Business

Master of Business Administration
Dr. Hui Chen
Coordinator of Graduate Program in Business
231 Lovelace Street
18 Business Administration Building
731-881-7208
fax 731-881-7241
mba@utm.edu

Graduate Program in Communication
Master of Arts in Strategic Communication
Dr. Tracy M. Rutledge
Co-coordinator of Graduate Program in Communications
538 University Street
305M Gooch Hall
731-881-7554
fax 731-881-7550
trutledge@utm.edu
Dr. Chara Van Horn
Co-coordinator of Graduate Program in Communications
538 University Street
305E Gooch Hall
731-881-7548
fax 731-881-7550
cvanhorn@utm.edu

## Graduate Program in Education

Master of Science in Education
Dr. Clinton Smith
Coordinator of Graduate Program in Education
538 University Street
237E Gooch Hall
731-881-7123
fax 731-881-7975
teach@utm.edu

## Graduate Program in Jackson

UT Martin Jackson Center
3031 Highway 45 Bypass
Jackson, TN 38301
731-425-9277

## Graduate Admission Procedures and Requirements

## General Requirements

Anyone with a bachelor's degree wishing to take courses for graduate credit, whether or not he/she wishes to become a candidate for a degree, must make formal application for admission to graduate study. Admission to graduate study does not make a student a candidate for a graduate degree. Only persons who have received a letter of admission from the Dean of Graduate Studies may enroll in graduate courses. Individuals who were admitted to graduate study but did not matriculate must submit a new application and meet admission requirements in effect for the term they wish to enroll. An applicant may be admitted at the beginning of any semester. Early application is encouraged. For a guaranteed decision on admission, completed application packets must be received in the Graduate Studies Office 28 days prior to the first day of the semester for which admission is requested. A completed application packet consists of application for admission, application fee, and all supporting documentation (i.e., transcripts, test scores, letters of reference, resume, essay, teaching license, etc.) required for the graduate program and admission level requested. All documents used for admission purposes become the property of The University of Tennessee at Martin and will not be returned. Students have the right to review their individual files.

Admission requirements for the graduate programs in Agriculture and Natural Resources, Family and Consumer Sciences, Business, Education, and Strategic Communications can be found on the following pages.

## Re-Enrollment

Students who were previously enrolled as graduate students at UT Martin but have not been enrolled for one semester (excluding summer) must submit an updated application form.

## Procedures for Admission

1. Apply online at www.utm.edu or obtain an application for admission from the Graduate Studies Office, The University of Tennessee at Martin, 554 University Street, 227 Administration Building, Martin, TN 38238.
2. Submit the online application (or completed paper application) with payment of the $\$ 30$ non-refundable application fee (additional $\$ 100$ processing fee for foreign students).
3. Request the registrars of all colleges and universities attended to send one official transcript directly to the Graduate Studies Office.
4. Request that official scores of the appropriate qualifying examination as required by the intended graduate program be sent directly to the Graduate Studies Office by the testing agency.
5. International students must also follow the special instructions detailed in the International Students section of this catalog.

A decision on admission cannot be made until all procedures have been completed and official documents have been received. Applicants who have not been admitted may not register for classes.

Each applicant is responsible for arranging to take the appropriate qualifying examination as required and for requesting the transmission of scores directly to the Graduate Studies Office from the appropriate testing agency.

Computer-based testing is available for the GRE General and GMAT. Contact the UT Martin Testing Center (731-881-7727) for registration information.

## International Students

International applicants seeking admission to graduate programs must furnish the following in addition to all other entrance requirements:

1. a completed, signed application including an accurate chronological outline of all previous education.
2. official university transcript(s) with certified translations if the records are in a language other than English. Transcripts must include descriptive titles of courses, credit hours for each subject and grades received to earn credit.
3. a non-refundable payment of $\$ 130$ ( $\$ 30$ application fee and $\$ 100$ processing fee).
4. official minimum TOEFL score of at least 525 (UT Martin's institutional paper test only) or IBT of 71 (internet based), or International English Language Testing System (IELTS) score of 6.5 is required, unless the applicant's native language is English or the applicant has earned a baccalaureate or higher-level degree within the past three years from a regionally accredited college or university in the United States.
5. a bank letter or other papers of financial support. Financial aid is not available for international students.
6. applicant's immunization record translated into English.
7. a completed Transfer Clearance Form (for applicants who are transferring from other institutions in the United States).

Information and forms needed for application to The University of Tennessee at Martin or the Tennessee Intensive English Program may be obtained by writing to The University of Tennessee at Martin, Office of International Programs and International Admissions, 144 Gooch Hall, 538 University Street, Martin, TN 38238, or online at www.utm.edu/tiep.

Only one I-20 will be issued for each admission. If the student does not enroll for the specified term the I-20 must be returned before a second is issued.

All required documents should be in the Office of International Programs and International Admissions (144 Gooch) well in advance of the semester in which the applicant plans to enroll to allow forwarding of the completed application to the Graduate Studies Office by the application deadline (twenty-eight days prior to the first day of the semester). An accepted applicant will be issued a letter of admission and an I-20 form, which will be necessary to obtain a student visa. Students must appear on campus no later than the date specified on the I-20 form.

An international student whose use of the English language appears to be inadequate after he/she arrives at the university will be required to take an English proficiency examination. If the student cannot pass this examination, he/she will be required to enroll in a course in English for foreign students.

## Types of Admission

All applicants must have an earned bachelor's degree. (Exceptions: see catalog sections entitled Second Master's Degree, and Seniors Taking Graduate Coursework.) Applicants must meet the university requirements for admission as either degree-seeking or non-degree graduate students. They must also meet the admission requirements for the college in which they intend to pursue graduate work, which may exceed the university's minimum requirements.

## Degree Seeking

This admission is for applicants who want to obtain a master's degree from UT Martin. Degree-seeking applicants who do not already have an advanced degree must meet the minimum Grade Point Average (GPA) and qualifying examination requirements specified below for the unconditional, conditional, or unclassified category.

## Early

Early unconditional admission is available to a degree-seeking applicant who is currently enrolled in the final semester for a baccalaureate degree at a university/college in the U.S. The Graduate Studies Office must have received official qualifying exam score(s) which equal or exceed the minimum requirement, current official transcript from the institution currently being attended and one official transcript from any other colleges/ universities attended previously. The applicant must also meet the requirements for unconditional admission to the intended graduate degree program, which may exceed the university's minimum requirements.
If the applicant meets the admission requirements for unconditional admission, an early admission letter will be sent. A final official transcript must be received within the first semester of the student's graduate enrollment.

## Unconditional

Unconditional admission requires at least a 2.50 cumulative grade point average (GPA) on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) from a regionally accredited college or university and an acceptable graduate qualifying examination score as required by the program in which they intend to enroll, which may vary depending on the applicant's GPA, as specified in the admission requirements of the college in which the student intends to pursue graduate work.

## Conditional

Applicants may be granted conditional admission status subject to the following conditions.

1. They must meet the specified minimum graduate qualifying examination score requirement for the graduate degree program in which they intend to enroll.
2. They must meet one of the following minimal GPA requirements on a 4.00 scale (GPA requirement is waived if applicant graduated at least five years before the semester for which admission is being requested):
a. Cum GPA-a 2.50 cumulative GPA on all work attempted prior to completion of the baccalaureate degree, or
b. SrYr GPA - a 3.00 GPA on the last 30 semester hours attempted in the baccalaureate degree (all work will be computed for the number of semesters necessary to total the last 30 semester hours), or
c. a 3.00 GPA on the SrYr plus any post-baccalaureate upper-division and/or graduate courses. (Any courses included in the SrYr calculation may be repeated to raise the GPA to 3.00.)

Applicants admitted as conditional students:

1. may take at most four graduate courses for only 8-15 hours of graduate coursework as a conditional student, including any hours attempted as an unclassified student in the same degree program.
2. must maintain a 3.00 Cum GPA and must earn at least a 3.00 Cum GPA for the $8-15$ hours before they can move to unconditional status. If the 3.00 Cum GPA is maintained the move to unconditional status occurs automatically at the conclusion of the semester in which 8 hours of graduate course work is completed successfully.

Subject to the recommendation of the college's graduate committee, courses taken as a non-degree student may be applied to the $8-15$ hours limitation-if specified at the time conditional admission is granted. For M.B.A. and M.S.A.N.R. students, no courses offered for elective credit may be taken without the permission of the respective graduate coordinator/designee.

## Unclassified

Applicants for degree-seeking status who meet the minimum GPA requirements for conditional admission but cannot provide a satisfactory official qualifying exam score may be granted unclassified admission. Unclassified students may enroll for one semester only and for a maximum of two graduate courses. They must achieve a 3.00 Cum GPA. Exception: Unclassified admission is not available for Business graduate students.

Continued enrollment as a degree-seeking student after the initial semester is subject to satisfactory completion of the requirements for conditional or unconditional admission in place when the student desires to re-enroll. If the student cannot satisfy the minimum conditional admission requirements, future enrollment must be in the non-degree category. The student must sign a form acknowledging this change in admission status.

A maximum of 12 hours of graduate courses (with at least a B in each course) taken as an unclassified and/ or non-degree student may be applied toward a degree, subject to the six-year time limit for completion of a degree.

## Second or Subsequent Master's Degree

Applicants for admission to graduate study who have received an advanced degree from a regionally accredited college or university are subject to individual review by the appropriate graduate program coordinator/designee, the dean of the academic unit to which they seek admission and the dean of graduate studies. Admission can be either unconditional or conditional. Note: Applicants who already have a UT Martin master's degree will automatically be accepted if applying for a degree offered by the same college as the earlier degree. Exception: All applicants for Counseling and Educational Leadership must be reviewed by the appropriate admission committee.

A student may obtain a second or subsequent master's degree in any of the programs offered. A maximum of nine hours (from a regionally accredited institution) applied toward the first (or prior) graduate degree may be applied toward the subsequent degree if approved by the college's graduate committee within which the subsequent degree is earned. For any degree, up to nine (9) hours from a previous degree (or degrees) may be used; however, a course can only be applied toward an additional degree one time. Hours applied toward the subsequent degree must be approved by the college's graduate committee within which the subsequent degree is being earned. A grade of at least a B must have been earned in courses allowed to count toward the subsequent degree and the course must be within six years of the graduation date for the subsequent degree. An extension on the time limit for courses taken towards the first (or prior) degree will not be allowed. Courses from the prior degree not applied towards the subsequent degree but required by the subsequent degree may not be repeated. Students will take graduate electives approved by the adviser instead of repeating the required courses. The total hours for the subsequent degree will not be reduced and a subsequent comprehensive exam must be taken. For students seeking a subsequent degree, cumulative GPA for the subsequent degree is based on UT Martin coursework taken beginning with admission to the subsequent degree program (plus the hours attempted and quality points for any UT Martin courses taken prior to admission and used to satisfy requirements for the subsequent degree).

Note: The current M.S.Ed. with a Major in Teaching replaces the former M.S.Ed. in Curriculum \& Instruction; the M.S.Ed. with a Major in Counseling replaces the former M.S.Ed. in Educational Psychology \& Guidance;
the M.S.Ed. with a Major in Educational Leadership replaces the former M.S.Ed in Educational Administration and Supervision.

## Non-Degree

In order to serve the educational needs of individuals who wish to undertake graduate study without pursuing a degree, an applicant with an earned degree may be admitted as non-degree if he/she meets one of the following requirements. (Exception: An applicant for Business can be admitted as non-degree only if he/she has earned a graduate degree in business.)

1. Cumulative GPA: Cum GPA—at least a 2.50 cumulative GPA on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) or
2. Senior Year GPA: SrYr GPA - at least a 3.00 GPA on the last 30 semester hours attempted in the baccalaureate degree (all work will be computed for the number of semesters necessary to total the last 30 semester hours) or
3. Senior Year plus any Post-Baccalaureate Upper Division and/or Graduate Work: at least a 3.00 GPA on the SrYr plus any post-baccalaureate, upper-division and/or graduate courses (courses included in the SrYr calculation may be repeated to raise the GPA to 3.00 ) or
4. Graduate Degree: completed graduate degree from regionally accredited institution.

Applicants in programs requiring graduate qualifying examinations for admission who do not meet any of the above GPA requirements must have the minimum graduate qualifying examination score and approval of the graduate committee in the intended major. Applicants in programs not requiring a graduate qualifying examination must meet one of the GPA requirements.
Non-degree students must meet all course prerequisites and receive permission to register for the course from the appropriate graduate coordinator/designee.
If a non-degree student later wishes to pursue a degree, the student must satisfy each of the following requirements:

1. meet the college's graduate qualifying examination minimum score, if required
2. receive approval of the college's graduate committee
3. have a bachelor's degree with one of the following GPAs
a Cumulative GPA: 2.50 Cum GPA ( 2.75 for unconditional admission in Agriculture and Natural Resources; 2.70 for unconditional admission in Education), or
b. Senior Year GPA: 3.00 SrYr GPA, or
c. Senior Year plus any Post-Baccalaureate Upper Division and/or Graduate Work: 3.00 GPA on the SrYr plus any post-baccalaureate upper division and/or graduate courses. (Any courses included in the SrYr calculation may be repeated to raise the GPA to 3.00.)
4. maintain a 3.00 Cum GPA in graduate work attempted at UT Martin.

Upon admission to a graduate degree program, a maximum of 12 hours of graduate courses (with at least a B in each course) earned as a non-degree and/or unclassified student may be accepted in a degree program. If a student is admitted into a degree program from non-degree status, the date of the earliest course approved for graduate credit will be used as the beginning of the six-year time limit toward completion. Exception: Credit earned as non-degree may not be accepted toward a graduate Business degree.

## Transient Students

A student who has been admitted to a master's degree program at another institution (whether matriculated or not) and who wishes to take courses for transfer to that institution may be admitted as a transient student upon receipt of an application for admission, application fee and an official letter from that institution verifying that the student is enrolled in a graduate degree program and is in good academic standing.

The transient classification is valid for one semester only. Enrollment as a transient student in any subsequent semester requires reapplication (no additional application fee required) and an official letter from the applicant's degree-granting institution affirming that the student is enrolled in a graduate degree program and remains in good standing. A maximum of 12 UT Martin graduate semester hours may be accumulated while enrolled as a transient student.

## Seniors Taking Graduate Coursework

A senior at The University of Tennessee at Martin who needs less than 30 semester hours to complete the requirements for a bachelor's degree and has at least a B (3.00) cumulative average, may take sufficient work for graduate credit to make a combined total of undergraduate and graduate credit hours of not more than 15 per semester, subject to the approval of the dean of graduate studies. Business courses may be taken only if a student meets all undergraduate prerequisite course requirements and has at least a minimum score of 500 on the GMAT.

Approval must be obtained through the Graduate Studies Office each semester at registration. Eligible seniors may take no more than a cumulative total of nine semester hours of graduate credit. Students wishing to apply graduate courses taken as a senior toward a master's degree program should consult the appropriate graduate program coordinator/designee before registering for the courses.

The student must complete a graduate application for admission and pay the application fee.

# Graduate Students Taking Graduate Courses in Other Graduate Programs 

Students admitted to graduate degree programs at The University of Tennessee at Martin may, under certain conditions, choose graduate elective hours from courses designed primarily for another degree program. In order to enroll in a course offered primarily for another degree program, the student must have (1) prerequisites for the course offered, (2) been recommended by the graduate degree coordinator/designee of the student's degree program and (3) been accepted by the graduate degree coordinator/designee of the program offering the course.

## Auditors

Students may audit courses subject to the approval of the adviser and the instructor whose class is visited. Students should be aware that if they do not meet the prerequisites for a course they wish to audit and the program in which the course is offered, the instructor will decide whether or not the student can audit the course. Instructors have the authority to drop a student who is auditing if the student does not satisfy the requirements as outlined by the instructor when permission is granted to audit a course. Auditors may take part in lab or field work only by permission of the instructor, consistent with departmental policy.

## Special Fee Policy for Totally Disabled and/or Senior Citizens

For information concerning the special fee policy for totally disabled and/or senior citizens who wish to enroll in courses for credit or non-credit, contact the Office of Academic Records (731-881-7050).

## Faculty Members and Staff

Faculty and staff employed by The University of Tennessee at Martin may apply for admission to graduate study in order to enroll in graduate level courses. Because of the demands required of graduate level courses and potential for conflict of interest, faculty and staff must demonstrate their enrollment in graduate courses will not adversely affect their job responsibilities or create a conflict of interest. The employee's supervisor, the dean of their respective program, the dean of graduate school, and the provost shall approve all applications for full time faculty and staff to enroll in graduate courses while employed by the university. However, any member of the UT Martin central administration above the position of director may not be admitted.

# Admission Requirements for the Department of Agriculture, Geosciences, and Natural Resources 

Applicants may be admitted as degree seeking (Unconditional, Conditional, or Unclassified) or non-degree as listed below. Degree-seeking applicants must meet the university requirements listed above under Types of Admission.

Students must have satisfactorily completed prerequisites to advanced courses in the selected areas in agriculture and natural resources. Graduates of curricula other than agriculture and natural resources may have acquired sufficient backgrounds in related science and may be accepted for admission. Each applicant's request for admission to the program and to specific courses will be evaluated for the need for undergraduate prerequisites. In addition to the requirements below, all applicants for admission must submit a statement of purpose for pursuing graduate studies, a current resume outlining work experience and training, all college transcripts, and at least two letters of reference from a professor or work supervisor. Students wishing to complete a thesis in the MSANR program must take the General Graduate Record Exam (GRE) with a writing score of at least 3.5. Students wishing to complete the non-thesis are not required to take the GRE. Changing from the non-thesis option to the thesis option does require completing the GRE.
Additional requirements for unconditional and conditional admission appear below.

## A. Unconditional Admission

1. Cum GPA of at least 2.75 AND
2. Applicant must have earned a B.S. degree in agriculture, natural resources management, park and recreation administration, wildlife science, or business (for Agribusiness and Risk Management concentration only) from a regionally accredited institution AND
3. Applicant must have a positive review from the Master of Science in Agriculture and Natural Resources (M.S.A.N.R.) Graduate Admission Committee.
B. Conditional Admission
4. Applicant must have earned a bachelor's degree from a regionally accredited institution AND
5. Applicant must have a positive review from the M.S.A.N.R. Graduate Admission Committee. The committee review includes (a) applicant's academic record with particular attention to the last two years of undergraduate work and previous graduate studies; (b) quality of work experience and other activities that demonstrate potential for leadership as demonstrated through a current resume; (c) at least two recommendation letters from professors and work supervisors; and (d) statement of purpose for pursuing graduate work.

The admission decision is based on all factors that make up the total application; however admission preference will be given to applicants with a B.S. degree in agriculture, natural resources management, park and recreation administration, wildlife science, business (for Agribusiness and Risk Management concentration only), or a related field.

## C.Unclassified or Non-Degree Admission

Applicants who do not meet requirements for either unconditional or conditional admission may be eligible for unclassified or non-degree admission and must submit all required admission materials. See university requirements listed in Types of Admission.

## Admission Requirements for the Department of Family and Consumer Sciences

Applicants may be admitted as degree seeking (Unconditional, Conditional, or Unclassified) or non-degree as listed below. Degree-seeking applicants must meet the university requirements listed above under Types of Admission.

Students must have satisfactorily completed prerequisites to advanced courses in the selected areas in family and consumer sciences. Graduates of curricula other than family and consumer sciences may have acquired sufficient backgrounds in related sciences and may be accepted. Each applicant's request for admission to the program and to specific courses will be evaluated for the need for undergraduate prerequisites.

## A. Unconditional Admission

400 times the applicant's Cum GPA plus GRE score (Verbal and Quantitative) must equal or exceed 1,400 points (minimum acceptable GRE score is 280).

## B.Conditional Admission

400 times applicant's Cum GPA plus GRE score (Verbal and Quantitative) must equal or exceed 1,280 points (minimum acceptable GRE score is 280) OR
400 times the applicant's SrYr GPA plus GRE score (Verbal and Quantitative) must equal or exceed 1,480 points (minimum acceptable GRE score is 280) OR
Minimum GRE score of 280 (Verbal and Quantitative) if exempted from the university's minimum GPA requirement.

## C.Unclassified or Non-Degree Admission

Applicants who do not meet requirements for either unconditional or conditional admission may be eligible for unclassified or non-degree admission. See previous section on Types of Admission.

Admission to the Dietetic Internship Program (DI) is in addition to admission to the university. Applicants must meet the following criteria to be considered for admission to the clinical portion of the Dietetic Internship Program (DI) under the Dietetics Option of the master's program. Applications are screened for selection on a competitive basis by a committee. Exceptions to minimum requirements will be screened for possible acceptance into the program.

1. Admission as a degree seeking student in the UT Martin graduate studies program (minimum 280 GRE is required for admission).
2. Minimum 3.00 cumulative GPA on a 4.00 scale (or equivalent).
3. Verification statement showing completion of DPD.
4. Recency of education in courses related to practice. If the degree is more than five years old, six credit hours of college coursework must be taken; if degree is more than 10 years old, 12 credit hours of coursework are required.
5. Preference is given to applicants whose combined Verbal and Quantitative GRE scores equal or exceed 300 .

## Admission Requirements for the College of Business and Global Affairs

Applicants may be admitted as degree seeking (Unconditional or Conditional) as listed below. Degree-seeking applicants must meet the university requirements listed above under Types of Admission.

To be considered for admission in the College of Business and Global Affairs (CBGA), applicants must hold a bachelor's degree from an accredited college or university or be currently enrolled in their final semester for a baccalaureate degree at an accredited American university/college. In addition, applicants must supply a resumé (including work history and educational record), a minimum acceptable GMAT Total Score (or the equivalent Educational Testing Service GRE score) and official transcripts from all universities/colleges attended. (NOTE: Students not achieving at least a 3.5 score on the Analytical Writing portion of the GMAT or GRE Exam, or students receiving a GMAT/GRE waiver must successfully complete (with a letter grade of C or better, or pass for a pass/fail course) Business Administration 701, English 325/525, Intensive English levels V and VI, or a writing course to be approved by the CBGA Graduate Coordinator during the first term in which they take graduate courses.) If the GMAT or GRE is taken more than once, the highest GMAT Total Score (or GRE equivalent) is used for determining admission and the highest Analytical Writing Score is used for determining whether additional coursework must be taken. All materials should be submitted to the Graduate Studies Office, The University of Tennessee at Martin, Martin, TN 38238.

If official GMAT or GRE scores are not available by the first day of the semester, unofficial scores may be used through the add deadline (first week of classes) one time for a one-semester admission decision. If the decision is favorable, the admission would be in the "conditional" category. However, official scores resulting in formula points sufficient for a positive decision must be provided to the Graduate Studies Office no later than the end of the semester. Failure to provide official acceptable scores prior to this deadline will result in dismissal from the MBA program at the end of the semester.

## A. Unconditional Admission

The applicant must

1. a. hold a bachelor's degree from an accredited college or university and meet minimum GPA requirements specified in Types of Admission
b. have earned a Cum GPA such that 200 times GPA plus the Total Score on the Graduate Management Admissions Test (GMAT) must total at least 1,050 points or if the SrYr GPA is used, the sum of SrYr GPA times 200 plus GMAT must total at least 1,100 (minimum acceptable GMAT Total Score is 450 .) If the GRE is used rather than the GMAT, the GMAT equivalent will be calculated from the GRE scores (using comparison tools provided by Educational Testing Services) for purposes of the calculation described above.
c. submit a two-page, single-spaced, well-worded and grammatically correct essay (typed, 12 pt . Times New Roman font, 1 " margins) on a topic provided by the MBA office of the College of Business and Global Affairs.
d. have a positive review from the CBGA Graduate Admission Committee
2. If the applicant's exceptional professional achievement (to include at least three years of professional experience) clearly demonstrates to the College of Business and Global Affairs Graduate Admission Committee high promise of success at graduate work, then the applicant must
a. hold a bachelor's degree from an accredited college or university and meet minimum GPA requirements specified in Types of Admission
b. have earned a Cum GPA such that 200 times GPA plus the Total Score on the GMAT must total at least 950 points or if the SrYr GPA is used, the sum of SrYr GPA times 200 plus GMAT
must total at least 1,000 . If the GRE is used rather than the GMAT, the GMAT equivalent will be calculated from the GRE scores (using comparison tools provided by Educational Testing Services) for purposes of the calculation described above.
c. submit a two-page, single-spaced, well-worded and grammatically correct essay (typed, 12 pt. Times New Roman font, 1 " margins) on a topic provided by the MBA office of the College of Blusiness and Global Affairs.
d. provide a letter of recommendation from his/her most recent employer in addition to the current resumé referenced above. The letter should be sent to the Graduate Studies Office, The University of Tennessee at Martin, Martin, TN 38238.
e. have a positive review from the CBGA Graduate Admission Committee. A limited number of applicants meeting this criteria will be admitted on a competitive basis.

## B. Conditional Admission

The applicant must

1. hold a bachelor's degree from an accredited college or university and meet minimum GPA requirements specified in Types of Admission AND
2. have a positive review from the CBGA Graduate Admission Committee. The committee review may include (a) applicant's academic record with particular attention to the last two years of undergraduate work and previous graduate studies; (b) scores on the GMAT and the Test of English as a Foreign Language (TOEFL) for those whose native language is not English; (c) quality of work experience and other activities that demonstrate potential for leadership; and (d) recommendations from professors and work supervisors. The admission decision is based on all factors that make up the total application; however, admission preference will be given to applicants with full-time work experience after obtaining the undergraduate degree. The entrance exam (GMAT or GRE) may be waived for those applicants with a minimum of seven years of full-time professional business experience demonstrating progressive responsibility after completing the bachelor's degree. Professional business experience after completion of the undergraduate degree is a particularly important consideration for the more competitive application process for the online MBA. Applicants must also submit a two- page, singlespaced, well-worded and grammatically correct essay (typed, 12 pt. Times New Roman font, 1 " margins) on a topic provided by the MBA office of the College of Business and Global Affairs.

All applicants for the online MBA are required to submit three letters of reference. Applicants for the Hybrid MBA may submit up to three letters of reference for consideration but are required to submit three letters of reference only if requesting waiver of the entrance exam based on professional business experience.

## Undergraduate Foundation Courses

The following courses, or their equivalents, are required as a foundation to graduate programs in business. A letter grade of C or better must be earned in each foundation course. In addition, several courses in the program may not be taken until one or more prerequisites have been satisfactorily completed.

Accounting 201 Financial Accounting for Decision Making or Accounting 300 Accounting for NonBusiness Students (If Accounting 201 or 300 is not successfully completed prior to admission to master's program in business, one of the courses or its equivalent must be satisfactorily completed by the end of the second semester in the program.)

Mathematics 210 Elementary Statistics and Probability (If not successfully completed prior to admission to master's program in business, Mathematics 210 or its equivalent must be satisfactorily completed by the end of the first semester in the program.)

## Admission Requirements for the College of Education, Health, and Behavioral Sciences

Applicants may be admitted as degree seeking (Unconditional or Conditional) or non-degree as listed below. Degree-seeking applicants must meet the university requirements listed above under Types of Admission and have received licensure to teach (Major in Teaching-Curriculum and Instruction; Major in Instructional Leadership) and must meet the minimal graduate qualifying GPA.

Note: A student may be admitted to the Curriculum and Instruction program for one semester with the proof that the recommendation for teaching licensure has been sent to the appropriate state department of education. At the end of the add period for that semester, a Graduate Hold on that student that will prevent registration for additional semesters until verification of the actual teaching license is received.

In addition to the above, all applicants for a Major in Counseling (degree-seeking, non-degree, or endorsement) must submit the following for review and recommendation from the Counseling Admission Board:

1. three letters of recommendation from school superintendents, principals, teachers, professors and/or employers. Each letter must provide clear evidence that addresses the candidate's counseling skills and/ or potential which will enable the individual to become a counselor. Letters should be on letterhead or sent from a professional email address, and must be mailed by the reference directly to the Graduate Studies Office, 227 Administration Building, UT Martin, Martin, TN 38238.
2. a two-page typed essay that fully describes the candidate's skills and experiences relevant to becoming a successful counselor. The candidate must also discuss the perceived personal abilities and attributes that will enable the counseling candidate to become a successful counselor.
3. a current resumé. The resumé needs to describe fully the candidate's degrees and importantly, the person's occupational experiences-particularly any counseling experiences obtained.
4. written acknowledgment of required participation in a 3-day on-campus residency. Students will be notified a semester in advance of their eligibility to participate. Students are responsible for all travel and lodging costs. The acknowledgement form can be obtained at http://www.utm.edu/departments/edgrad/ forms.php.
5. documentation of teaching experience provided by the applicant's school system on appropriate letterhead. If applicant does not have teaching experience, Counseling 712 is required during the first semester of coursework. Applicants without teaching experience must submit a signed acknowledgment of this requirement. The "No Teaching Experience" form can be obtained at http://www.utm.edu/departments/edgrad/forms.php.
6. a completed background check acknowledgement form. The form can be obtained at http://www.utm. edu/departments/edgrad/forms.php.

For further details, contact the Coordinator/designee of Graduate Program in the College of Education, Health, and Behavioral Sciences.

Applicants who do not receive a positive recommendation from the Counseling Admission Board for admission to the UT Martin Counseling Program, and wish to appeal the decision, must do so within four weeks of the issuance of their denial notice/letter by the university's Dean of Graduate Studies.

In addition to GPA requirements, all applicants for Instructional Leadership (degree-seeking, non-degree, or endorsement) must also submit the following documents (items 1-8) for review and recommendation from the Instructional Leadership (EDLD) Program Admission Committee.

1. Personal statement of prior experience in leading change. Provide documented evidence to support your claims. Please limit the response to two pages maximum.
2. Current resumé.
3. The Applicant Recommendation Form must be completed and submitted by principal/superintendent and/or former principal/superintendent. The form is available on the Education Graduate Program webpage (http://www.utm.edu/departments/edgrad/forms.php).
4. Copy of current teaching license.
5. Verification of education working experience. Two years of successful education working experience prior to starting the program are required.
6. Signed complete copy of most recent performance appraisal by a state approved evaluation model or similar measure for the past two years.
7. Two letters of recommendation addressing the candidate's knowledge of effective leadership practices (I.E. prior experience leading change, fostering collaboration, or supporting growth and development of staff), leadership skills, and attitudes and dispositions.
(Note: Letters of recommendation must be from anyone who is familiar with your education working experience.)

Admission is dependent upon submission of these documents and a positive review by the Program Admission Committee in the College of Education, Health, and Behavioral Sciences.

Applicants who do not receive a positive recommendation from the Program Admission Committee for admission to the UT Martin Instructional Leadership Program, and wish to appeal the decision, must do so within four weeks of the issuance of their denial notice/letter by the university's Dean of Graduate Studies.

Additional requirements for unconditional and conditional admission appear below.
A. Unconditional Admission

1. Minimum 2.70 cumulative grade point average.
B. Conditional Admission
2. Minimum 2.50 cumulative grade point average, or 3.00 SrYr or 3.00 adjusted SrYr GPA.
C. Non-Degree Admission

Applicants who do not meet requirements for either unconditional or conditional admission may be eligible for non-degree admission. See previous section on university Types of Admission.

## Undergraduate Prerequisite Courses for Students Majoring in Teaching Seeking Secondary 7-12 Initial Licensure

A transcript evaluation must be completed in order to determine undergraduate prerequisites needed to meet the specialty area content as required by the State Department of Education. Prerequisites may vary depending on the degree held by the individual seeking licensure. Contact the licensure officer in Education Student Services at 731-881-7126.

## Criminal Background Check

All graduate students are required to apply for and successfully pass a criminal background check the semester prior to any field experience and/or internship course in which they plan to enroll. NOTE: Initial Licensure majors are required to complete the criminal background check as part of the admission to the Educator Preparation Program process. This will take place while enrolled in Teacher Education 780 or Teacher Education 730.

Counseling majors are required to complete the criminal background check as part of the residency. In order to avoid problems once the semester has started, forms and procedures must be completed according to this policy.

## Admission Requirements for the Department of Communications

Applicants may be admitted as degree seeking (Unconditional, Conditional, or Unclassified) or non-degree as listed below. Degree-seeking applicants must meet the university requirements listed under Types of Admission.

To be considered for admission in the Master of Arts in Strategic Communication, applicants must hold a bachelor's degree from a regionally accredited college or university or be currently enrolled in their final semester for a baccalaureate degree at an accredited American university/college. In addition, applicants must meet the minimum acceptable subscores on the GRE or minimum acceptable GMAT Total Score, submit a current resume outlining work experience and training, all college transcripts, at least three letters of reference from a professor or work supervisor, and a 500-word statement of professional goals that addresses the applicant's career goals and how the MASC would contribute to the achievement of those goals.

If the GRE or GMAT is taken more than once, the highest scores are used for determining admission. If official GRE or GMAT scores are not available by the first day of the semester, unofficial scores may be used through the add deadline (first week of classes) one time for a one-semester admission decision. If the decision is favorable, the admission would be in the "conditional" or "unclassified" category dependent upon the test scores. Official tests scores meeting the minimum requirements must be submited to the Graduate Studies Office no later than the end of the semester. Failure to provide acceptable test scores prior to this deadline will result in dismissal from the M.A. in Strategic Communication program at the end of the semester.

Applicants holding a graduate degree from a regionally accredited college or university are eligible for a GRE/ GMAT test score waiver. Applicants with 7 or more years of progressive work experience in strategic communication may also be eligible for a GRE/GMAT test score waiver.

Students must have satisfactorily completed prerequisites to advanced courses in the selected areas in communications. Graduates of curricula other than communications may be accepted for admission. Each applicant's request for admission to the program and to specific courses will be evaluated for the need for undergraduate prerequisites.

## Unconditional Admission

- Hold a bachelor's degree from a regionally accredited college or university
- Have at least a 2.50 cumulative grade point average (GPA) on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) from a regionally accredited college or university.
- Meet one of the following minimum test score options.
- GRE: Verbal Reasoning: 150 (450 if taken prior to August 2011), Quantitative Reasoning: 138 (350 if taken prior to August 2011), Analytical Writing: 4.0
- GMAT: Total Score 350, Analytical Writing Assessment: 4.0
- Have a positive review from the Master of Arts in Strategic Communication (MASC) Graduate Admission Committee.


## Conditional Admission

- Hold a bachelor's degree from a regionally accredited college or university
- Have at least a 2.50 cumulative grade point average (GPA) on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) from a regionally accredited college or university


## AND

Meet one of the following options.

- GRE: Verbal Reasoning: 146 (390 if taken prior to August 2011), Quantitative Reasoning: 138 ( 350 if taken prior to August 2011), Analytical Writing: 3.5
- GMAT: Total Score 320, Analytical Writing Assessment: 3.5
- LSAT: 148


## OR

- GRE: Verbal Reasoning: 150 (450 if taken prior to August 2011), Quantitative Reasoning: 138 (350 if taken prior to August 2011), Analytical Writing: 3.0, and successfully complete (with a letter grade of $B$ or better, or pass for a pass/fail course) during the first semester of graduate classes a writing course to be approved by the MASC Graduate Coordinator.
- GMAT: Total Score 350, Analytical Writing Assessment: 3.0, and successfully complete (with a letter grade of $B$ or better, or pass for a pass/fail course) during the first semester of graduate classes a writing course to be approved by the MASC Graduate Coordinator.


## OR

The GRE/GMAT entrance exam requirement may be waived for applicants with a significant amount of professional experience related to strategic communication (i.e., public relations, marketing, advertising, campaign planning, fundraising, organizational management, etc.) Applicants must meet one of the following criteria, demonstrate career advancement after completing the bachelor's degree and receive a positive overall review from the Master of Arts in Strategic Communication Graduate Admission Committee.

- Have at least seven years of full-time professional experience in strategic communication, hold a bachelor's degree from a regionally accredited college or university, and have at least a 2.50 cumulative grade point average (GPA) on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) from a regionally accredited college or university.
- Have at least five years of full-time professional experience in strategic communication, hold a bachelor's degree from a regionally accredited college or university, and have at least a 3.00 cumulative grade point average (GPA) on all work attempted prior to completion of the baccalaureate degree ( 4.00 scale) from a regionally accredited college or university.

Applicants using the professional option must submit satisfactory evidence of academic writing ability or successfully complete (with a letter grade of B or better, or pass for a pass/fail course) during the first semester of graduate classes a writing course to be approved by the MASC Graduate Coordinator.

- Have a positive review from the Master of Arts in Strategic Communication (MASC) Graduate Admission Committee. The committee review will include the quality of work experience, previous academic performance, statement of goals, and letters of reference.


## Unclassified or Non-Degree Admission

Applicants who do not meet requirements for either unconditional or conditional admission may be eligible for unclassified or non-degree admission and must submit all required admission materials. See university requirements listed in Types of Admission.

## Academic Regulations

Each graduate student assumes full responsibility for knowledge of the rules and regulations of the Graduate Program and departmental requirements concerning the individual degree program. A statement on student rights is included in the Student Handbook. Copies of the handbook are available in the Division of Student Affairs (223 Administration Building).

## Withdrawal from Graduate Studies

If a student no longer wishes to be a graduate student, he/she must complete a "Withdrawal from Graduate Studies" form available in the Graduate Studies Office or online. If the student later wishes to be readmitted to Graduate Studies, he/she must complete an application for admission, pay the non-refundable application fee and meet admission requirements in effect at that time.

## Drop, Add and Withdrawal from the University

## Drop Policy

Within First Eight Weeks. With permission of a student's adviser, a course may be dropped during the first eight weeks of the semester. Drops executed during the first 14 days will leave no record on the student's academic transcript. A drop executed after the fourteenth day through eighth week will result in a grade of $\mathbb{W}$ (withdrawal).

After First Eight Weeks. Courses may not be dropped after the first eight weeks of a semester unless it can be clearly demonstrated that one of the following exists:

1. serious illness or injury of the student as verified by Student Health and Counseling Center or private physician;
2. serious personal or family problems as verified by a minister, physician, or other appropriate professional; or
3. necessary change in work schedule which conflicts with the class being dropped, as verified by the student's employer submitted in writing on company letterhead.

In the event of such certification, and the approval of the student's adviser and the registrar, the student will receive the grade of W (withdrawal). Under normal circumstances a student may not drop a course after the last day of class or after administration of the final exam, whichever occurs first.

Note: A student will not be permitted to drop a course after the first eight weeks of the semester simply to avoid a poor grade.
Summer Deadlines: Students should consult the summer term timetable for the appropriate summer deadlines.

## Add Policy

Adding Courses. With permission of the student's adviser, a course may be added through the first week of class for the fall and spring semesters. All course section adjustments must be completed during the first week of the semester. Students should consult the summer term timetable for the appropriate summer deadlines.

## Withdrawal Policy

Withdrawing from University. All official withdrawals (dropping the student's entire schedule) from the university are processed by the Office of Academic Records.

Within First Eight Weeks. Withdrawals executed during the first 14 days of the fall and spring semesters will leave no record of the courses for which the student registered. Withdrawals executed after the fourteenth day through the eighth week of the semester will result in a grade of W (withdrawal) in all courses for which the student registered.

After First Eight Weeks. Withdrawals are not permitted after the first eight weeks of a semester unless it can be clearly demonstrated that one of the following exists:

1. serious illness or injury of the student as verified by Student Health and Counseling Center or private physician;
2. serious personal or family problems as verified by a minister, physician, or other appropriate professional; or
3. necessary change in work schedule which conflicts with the class being dropped, as verified by the student's employer submitted in writing on company letterhead.

In the event of such certification, and the approval of the vice chancellor for student affairs, the student will receive the grade of $W$ in all courses for which the student registered. Under normal circumstances a student may not withdraw from the university after the last day of class or after administration of the final exam, whichever occurs first.

Note: A student will not be permitted to withdraw after the first eight weeks of the semester simply to avoid a poor grade.

Summer Deadlines: Students should consult the summer term timetable for the appropriate summer deadlines.

## Course Loads

A full load is nine semester hours. Four hours will be considered a half-time load and six hours will be considered a three-quarter load. Undergraduate hours taken to meet degree requirements will be included with all graduate hours to determine course load.

The maximum load for a graduate student is 15 semester hours during fall and spring semesters and six semester hours per session during summer. To register for more than the maximum during any semester requires approval of the appropriate Graduate Coordinator/designee. Maymester is limited to three hours only. Students who are employed full-time must secure permission from the appropriate Graduate Coordinator/designee to enroll for more than six hours of graduate coursework. Graduate assistants and others who have part-time duties with the university may enroll only for an appropriate fraction of the maximum load such as follows:

Assistants employed 20 hours per week—maximum of nine (9) semester hours.
Assistants employed 15 hours per week-maximum of 12 semester hours.
Assistants employed 12 hours per week-maximum of 15 semester hours.

## Course Numbers

Courses numbered 500 and above are for graduate credit. Courses in the 700 group are for graduate students only. Courses in the 500 and 600 groups are the same as specified 300 - and 400 -level courses for undergraduates but have additional requirements beyond those expected of undergraduate students. They may be taken for graduate credit when offered in the course schedule under the 500/600 number if the student has not already completed the undergraduate equivalent. The last two digits for these 500/600-level graduate courses are the same as their undergraduate equivalents.

The course descriptions for 500 -level courses appear in numeric sequence under the equivalent 300 - level course. The 500 number appears in parentheses after the 300 number. No more than three semester hours of 500 -level coursework may be applied toward a degree. The course descriptions for 600 -level courses appear in numeric sequence under the equivalent 400 -level course. The 600 number appears in parentheses after the 400 number.

## Prerequisites

Graduate study in any department must be preceded by sufficient undergraduate work in the major field and/ or related areas to satisfy the department that the student has adequate background for graduate work in that field. The catalog lists some, but not necessarily all, prerequisites since these may vary with the individual student's background, goals and competencies.

Graduate students taking undergraduate prerequisite courses must make a C or better in each course. Students who do not achieve the required grade in undergraduate prerequisite courses will not be allowed to take additional graduate coursework until a satisfactory grade is achieved in the undergraduate course(s) in question.

## Course Substitutions and Student Petitions

A course substitution request may be filed when there is just cause for the substitution (e.g., cross-listed course was previously taken for undergraduate credit). For a course substitution request to have final approval, it must receive approval from the adviser, the graduate coordinator/designee and the college committee. To avoid possible delay in graduation, students should obtain these approvals prior to scheduling any course which they believe can be substituted for a required course.

Graduate students wishing to petition for changes in their program or for other matters should consult with their adviser.

The appropriate forms for submission of course substitution and overload requests or student petitions may be obtained from the graduate program coordinator/designee. Graduate Council approval is also necessary, in addition to the approvals stated previously, for any requests involving university policy. If the petition warrants action by the Graduate Council, the student will be notified both of the meeting date and of the final decision by the dean of graduate studies.

If the Graduate Council denies a student request, it may not be resubmitted to the council. Any appeal to the vice chancellor for academic affairs must be limited to an alleged procedural violation.

## Transfer Credit

A maximum of 12 semester hours completed at a regionally accredited institution may be transferred into a student's master's program if all of the following conditions are met: (For M.B.A. students, no more than eight (8) hours of the 12 hours may be applied toward required courses.)

1. if taken for graduate residence credit, i.e. no correspondence or extension credit allowed (see below);
2. if passed with a grade of $B$ or better (no transfer credit will be accepted for courses graded $\mathrm{P} / \mathrm{F}$ or $\mathrm{S} / \mathrm{U}$ );
3. if part of an otherwise satisfactory graduate program (B average);
4. if the transferred coursework was not earned more than six years prior to the semester in which the student completes all degree requirements; and
5. if approved by the student's adviser, the appropriate graduate coordinator/designee and the dean of graduate studies. Note: If already matriculated at UT Martin, approval should be obtained before enrolling in the proposed course(s).

Transferred work will not be counted in computing the grade point average on courses completed in the graduate program.

The total number of transferred residence courses may exceed 12 semester hours when within The University of Tennessee system. Credits transferred into the master's program will not reduce the residence requirements. No correspondence work may be used to meet master's degree requirements. No credit designated as extension credit at other institutions may be transferred into a student's master's program.

## Grades and Grade Appeals

Graduate students are required to make an overall minimum cumulative grade point average of 3.00 in courses taken for graduate credit. The cumulative GPA for graduate students is based on graduate coursework taken at UT Martin. M.B.A. students must also have at least a 3.00 GPA in courses approved for use in the M.B.A. degree program. Graduate education students are allowed to earn two grades of C in courses required for graduation. If a third grade of C is earned in a course required for graduation, the student can petition the College of Education, Health, and Behavioral Sciences Graduate Committee to repeat one of the C grades. Students requesting to retake a course must submit a written request to their adviser who will then submit the request to the College of Education, Health, and Behavioral Sciences Graduate Committee and dean of graduate studies. If the petition to retake a class is approved, the repeated class must be taken at UT Martin. Any subsequent grades of C will make the student ineligible for continuation in the degree program. Graduate credit is allowed only for courses completed with grades A, B, C and P (Pass or Progress). Grades of D or F are counted in computing the scholastic average but carry no credit toward graduation.

Only the subsequent grade received in any course which is approved for repeat (see section Repeating a Course) will be used to calculate the grade point average. Transferred work will not be counted in computing the grade point average of courses completed in the graduate program. The grade of P (Progress) or N (Insufficient Progress) will be assigned to students registered for thesis or final project courses.

The work of a student who is passing a course satisfactorily but cannot complete all the requirements due to illness, accident, or unavoidable circumstances may be reported as Incomplete (I). It is expected that the student will remove the Incomplete during the next semester after it is received. The student granted a bona fide I by his/ her instructor may have the next full semester to complete the work necessary to erase the Incomplete before it is computed as an F . Thereafter, it shall be computed as an F until changed by student action within one calendar year of receiving the I or by automatic action after one calendar year when the I shall become a permanent F . The student need not be enrolled to remove the Incomplete. A faculty member may also give an Incomplete (I) to a student in a course whom the faculty member regards as deficient in English language in that course, but who is otherwise passing. The Incomplete (I) will be removed when the Department of English and Modern Foreign Languages certifies to the instructor that the student has made the necessary improvement.

When a graduate student wishes to appeal a grade, the appeal process must be initiated within the first three weeks of the next semester. The aggrieved student shall first discuss the matter with the faculty member involved to see if there is some error or misunderstanding which can be resolved between them. Failing this, the student should follow the appeal process that is described in the Student Handbook if he/she wishes to pursue the matter.

## Repeating a Course

No graduate student will be allowed to repeat a course (or a designated "same as" course) for the purpose of raising a grade. Students wishing to repeat required courses in which they have received a grade of D or F must have the prior approval of their adviser, the graduate program coordinator/designee and the dean of graduate studies. Students in the College of Education, Health, and Behavioral Sciences earning more than
two grades of C in courses required for graduation can petition and, if approved in advance of registration, replace only one C (see Grades and Grade Appeals section). Approval must be granted by both the committee and dean of graduate studies before retaking a C. Violation of these regulations will result in the deletion of the grade and credit for the invalid repeat from the official university records. A student's enrollment in UT Martin's equivalent of any non-transferrable course does not constitute a repeat.

## Academic Continuation

Students are required to have a minimum cumulative grade point average (GPA) of 3.00 to receive the graduate degree from The University of Tennessee at Martin. The cumulative GPA for graduate students is based on graduate coursework taken at UT Martin. Academic standards of performance have been established to ensure satisfactory progress toward a degree. These performance standards form the basis for the following academic classifications:

1. academically eligible
2. academically eligible-warning
3. academically ineligible

Guidelines and procedures for placing students in the previous classifications are explained in the following paragraphs.
Academically Eligible. A student is considered to be academically eligible so long as the number of graduate quality points earned is equal to three times the number of graduate GPA hours attempted. This is equivalent to a cumulative GPA of 3.00 .
Academically Eligible-Warning. A student will automatically be placed on academic warning at the end of any semester if he/she fails to have a 3.00 cumulative GPA. (EXCEPTION: A student with Conditional or Unclassified admission status will be academically ineligible for graduate study when he/she fails to have a 3.00 cumulative GPA.) The warning status will be removed upon the achievement of a 3.00 cumulative GPA. If a student on academic warning fails to achieve a 3.00 cumulative GPA, the student will remain on warning as long as a 3.00 graduate semester GPA is earned, indicating satisfactory progress. Should the student fail to demonstrate satisfactory progress after one or more continuous semesters of warning, he/she will be academically ineligible.

Academically Ineligible. A student on academic warning for one or more continuous semesters will be academically ineligible unless one of the following occurs: (1) the cumulative GPA is raised to 3.00 or better; or (2) a 3.00 or better semester GPA is achieved. A student may appeal for reinstatement to the term immediately following his/her academic ineligibility.

## Dismissal and Reinstatement Policies

1. Graduate students admitted on a conditional or unclassified basis must maintain a 3.00 cumulative GPA or become academically ineligible.
2. Graduate students who fail to maintain a cumulative 3.00 average will automatically be placed on academic warning. Such students will be continued on academic warning until a 3.00 cumulative average is achieved as long as they maintain a 3.00 semester average on graduate work during the academic warning period. If they fail to achieve a 3.00 semester average any semester during the academic warning period, they will become academically ineligible and will be dropped from the graduate school.
3. Students may be reinstated to Graduate Studies only one time and should begin the process by consulting with the appropriate coordinator/designee. Reinstatement, however, is not automatic and requires
approval of the dean of graduate studies. The approval will be based upon recommendation of the appropriate graduate committee (for students dropped from the program for reasons outlined in \#1 above) or upon recommendation of the appropriate coordinator/designee (for students dropped from the program for reasons outlined in \#2 above).
4. A student may appeal a negative decision for reinstatement by sending a written statement to the Graduate Council (c/o Graduate Studies Office). The student will be notified when the petition will be brought before the Council and will have an opportunity to appear in person to present his/her case. The dean of graduate studies will notify the student of the Council's decision.

## Appointment of an Adviser

The graduate coordinator/designee in the student's major area is the general adviser for all graduate students in that program. A permanent adviser in his/her major should be appointed during the first semester of enrollment.

## Intent to Graduate

An Intent to Graduate must be submitted no later than the beginning of the semester prior to the anticipated final semester. Submission is an online process.

## Financial Information

Fees and tuition are established in June by the UT Board of Trustees in conjunction with legislative action which determines the annual appropriation to the institution. Any changes from the fees and expenses detailed here will be available prior to registration for the semester to which they apply. Graduate students will be assessed graduate fees for all coursework, undergraduate or graduate, in which they enroll.

Graduate programs administered through UT Martin Online are subject to fees at $\$ 620$ per credit hour (instate), $\$ 676$ per credit hour (domestic out-of-state) and $\$ 733$ per credit hour (international out-of-state) as detailed at www.utm.edu/bursar under Fee Schedule.

All students must settle accounts with the Bursar's Office and complete the registration for courses prior to attending classes.

The general fees in effect for 2020-2021 are as follows and are subject to change.

## Fees*

Maintenance Fee (In-state Fee) Per Semester ..... \$4,548
Programs \& Services Fee Per Semester ..... $\$ 560$
Technology Fee Per Semester ..... \$125
Facility Fee Per Semester ..... \$75
Total In-State Graduate Full-Time Fees Per Semester ..... \$5,308
Additional Tuition for Domestic Out-Of-State Students Per Semester. ..... \$3,020
Additional Tuition for International Out-Of-State Students Per Semester ..... \$6,972Residents of Hickman, Fulton and Graves counties in Kentucky can attend UT Martin without payingout-of-state tuition.
*Check the web at www.utm.edu/bursar for revisions to fees.

## Part-Time Student:

Any graduate student who enrolls for fewer than nine academic hours is a part-time student.

## Optional Hourly Rate:


Graduate Application Fee............... $\$ 30.00$ (additional $\$ 100$ processing fee for international students)
Required for each initial application for admission. This fee is not refundable.
Auditors, who receive no credit, pay the same fees as other students.
Auditors do not take the examinations, receive credit, or participate in class discussion.
For information concerning the special fee policy for totally disabled and/or senior citizens who wish to enroll in courses for non-credit or credit, contact the Office of Academic Records (731-881-7050).
Late Registration Service Fee ....................................................................................... \$50.00
Course Change Fee ........................................................................................................ \$25.00
A fee of $\$ 25$ per course will be assessed for courses dropped after the official late registration period. This fee is not refundable and does not apply to students who withdraw from the university.
Payment Plan Fee ............................................................................................................. \$30.00
See information on Payment Plan Policy and Fee in undergraduate section.
Late Fee on Payment Plan ................................................................. $\$ 50$ of the installment due

## Refunds

## Refunds-Dropping Hours (Continue with a reduced class load)

When a student decreases the number of hours attempted during a term to less than a full course load (nine hours), charges for the hours dropped will be calculated based upon the official drop day as presented to Bursar's Office from the Office of Academic Records.

| Calendar Days of Term | \% Charged | \% Refund |
| :---: | :---: | :---: |
| Day 1-7 | ..no charge | 100\% |
| Day 8-14 | ...no charge.. | 100\% |
| Day 15-21 | ... $40 \%$ | . $60 \%$ |
| Day 22-28 | . $60 \%$ | . $40 \%$ |
| Day 29-end of term | 100\% | ...0\% |

Refunds are based on the fees charged, not the amount paid. If the student is receiving financial aid, refunds will be returned to the financial aid accounts, including lenders of student loans, before any money is returned to the student. Credit balances from all sources of the university, with the possible exception of Title IV funds, will be applied to outstanding charges before a refund is issued.

## Refunds-Withdrawing (Dropping all classes)

Withdrawals from school for any reason during any term must be made by official notification to the Office of Academic Records. Failure to attend classes does not cancel enrollment. The date of the withdrawal is one factor used to determine the amount of fees to be refunded. Other factors include whether a student is receiving Title IV financial aid and whether unpaid charges (total institutional costs minus the sum of total aid paid to institution and cash paid by the student) remain on the student's account. The institutional refund policy will be used for students who do not receive Title IV financial aid. The following percentages will be used to calculate charges on hours dropped (tuition, fees, room):

| Calendar days of Term | \% Charged | \% Refund |
| :---: | :---: | :---: |
| Day 1-7.. | ...no charge.. | .......100\% |
| Day 8-14.. | ...no charge.. | ..100\% |
| Day 15-21. | ... $40 \%$ | ....60\% |
| Day 22-28.. | .. $60 \%$. | ....40\% |
| Day 29 -end of term.. | 100\%. | ...0\% |

If the student is receiving financial aid, refunds will be returned to the financial aid accounts, including lenders of student loans, before any money is returned to the student. Credit balances from all sources of the university, with the possible exception of Title IV funds, will be applied to outstanding charges before a refund is issued.

Summer school term is shorter than fall and spring, and the summer term is divided into sessions. Therefore, charges for hours dropped will be calculated based on the following:

|  | 1st Session | 2nd Session | Full Term | \% Charged | \% Refund |
| :--- | :---: | :---: | :---: | :---: | ---: |
| Day | $1-4$ | $1-4$ | $1-7$ | no charge | $100 \%$ |
| Day | $5-7$ | $5-7$ | $8-14$ | no charge | $100 \%$ |
| Day | $8-11$ | $8-11$ | $15-21$ | $40 \%$ | $60 \%$ |
| Day | $12-14$ | $12-14$ | $22-28$ | $60 \%$ | $40 \%$ |
| Day | 14-end of term | 14-end of term | 29-end of term | $100 \%$ | $0 \%$ |

No refunds will be made until two weeks after the close of registration during the regular school year and two weeks after the close of second session summer semester registration.

## Example:

The student's institutional charges for the semester total $\$ 4,824$ which was paid by a personal check. The student withdrew on the sixteenth calendar day following regular registration. The refund would be $\$ 2,890.80$.
Calculation: Semester rate - (\# of hours) x (\% Charged) x (per hour rate) $=$ Refund

$$
\$ 4,824-[(9) \times(40 \%) x(\$ 537)]=\$ 2,289.80
$$

The federal refund calculation policy will be used for students who have attended classes at UT Martin and are receiving Title IV financial aid. Under this refund policy, withdrawals on the first day of classes will permit a 100 percent refund of institutional charges (fees, tuition, room and board, with no allowance for deposit or consumption on room and board). Withdrawals after the first day of classes will be calculated based on the number of days the student completes in the enrollment period.

## Example:

The student has enrolled at UT Martin and is receiving a federal loan of $\$ 4,250$. The institutional charges are $\$ 4,824$. The student withdrew on the 15th day of the enrollment period. The enrollment period is 110 days in length $(15 / 110=13.6 \%$ completed days). The refund percent will be 86.4 percent ( $100 \%-13.6 \%$ ).

Calculation: $\$ 4,824 @ 86.4 \%=\$ 4,167.94$ to be returned to the federal lender.

## Graduate Assistantships

A limited number of graduate assistantships are available to qualified students. Inquiries about these should be directed to the Graduate Studies Office. Assistantships carry a fixed stipend. They also provide a waiver of tuition charges, (Maintenance Fee only) including out-of-state fees, for GAs with at least 50 percent appointment. International students may not apply for an assistantship until they have completed at least one term of full-time work at UT Martin. Their knowledge of the specific field in which they may work and their command of the English language must be evaluated thoroughly by faculty supervisors before an award may be made.
Graduate assistants are expected to enroll for no more than the appropriate fraction of the maximum course load specified in the section on Course Loads.

The University of Tennessee at Martin adheres to the following "Resolution Regarding Graduate Scholars, Fellows, Trainees and Assistants" of the Council of Graduate Schools in the United States:

Acceptance of an offer of financial support (such as a graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by a prospective or enrolled graduate student completes an agreement that both student and graduate school expect to honor. In that context, the conditions affecting such offers and their acceptance must be defined carefully and understood by all parties.

Students are under no obligation to respond to offers of financial support prior to April 15; earlier deadlines for acceptance of such offers violate the intent of this Resolution. In those instances in which a student accepts an offer before April 15 and subsequently desires to withdraw that acceptance, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student not to accept another offer without first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer. It is further agreed by the institutions and organizations subscribing to the above Resolution that a copy of this Resolution should accompany every scholarship, fellowship, traineeship and assistantship offer.

## Special Assistance for Underrepresented Students

Access and Diversity Scholarships—The University of Tennessee at Martin is strongly committed to increasing the enrollment of graduate students from underrepresented groups. Access and Diversity scholarships are available for qualified students. Recipients are selected based upon nominations by graduate coordinators/ designee.

## Federal Direct Loan Program

Graduate students are eligible for unsubsidized Federal Stafford loans and Federal GradPLUS loans to assist with meeting educational expenses. The student must be enrolled at least half-time and be seeking a degree. Interest accrues while the student is in school; however, the principle can be deferred until graduation, withdrawal, or when the student is no longer enrolled at least half-time. Students must complete the FAFSA to be considered for this program.

## Other Financial Aid Programs

Veteran's Administration and Vocational Rehabilitation benefits may be available to qualified students. Students should contact the local agency if they are eligible for this assistance.

# General Requirements for Graduate Degrees 

Basic requirements for the graduate program are outlined below. Some of the colleges and departments have special requirements above and beyond those stated here and students are advised to consult the appropriate section of this catalog for any further degree requirements.
The master's degree may be conferred upon a student who has completed a minimum of 30-48 semester hours of approved graduate courses in one of the programs outlined in this catalog and has a 3.00 or higher graduate cumulative grade point average for coursework applied toward the degree. A student may be required by the dean of graduate studies or by the appropriate graduate coordinator/designee to take certain additional courses as prerequisites, to take additional undergraduate or graduate courses, or to engage in independent study in order to remedy deficiencies and ensure a sound academic program. No course which has been applied toward an undergraduate degree may be counted toward the master's degree. If approved, a limited number of hours applied toward a prior graduate degree may be applied toward a subsequent graduate degree. Courses taken for undergraduate credit may not be repeated for graduate credit. No more than three hours of 500 -level coursework (graduate credit cross-listed with 300 level) may be applied toward a degree and a minimum of 70 percent of the coursework required for graduation must be taken at the 700 level. Only six semester hours of workshop credit may be applied toward a degree.

A graduate student is allowed to satisfy requirements for a graduate degree under any catalog in effect during the time a student has been admitted to a degree program at UT Martin, provided that the catalog has been in effect within six years of graduation and provided the student has been enrolled as a graduate student in the catalog year.

The requirements for each graduate degree and the majors (with concentrations, if applicable) and other specialized curricula for the degrees are described in the sections of the catalog which follow. The student has the ultimate responsibility to fulfill the requirements for the degree, to check his or her own eligibility to take courses and to observe the academic rules governing his or her program.

## Residence and Time Limits

The minimum-residence requirement for the master's degree is the equivalent of two semesters of full-time graduate study ( 18 semester hours). Most programs require a minimum of 30 hours for the thesis option and 36 hours for the non-thesis option. Refer to the individual program requirements for exceptions.

The time limit for the use of graduate credit toward a master's degree is six years (18 consecutive semesters) beginning with the earliest course applied toward the degree. For example, fall through summer semester is one year, as is spring through fall semester, and summer through spring semester. Normally, this time limit may not be extended. In exceptional cases, courses taken beyond this period may be recognized by special written examination if given prior approval by the Graduate Council.

## Thesis Option

Students in Family and Consumer Sciences (M.S.F.C.S.) and Agriculture and Natural Resources (M.S.A.N.R.) may choose to write a thesis. This option is not available for students in Business or Education.
M.S.A.N.R. students seeking to qualify for the Thesis Option must have a GRE writing score of 3.5 or greater, and must complete a Writing Qualification Exam (WQE) developed and administered by the M.S.A.N.R. Graduate Coordinator. The M.S.A.N.R. Graduate Coordinator, in consultation with the M.S.A.N.R. Graduate Supervisory Committee, will grade the WQE: Pass or Fail. Students receiving a "Fail" grade on the WQE may schedule a second attempt on the WQE without taking remedial writing course work. M.S.A.N.R. students receiving a Fail grade on their first and second WQE attempts must take remedial writing course work prior to taking the WQE a third and final time. M.S.A.N.R. students must receive a "Pass" grade on the WQE no later than the end of the second semester of M.S.A.N.R. course work to be considered for the M.S.A.N.R. Thesis Option. The WQE does not apply to Non-Thesis Option students in the M.S.A.N.R. program. M.S.A.N.R. students who do not qualify for the Thesis Option may continue in the M.S.A.N.R. program in the Non-Thesis Option.

The student's major professor serves as chair of the thesis committee. The committee also includes two other graduate faculty members from the major department. A student should consult the appropriate graduate coordinator/designee regarding the formation of the thesis committee at the time the thesis option is elected. The thesis courses (Family and Consumer Sciences 701-702; Agriculture 701-702; Natural Resources Management 701-702) must be taken sequentially. Only one course may be selected each semester.

Family and Consumer Sciences and Agriculture and Natural Resources students schedule a regular conference with their thesis committee chair and periodic evaluation conferences with members of their thesis committee to assess strengths and weaknesses. A statement of progress is prepared to assist in planning the balance of the graduate program.
Theses are to follow the style of the current Thesis and Dissertation Manual of the Tennessee Conference of Graduate Schools which is available online at http://web.utk.edu/~thesis. It is the responsibility of the student to secure and comply with these guidelines.

Two unbound final copies of the committee-approved thesis must be presented to the dean of graduate studies no later than two weeks before the end of the semester (including final exams) in which the student expects to graduate. The student must make any necessary corrections in the unbound copies of the thesis in the Graduate Studies Office no later than one week before the end of the semester. The student must be enrolled for thesis credit the term the thesis is accepted. Exception: A student submitting an approved and corrected thesis to the Graduate Studies Office on the last workday preceding the first day of class for the semester in which the student will graduate will not be required to re-enroll in thesis credit.

## Use of Human Subjects in Research

Federal laws require that research projects (whether undertaken by students or faculty members) involving human subjects be designed to protect the physical, psychological and emotional well-being of these subjects. Current regulations state that formal protection approval must be obtained if human subjects are used other than in a normal educational setting or if those subjects are at risk because of physical intrusion or privacy violation. Approval of all research must be obtained before any data are collected. The Faculty, Staff and Student Guide to Research Involving Human Subjects and all approval forms are available in the respective departmental offices, in the Office of Research, Grants, and Contracts and on the RGC website (www.utm.edu/ rgc).

## Non-Thesis Option

A student who elects this option must meet the requirements as stated for his/her degree. Courses must be approved in advance by his/her adviser. A written comprehensive examination is required and will be scheduled during the final semester of coursework.

## Master Research Project

Students in the Master of Science in Education with a Major in Teaching (Curriculum \& Instruction and Interdisciplinary Concentrations) must complete a Master Research Project for their culminating experience.

## Examinations

All graduate students must pass a final comprehensive examination which consists of an oral and/or written examination on all work, resident and transferred, offered for the degree. These examinations shall be held during the semester in which the student expects to receive the degree, at least three weeks prior to the end of that semester. During the semester that a graduate student takes (repeats) his/her comprehensive exam, he/she must be enrolled in a graduate class at UT Martin or pay a fee equal to one credit hour (in-state rate). The final examination for students will be conducted by a committee chaired by the graduate student's major professor. Any members of the university faculty and graduate students may attend an oral final examination.

All students in Agriculture and Natural Resources are required to take a final written examination which is comprehensive in nature. The student should consult his/her adviser at the beginning of the semester in which he/she expects to graduate in order to establish the final examination committee.

A Family and Consumer Sciences student who chooses the non-thesis option will write a narrative comprehensive exam covering major areas studied. Questions will be submitted by all members of the graduate committee. A final oral examination may be required by the graduate committee.
All students in Business are required to take a written comprehensive examination which is an integral part of Management 790. Students earning a grade of at least $B$ in the course will have represented successful completion of a comprehensive exam. Students not earning at least a B will be required to take a comprehensive exam following the existing catalog guidelines regarding repeating the comprehensive examination. Students must take Management 790 in their last semester and must contact the Business Graduate Coordinator relative to scheduling.
All students in Education are required to take a final written examination which is comprehensive in nature. Students majoring in Counseling are required to take a comprehensive exam administered online through Canvas. A minimum score of $70 \%$ is required for successful completion. The examination will test a student's competencies and knowledge in the chosen area of specialization. The comprehensive examination must be taken in the semester preceding the semester in which the student expects to begin the first internship. Students must have completed Multicultural Issues, COUN 710, 716, 722, 725, 730, 740, 760, \& 785 or the equivalent transferred courses.

Students majoring in Instructional Leadership are required to pass the Praxis School Leadership Series "School Leaders Licensure Assessment" (SLLA) test as their comprehensive exam. An official copy of the score report must be sent directly to UT Martin by the testing agency for verification. (Score is determined by the Tennessee State Department of Education.) Obtaining a passing score on the SLLA exam is required in order to graduate and to be recommended for the Instructional Leadership License--Beginning (ILL-B). Information regarding the Praxis SLLA test (registration, test dates, fees, etc.) can be found at www.ets.org or by contacting the Education Graduate Office in 205 Gooch Hall. The test must be taken during the semester in
which the student plans to earn his/her degree or in the immediately preceding semester.
Students majoring in Teaching--concentrating in Curriculum and Instruction or Interdisciplinary (including former Subject Area)--are required to take a written comprehensive examination which is an integral part of Teacher Education 791. Students earning a grade of at least B in the course will have represented successful completion of a comprehensive exam. Students not earning at least a B will be required to take a written comprehensive exam following the existing catalog guidelines regarding repeating the comprehensive examination. Students must take Teacher Education 791 in their last semester and must contact the Education Graduate Office prior to registration.

Students majoring in Teaching with the Initial Licensure (Elementary, Secondary, and Comprehensive K-12) option are required to submit a teaching portfolio which is the culminating assessment assignment and a requirement in the final semester while enrolled in Elementary Education 793 and 794, or Secondary Education 793 and 794, or Teacher Education 795. Initial Licensure students are required to pass the Praxis II and PLT in order to student teach. Successful submission and completion of the portfolio and passing grades on the Praxis exams will serve as a pass on the comprehensive exam. Students who fail to meet the student portfolio requirements will be required to take a comprehensive exam following the existing catalog guidelines regarding repeating the comprehensive examination.
All requests for a change in the examination committee must be approved by the student's adviser, the appropriate graduate program coordinator/designee, the chair and/or dean and the dean of graduate studies.
In the event that a student fails his/her comprehensive examination, these guidelines apply:

1. The examination may be repeated within a period not to exceed one full semester from the date of the original examination only when it is the consensus of the examination committee that the student has a reasonable chance of mastering the necessary material.
2. The members of the original examination committee shall constitute the committee for the second examination (except for unusual circumstances and approved by the appropriate graduate coordinator/ designee, the department chair, the dean of the college and the dean of graduate studies).
3. The second examination cannot be given within one month of the first examination and will be scheduled by the chair of the committee.
4. The committee shall require the student to do such additional work as it deems necessary.
5. If a student fails the second examination, the committee chair will notify the student if he/she will be required to take additional courses and/or to complete additional examinations recommended by the committee before being permitted to have a third, and final, examination.

A copy of the required work in preparation for a third examination is to be sent to the graduate program coordinator/designee, the department chair and/or the dean of the college and the dean of graduate studies. In no case shall a third examination be given until a complete semester has passed since the semester that the second examination was failed. Failure to achieve a minimum grade of $B$ in each course required by the examination committee will disqualify a student from a third examination. Failure to pass the third examination will disqualify a student from receiving a master's degree for the coursework taken. This does not exclude a student from beginning a new degree program at this institution, but any coursework toward the first unsuccessful degree program may not be applied toward a new one.

# Degree Requirements for Department of Agriculture, Geosciences, and Natural Resources 

The Department of Agriculture, Geosciences, and Natural Resources offers a Master of Science in Agriculture and Natural Resources (M.S.A.N.R.). The M.S.A.N.R. program is administered through UT Martin Online, facilitating a minimal tuition increase for non-resident students. The M.S.A.N.R. curriculum is comprised of 36 hours of graduate course work and is offered primarily via the Internet. The program features three concentrations to meet the needs of place-bound professionals seeking a graduate education. Students in the M.S.A.N.R. program select a concentration (18 hours) in either: (Ia.) Agribusiness and Risk Management, (Ib.) Natural Resources Systems Management, or (Ic.) Systems Science in Agriculture.

The Agribusiness and Risk Management (ARM) concentration provides a range of agricultural economics course work developed specifically to address risk management issues associated with agribusiness enterprises. Students selecting the Natural Resources Systems Management (NRSM) concentration can choose courses related to natural resources management including the areas of wildlife biology, park administration, geosciences, and agricultural engineering technology. The Systems Science in Agriculture (SSA) concentration features course work in agricultural engineering technology, management science, and agricultural economics providing a well-rounded graduate education for professionals seeking careers in agricultural industries and government agencies.

In addition to the above graduate programs offered in the College of Agriculture and Applied Sciences, students may also choose to enroll in the Master of Business Administration with an Agricultural Option in the College of Business and Global Affairs. For more information on the requirements for the MBA with an agricultural option please see the College of Business and Global Affairs graduate requirements.

Students may pursue thesis (see M.S.A.N.R. thesis qualifications) or non-thesis options in the M.S.A.N.R. program. Students pursuing the thesis option must register for and complete the requirements for Agriculture 701-702 or Natural Resources Management 701-702, while students in the non-thesis option will register for and complete the requirements of Agriculture 790-791 or Natural Resources Management 790-791.

Students must satisfy the university general requirements and the following requirements specific to the degree.

## Master of Science in Agriculture and Natural Resources (1190)

## Resumé of Degree Requirements

Ia. Agribusiness and Risk Management Concentration (1194)........................................ 18 hours
Agricultural Economics 705 Advanced Agricultural Marketing (3)
Agricultural Economics 710 Commodity Futures and Options Markets (3)
Agricultural Economics 750 Agricultural Risk Analysis and Decision Making (3)
Agricultural Economics 751 Strategic Management Issues in Agriculture (3)
Agricultural Economics 780 Project Management Issues in Agriculture (3)
Agricultural Economics 784 Applied Management Science in Agricultural Systems I (3)
OR
Ib. Natural Resources Systems Management Concentration (1192).................................. 18 hours
Complete 18 hours of course work from the following courses:
Agricultural Engineering Technology 720 Advanced Soil and Water Conservation Engineering (3)
Agricultural Engineering Tech. 760 Comprehensive Nutrient Mgt Planning \& System Design (3)
Agricultural Engineering Technology 782 GIS for Agricultural \& Natural Resources Mgt (3)

Geography 755 Global Climate and Climate Change (3) or
Natural Resources Management 755 Global Climate and Climate Change (3)
Geoscience Education 700 Advanced Earth Systems Science (3)
Geoscience Education 710 Advanced Physical Geology for Educators (3)
Geoscience Education 750 Global Climate Change (3)
Natural Resources Management 722 Production of Biorenewable Resources (3) or Plant Science 722 Production of Biorenewable Resources (3)
Natural Resources Management 730 Advanced Natural Resources Economics (3)
Natural Resources Management 740 Natural Resources Policy and Administration (3)
Natural Resources Management 760 Management of Interpretive Resources (3) or Park Administration 760 Management of Interpretive Resources (3)
Natural Resources Management 765 Conservation \& Preservation of Historic Structures (3) or Park Administration 765 Conservation \& Preservation of Historic Structures (3)
Natural Resources Management 770 Topics in Natural Resources Management (1-6)
Park Administration 770 Topics in Park and Recreation Administration (1-6)
Soil Science 630 Wetland Science (3)
Wildlife Biology 730 Wildlife Policy (3)
Wildlife Biology 770 Topics in Wildlife Biology (1-6)
A 600 level or higher course ( 3 hours) in agriculture, agricultural engineering technology, geosciences, natural resources, park administration, wildlife biology or other science-related area approved by the M.S.A.N.R. Graduate Coordinator
or
Graduate courses from accredited universities as approved by the M.S.A.N.R. Graduate Coordinator (up to 12 hours).

## OR

Ic. Systems Science in Agriculture Concentration (1193) 18 hours Management Science (3 hours)

Agricultural Engineering Technology 784 Applied Mgt Science in Agricultural Systems I (3) or Agricultural Economics 784 Applied Management Science in Agricultural Systems I (3)
and

## Agricultural Systems Technology (12 hours)

choose four courses ( 12 hours) from the following:
Agricultural Engineering Technology 710 Safety and Ergonomic Sciences in Agriculture (3)
Agricultural Engineering Technology 720 Advanced Soil and Water Conservation Engineering (3)
Agricultural Engineering Technology 760 Comprehensive Nutrient Management Planning and System Design (3)
Agricultural Engineering Technology 782 GIS for Agricultural and Natural Resources Mgt (3) Natural Resources Management 722 Production of Biorenewable Resources (3) or Plant Science 722 Production of Biorenewable Resources (3)
A 600 level or higher course (3 hours) in agricultural engineering technology, or related applied science approved by the M.S.A.N.R. Graduate Coordinator
and

## Agricultural Economics (3 hours)

choose one course ( 3 hours) from the following:
Agricultural Economics 705 Advanced Agricultural Marketing (3)

# Agricultural Economics 710 Commodity Futures and Options Markets (3) <br> Agricultural Economics 745 Agricultural Production Economics (3) <br> Agricultural Economics 750 Agricultural Risk Analysis and Decision Making (3) <br> Agricultural Economics 751 Strategic Management Issues in Agriculture (3) <br> Agricultural Economics 780 Project Management Issues in Agriculture (3) 

II. Agriculture, Geosciences, and Natural Resources Electives 9 hours* Choose nine (9) hours of course work from 600 level or higher courses in agriculture, agricultural economics, geosciences, natural resources, education, natural or physical sciences, or other graduate course approved by the M.S.A.N.R. Graduate Coordinator.
*Three hours in this category must include a globalization component.

## III. Statistics/Advanced Mathematics <br> $\qquad$ 3 hours <br> Agriculture 741 Statistical Methods in Agriculture and Natural Resources (3) or A graduate-level statistics or mathematics course approved by the M.S.A.N.R. Graduate Coordinator (3). Students in the Agribusiness and Risk Management ARM option are required to complete AGEC 740 Advanced Econometric Applications in Agribusiness (3) to complete the statistics requirement.

IV. Research............................................................................................................................. 6 hours

Non-Thesis Option
Agriculture 790 Scientific Writing and Presentations (3) or
$\quad$ Natural Resources Management 790 Scientific Writing and Presentations (3)
and
Agriculture 791 Master's Research Project in Agriculture (1-3) or
Natural Resources Mgt 791 Master's Research Project in Natural Resources Management (1-3)

## OR

## Thesis 0ption

Agriculture 701-702 Master's Thesis (3, 1-3) or
Natural Resources Management 701-702 Master's Thesis (3, 1-3)
M.S.A.N.R. students seeking to qualify for the Thesis Option must have a GRE writing score of 3.5 or greater, and must complete a Writing Qualification Exam (WQE) developed and administered by the M.S.A.N.R. Graduate Coordinator. The M.S.A.N.R. Graduate Coordinator, in consultation with the M.S.A.N.R. Graduate Supervisory Committee, will grade the WQE: Pass or Fail. Students receiving a "Fail" grade on the WQE may schedule a second attempt on the WQE without taking remedial writing course work. M.S.A.N.R. students receiving a Fail grade on their first and second WQE attempts must take remedial writing course work prior to taking the WQE a third and final time. M.S.A.N.R. students must receive a "Pass" grade on the WQE no later than the end of the second semester of M.S.A.N.R. course work to be considered for the M.S.A.N.R. Thesis Option. The WQE does not apply to Non-Thesis Option students in the M.S.A.N.R. program. M.S.A.N.R. students who do not qualify for the Thesis Option may continue in the M.S.A.N.R. program in the Non-Thesis Option.

Thesis option students will complete a research study in an approved area of agriculture or natural resources management. The thesis research director must have a terminal degree and be actively involved in research or extension. The student, in consultation with the thesis research adviser, must submit a written research proposal to the graduate thesis committee for approval prior to collecting thesis data. The graduate thesis committee will be composed of a minimum of three faculty members with graduate faculty status.

Minimum hours required for degree
A minimum of 70 percent of the degree requirements must be taken at the 700 level. All M.S.A.N.R. students
must complete a written comprehensive final examination during the semester they expect to graduate. The comprehensive final exam will be administered and graded (Pass/Fail) by the student's graduate committee. Thesis students receiving a Pass score on the comprehensive final exam will schedule an oral thesis defense at least three weeks prior to graduation. All M.S.A.N.R. students must receive a Pass score on the written comprehensive exam to graduate. Thesis students must also receive a Pass score on the oral thesis defense to graduate. Thesis students must meet all of the requirements listed above and requirements as outlined in the section of this catalog entitled Thesis Option.

## Degree Requirements for Department of Family and Consumer Sciences

The Department of Family and Consumer Sciences offers a Master of Science in Family and Consumer Sciences (FCS). The FCS program is administered through UT Martin Online and is totally online to facilitate the needs of professionals to pursue an advanced degree from wherever they are located. The master's program has two concentrations: General Family and Consumer Sciences and Dietetics. The first concentration is generalist in nature and based on a selected range of comprehensive courses. The Dietetics concentration incorporates a Dietetic Internship Program (DI) accredited by Accreditation Council for Education in Nutrition and Dietetics. The DI offers graduates of didactic programs in dietetics a post-baccalaureate, clinically based practicum. Students completing the DI portion of the Dietetic concentration are eligible to take the registration examination that leads to becoming a Registered Dietitian (RD). This option incorporates the DI practicum into an advanced-degree program which will lead to an M.S. degree. For either concentration in the major, the shared objectives are to:

1. serve the needs of students within the region and within the state who desire advanced subject matter for personal and professional reasons.
2. provide an alternative program to highly specialized curricula available at other institutions in the state.
3. provide courses which permit students to form integrated concepts from distinct subject matter areas available in the department.
4. meet needs of students who require considerable non-traditional scheduling and flexible time frames to complete their degrees.
5. maintain high standards of expectation for quality and service to the students, the institutions and the region.

Students must satisfy the university general requirements and the following requirements specific to the degree.

## Master of Science in Family and Consumer Sciences (1251, 1252)

## Resumé of Degree Requirements

[^5]Family and Consumer Sciences 791 Research Methods (3)
Educational Evaluation 710 Educational Statistics or equivalent (3)
Supporting Courses (6 hours)
Courses selected according to student's objective and with approval of student's graduate committee.
Thesis Research/Family and Consumer Sciences Electives for Non-Thesis (6 hours)
Family and Consumer Sciences 701-702 Master's Thesis $(3,3)$ or
Electives must be chosen from any of the disciplines in the Department of Family and Consumer Sciences.
Thesis topic chosen must relate to an area in Family and Consumer Sciences.

A minimum of 70 percent of the degree requirements must be taken at the 700 level.
For non-thesis option, student will write a narrative, comprehensive exam covering major areas studied. Questions will be submitted by all members of student's graduate committee. A final oral examination may be required by the graduate committee.

OR
Dietetic Concentration: ......................................................................................................... 36 hours
Family and Consumer Sciences Courses (12 hours)
Electives from Food Systems Management, Food Science, Nutrition (6)
Nutrition 705 Maternal and Child Nutrition (3)
Nutrition 706 Advanced Nutrition Principles in Renal Disease (3)
Research-Related Courses (6 hours)
Family and Consumer Sciences 791 Research Methods (3)
Educational Evaluation 710 Educational Statistics or equivalent (3)
Supporting Courses (12 hours)
Supervised Practice Component (Admission to DI is required):
Food Systems Management 714 Preprofessional Practice I (3)
Nutrition 724 Preprofessional Practice II (2)
Nutrition 734 Preprofessional Practice III (3)
Nutrition 754 Preprofessional Practice V (3)
Nutrition 764 Preprofessional Practice VI (1)
Thesis Research or Non-Thesis Electives (6 hours)
Family and Consumer Sciences 701-702 Master's Thesis $(3,3)$ or
Electives must be courses chosen from any of the disciplines in the Department of Family and Consumer Sciences.

## Requirements for Concentrations in Family and Consumer Sciences

Students who desire to complete requirements approved by the Academy of Nutrition and Dietetics pursuant to achieving Registered Dietitian Nutritionist (RDN) status may meet the objective by following the dietetics concentration within the degree program. Students who hold a B.S. degree in Vocational Family and Consumer Sciences Education may add occupational endorsements to their existing certificates while pursuing the general concentration for the master's degree. The supporting courses within the concentration should consist of courses in family and consumer sciences education which are required as work experiences for the endorsements.

The program of study for each degree candidate is individually designed to make use of the candidate's existing competencies and to supply the additional academic preparation necessary for meeting the agreed-upon objectives. The program of study is filed with the Family and Consumer Sciences Graduate Coordinator.

## Degree Requirements for College of Business and Global Affairs

The College of Business and Global Affairs offers a master's level non-thesis program of graduate study: the Master of Business Administration (M.B.A.). The program is open to any holder of a baccalaureate degree from a four-year college or university, regardless of the undergraduate field of study and provides the theoretical and conceptual foundations for those who may later pursue a doctoral degree, as well as the knowledge to advance in their career.

Graduates of the M.B.A. program will demonstrate:

- effective written and oral communication,
- effective leadership and teamwork,
- an understanding of the integrated nature of business functions,
- the ability to think critically and use analytical approaches in making effective decisions within a dynamic business environment and
- an understanding of ethical dimensions in business decisions.

The M.B.A. is an integrated program designed to prepare individuals for responsible managerial positions by providing background in the major functional areas of business operations. Curricular emphasis is placed on the development of managerial generalists. The M.B.A. is a widely recognized professional degree targeted toward those who occupy or aspire to mid-level and senior-level positions.

The program is geared for the student who is also employed full-time. While sufficient courses are available each term for a student to be enrolled full-time, the timing, sequence and amount of offerings are dictated by the needs of those progressing through the program as part-time students. The M.B.A. program is offered in both Hybrid and Online formats.

Currently, there are more than 30 graduate faculty members in the College of Business and Global Affairs. Students must satisfy the university general requirements and the following requirements specific to the degree.

## Master of Business Administration (4060)-30 Hours Required

Students must successfully complete each of the following courses:
Core Courses (27 hours)
Accounting 711 Accounting for Managerial Decisions (4)
Business Administration 721 Critical Thinking (1)*,**
Business Law 711* Legal and Ethical Environment of Business (3)
Economics 710 Managerial Economics (4)
Finance 710 Corporate Financial Management (4)
Management 710* Organizational Theory and Design (4)
Marketing 710* Marketing Strategy (4)
Management 730 Operations Management: Analytics and Applications (3)
Culminating Course (3 hours)
Management 790 Strategic Management and Business Policy (3)
Must be taken during last semester.
*Students must take at least one of these four required courses within the first two semesters of study.
**BADM 721 must be taken the first time offered unless approved by the graduate coordinator.

## Master of Business Administration with General Business Option (4061)-30 Hours Required

Students must successfully complete each of the following courses:
Core Courses (27 hours)
Accounting 711 Accounting for Managerial Decisions (4)
Business Administration 721 Critical Thinking (1)*,**
Business Law 711* Legal and Ethical Environment of Business (3)
Economics 710 Managerial Economics (4)
Finance 710 Corporate Financial Management (4)
Management 710* Organizational Theory and Design (4)
Marketing 710* Marketing Strategy (4)
Management 730 Operations Management: Analytics and Applications (3)
Culminating Course (3 hours)
Management 790 Strategic Management and Business Policy (3)
Must be taken during last semester.
NOTES:
*Students must take at least one of these four required courses within the first two semesters of study.
**BADM 721 must be taken the first time offered unless approved by the graduate coordinator.

## Master of Business Administration with Agricultural 0ption (4062)-42 Hours Required

Students must successfully complete each of the following courses:
Core Courses (27 hours)
Accounting 711 Accounting for Managerial Decisions (4)
BADM 721 Critical Thinking (1) *,**
Business Law 711* Legal and Ethical Environment of Business (3)
Economics 710 Managerial Economics (4)
Finance 710 Corporate Financial Management (4)
Management 710* Organizational Theory and Design (4)
Marketing 710* Marketing Strategy (4)
Management 730 Operations Management: Analytics and Applications (3)
Elective Courses (choose 12 hours from the following courses)
Agricultural Economics 705 Advanced Agricultural Marketing (3)
Agricultural Economics 710 Commodity Futures and Options Market (3)
Agricultural Economics 735 Seminar in International Agricultural Trade (3)
Agricultural Economics 740 Advanced Econometric Applications in Agribusiness (3)
Agricultural Economics 750 Agricultural Risk Analysis and Decision-Making (3)
Agricultural Economics 751 Strategic Management Issues in Agriculture (3)
Agricultural Economics 780 Project Management Issues in Agriculture (3)
Agricultural Economics 784 Applied Management Science in Agricultural Systems I (3)
Natural Resources Management 730 Advanced Natural Resources Economics (3)

## Culminating Course (3 hours)

Management 790 Strategic Management and Business Policy (3)
Must be taken during last semester.

## NOTES:

*Students must take at least one of these four required courses within the first two semesters of study. **BADM 721 must be taken the first time offered unless approved by the graduate coordinator.

# Degree Requirements for the College of Education, Health, and Behavioral Sciences 

## Master of Science in Education

Students must satisfy the university general requirements and the following requirements specific to the degree. The majors within the degree are: educational leadership, counseling, and teaching.

## Accreditation

The Major in Teaching and the Concentration in School Counseling are approved by the National Council for the Accreditation of Teacher Education (NCATE) and the Council for the Accreditation of Educator Preparation (CAEP).

## Conceptual Framework for Advanced Programs

(Curriculum and Instruction, School Counseling, Clinical Mental Health Counseling, Educational Leadership)

The Graduate Faculty has adopted the theme "Professional Educators as Leaders and Enhancers of Human Development" to represent our goal in continuing an educator's professional development. The advanced program goals are depicted as four keys that the graduate faculty feels will unlock each candidate's potential. They are:

Key 1 Knowledge, Skills and Application
Key 2 Human Relations
Key 3 Inquiry
Key 4 Professional and Ethical Behavior
Within each key component are outcomes that each candidate is expected to master upon completion of his/ her individual program. These keys are linked together by a solid ring representing the faculty's commitment to diversity, technology and assessment.

## Explanation of Keys and Examples of Evidence:

Key 1-Knowledge, Skills and Application. Candidates will understand how students develop and learn. They will have an understanding of their area of expertise and appreciate how knowledge in this area is created, organized, linked between other disciplines and applied to real-world situations. Their instructional skills will allow them to create multiple paths to the subjects they teach and develop problem solving abilities. Candidates will also be able to adjust their practice based on observation and knowledge of the students' interests, skills, abilities, knowledge, family circumstances and peer relationships.

Key 2-Human Relations. Candidates will be able to engage groups of students to ensure a disciplined learning environment that unlocks their full potential while allowing the schools' goals for students to be met. As professional educators, they will be adept at engaging students in appropriate behavior in and out of the
classroom. Candidates will be able to enlist their colleagues' knowledge and expertise to complement their own. They will have the ability to contribute to the effectiveness of the school by working collaboratively with other professionals on instructional policy, curriculum development and staff development, as well as with parents and community resource personnel, engaging them productively in the work of the school.
Key 3-Inquiry. Candidates will stay abreast of current research and incorporate new findings in their practice. Their decisions will be grounded in both the literature and their expertise. Data collection, observation and reflective thinking are examples of powerful activities that candidates will practice to enhance their professional effectiveness. Candidates will have a clear understanding of the research process. They will be able to design and execute a plan for research, read and interpret published research of others and apply the findings to an educational setting.

Key 4-Professional and Ethical Behavior. Candidates will be a model of the educated person, exemplifying the virtues they seek to inspire in students - curiosity, honesty, tolerance, fair-mindedness, respect for diversity and appreciation of cultural differences. Candidates will develop the ability to cope with the unexpected and act wisely in the face of uncertainty. They will understand the importance of lifelong learning so that they may encourage the same in their students. They will be expected to take advantage of professional development activities.

## Conceptual Framework for Initial Licensure Programs

The Teacher Education unit has adopted the theme "Educators as Facilitators of Learning" to represent its goal in preparing future teachers. Our program goals are depicted as three keys that the Unit faculty feels will unlock each candidate's potential.

They are:
Key 1 Knowledge, Skills and Application
Key 2 Reflective Practice
Key 3 Professional and Ethical Behavior
Within each key component are outcomes that each candidate is expected to master in order to be recommended for licensure. These keys are linked together by a solid ring representing the Unit's commitment to diversity, technology and assessment.

## Explanation of Keys and Examples of Evidence:

Key 1-Knowledge, Skills and Application. Candidates will be able to demonstrate expertise within the subject matter, subject must be meaningful to all students, will be knowledgeable of curriculum. They will also be able to create a positive learning environment, which will promote responsible behavior among all students including those having difficulties, less prepared and/or with exceptionalities.

Key 2-Reflective Practice. Candidates will be able to reflect appropriate and inappropriate practice, the nature of students, learning environments and strategies to enhance learning. Candidates will also know how to improve the teaching/learning situation. They will be able to monitor their own teaching strategies and behavior in relation to student success, which may include modifying their plans and teaching approaches. The candidates will be able to use assessment techniques to reflect on student progress and to improve student learning.

Key 3-Professional and Ethical Behavior. Candidates will be able to articulate their values and beliefs, demonstrate self-respect and respect for others. The candidate will be expected to discuss intellectual freedom, equity, tolerance and due process. They will know the professional code of ethics in their specialty area and know the consequences if violated. The candidate is expected to participate in collegial activities as well as maintain activity in professional organizations.

## Major in Counseling (5041, 5042, 5043, 5044)

The Master of Science in Education with a major in Counseling has four specializations: 1) school counseling (5042), 2) clinical mental health counseling (5041), 3) addictions counseling (5043), and 4) student affairs and college counseling (5044). The school counselor specialization will prepare counselors to support teachers and other school personnel as well as parents in addressing the needs of students related to academic, career preparation and personal growth and development. Students will be prepared to serve schools with grades Pre-Kindergarten through 12. The major in Counseling is an approved preparation program for School Counseling Licensure through the Division of Teacher Education and Accreditation, Tennessee State Department of Education.

The Clinical Mental Health Counseling specialization will prepare counselors to address a wide variety of wellness, prevention, and mental health concerns within the clinical mental health counseling context.

The Addictions Counseling specialization will prepare counselors to work in a wide range of addiction counseling, treatment, and prevention programs, as well as in a mental health counseling contexts.

The Student Affairs and College Counseling specialization will prepare counselors to work in professional positions in college counseling centers, financial aid, and other student affairs services in higher education settings.

## Disclaimer

The College of Education, Health, and Behavioral Sciences is required to follow the directives of the State Department of Education, which has the authority to make changes in certification standards. The university does not claim to prepare counselors for distinct specialties with its general-degree programs in counseling. Students should consult their adviser or the coordinator/designee to ascertain if their career goals require specialization in a certain area of counseling. Students who graduate from the counseling program and plan to enter private practice or need licensure for employment are responsible for meeting the licensure requirements in Tennessee for the Licensed Professional Counselor. Students are instructed to write the Tennessee Department of Health Related Boards, 283 Plus Park Blvd., Nashville, Tennessee 37247-1010 for the board's licensure standards, which may exceed the university's counseling degree program requirements.
I. Foundation Core (6 hours)
Counseling 710 Research in Education and Counseling ..... 3
Counseling 721 Multicultural Issues in Education \& Counseling. ..... 3
II. Concentration (24 hours)
Counseling 722 Professional, Ethical and Legal Issues in Counseling. ..... 3
Counseling 725 Theory and Techniques of Counseling ..... 3
Counseling 730 Career Development and Counseling ..... 3
Counseling 740 Group Dynamics ..... 3
Counseling 748 Principles of Crisis Intervention ..... 3
Counseling 750 Mental Health and Psychopathology ..... 3
Counseling 760 Individual Appraisal ..... 3
Counseling 785 Counseling Practicum ..... 3
Clinical Mental Health Counseling Specialization (24 hours)
Counseling 716 Growth and Development Across the Life Span (Birth to Adult) ..... 3
Counseling 620 Introduction to Counseling ..... 3
Counseling 776 Psychopharmacology ..... 3
Counseling 777 Psychopathology: Diagnosis and Treatment ..... 3
Counseling 782 Alcohol and Substance Abuse Counseling ..... 3
Counseling 783 Clinical Mental Health Counseling ..... 3
Counseling 784 Mental Health Services Management, Consultation, and Supervision. ..... 3
Electives: Three hours of electives at the 600 -level or above (approved by adviser) ..... 3
Addictions Counseling Specialization (24 hours)
Counseling 620 Introduction to Counseling ..... 3
Counseling 716 Growth and Development Across the Life Span (Birth to Adult) ..... 3
Counseling 747 Introduction to Addictions Counseling. ..... 3
Counseling 776 Psychopharmacology. ..... 3
Counseling 777 Psychopathology: Diagnosis and Treatment ..... 3
Counseling 781 Introduction to Marital and Family Counseling ..... 3
Counseling 782 Alcohol and Substance Abuse Counseling ..... 3
Electives: Three hours of electives at the 600 -level or above (approved by adviser) ..... 3
School Counseling Specialization (12 hours)
Counseling 716 Growth and Development Across the Life Span (Birth to Adult) ..... 3
Counseling 620 Introduction to Counseling ..... 3
Counseling 786 Organization and Administration of School Counseling Services/Programs. ..... 3
Counseling 787 Pre-Practicum in School Counseling ..... 3
Student Affairs and College Counseling Specialization (12 hours)
Counseling 620 Introduction to Counseling ..... 3
Counseling 752 Student Affairs in Higher Education ..... 3
Counseling 753 Student Development and Higher Education ..... 3
Counseling 754 Assessment, Evaluation, and Administration of Student Affairs and College Counseling ..... 3
III. Culminating Experience (6 hours)
Counseling 788 Internship I and Counseling 792 Internship II ..... 6
OR
Counseling 789 Internship in Secondary School Counseling andCounseling 790 Internship in Elementary School Counseling6
Minimum hours required for degree (school counseling, student affairs and college counseling) ..... 48
Minimum hours required for degree (clinical mental health, addiction counseling) ..... 60

Note: In order to be recommended for licensure as a School Counselor, the State Department of Education stipulates that candidates without teaching experience will have a semester-long orientation experience in a (PreK-12) school as an early part of the preparation program. Students will meet this requirement by successful completion of Counseling 712 Learning Theories and 30 hours of observation ( 15 hours in Elementary K-6; 15 hours in Secondary 7-12 setting).

## Admission to Candidacy

Students admitted to the Counseling programs are eligible to apply for admission to candidacy after they have enrolled in a minimum of 15 credit hours. Students must have satisfactorily completed Counseling 620,

Counseling 725 and Counseling 740 prior to completing application. To apply for Admission to Candidacy, students must:

1. submit online application for "Admission for Counseling Residency and Candidacy." The application is available on the Education Graduate Program website (http://www.utm.edu/departments/edgrad/forms. php). The Education Graduate Office will verify eligibility. The application must be submitted in order to participate in the three-day residency (held biannually). Students will be notified of session they will be required to attend (January or June).
2. successfully complete a three-day residency which is required for full admission to candidacy and continuation in the Counseling program. Successful completion of residency and approval for candidacy requires favorable evaluation by faculty at the end of residency.

Students who are not admitted to candidacy may reapply for admission one additional time within one calendar year from date of notification. NOTE: Students may not complete more than 24 credit hours without successfully completing the four-day residency and admission to candidacy.

## Residency

All counseling majors are required to attend a three-day residency (either January or June) in order to be admitted to candidacy and be allowed to continue in the counseling program. At the time of application to candidacy, students will register to attend the upcoming residential meeting. The program will be held on the Martin campus. The Residency is completed after taking a minimum of 15 credit hours, including Counseling 620, Counseling 725 and Counseling 740, but before completion of 24 credit hours.

## Practicum Requirement

Each student in the counseling program must complete a semester-long supervised practicum experience (Counseling 785). The practicum requirement is available to students only upon the approval of the instructor, and must be taken prior to the internship. School Counseling (5042) candidates admission to practicum will be granted if passing scores for the required Praxis II exam for licensure in school counseling is submitted to the Education Preparation Program office in addition to the requirements stated above.* Application for completing the practicum requirement must be submitted one semester in advance of the semester the experience is desired. An application may be obtained from the coordinator/designee of graduate programs in Education.
*The State Department of Education establishes passing scores for the CORE, Praxis II Subject Assessments, and Principles of Learning and Teaching exams. The scores are subject to change each year. In order to obtain the current passing scores when tests are taken, check with the Office of Education Preparation Program located in 205 Gooch Hall.

## Internship Application

The internship is a field experience in which students are required to apply the knowledge and skill acquired in previous coursework to actual school/clinical mental health settings. Students must complete an internship application online the semester prior to enrollment. The application may be completed online at http:// www.utm.edu/departments/edgrad/forms.php. The internship requirements will be fulfilled at a site approved through the Education Graduate Office. A registration hold will be placed on student records to prevent registration for internships before application is complete.
All prerequisites, core courses and the practicum requirement must be completed before the internship is begun.

Deadlines: September 30 application due for Spring internship
January 30 application due for Summer or Fall internships

## Critical Paper

Each internship student must summarize and evaluate the internship experience in a critical synthesis paper.

## Comprehensive Examination

A comprehensive written examination must be taken by all students pursuing the Master of Science degree with a major in Counseling. The examination will test a student's competencies and knowledge in the chosen area of specialization. The comprehensive examination must be taken in the semester preceding the semester in which the student expects to begin the first internship. The comprehensive exam will be administered online through Canvas. A minimum score of $70 \%$ is required for successful completion.

## Major in Instructional Leadership (5051)

The Master of Science in Education with a major in Instructional Leadership is available to individuals who obtained a bachelor's degree from an accredited college or university and who are professionally licensed to teach. This degree allows the candidate to complete certification requirements for the beginning administrator as an initial step towards full credentialing as a professional administrator. According to current Tennessee State Board of Education policy, full credentialing and employment of principals/supervisors is a two-step process. The first step leads to licensure as a beginning administrator; the second step supports the professional development of the new administrator and leads to licensure as a professional administrator. This may be accomplished through a Standard Program or an Internship Program. It is important for the candidate to consult with the graduate coordinator/designee and/or adviser to identify the appropriate program to be pursued in preparing to be recommended for licensure.

## Disclaimer

The College of Education, Health, and Behavioral Sciences is required to follow the directives of the State Department of Education, which has the authority to make changes in licensure standards. Students will need to consult their adviser for the specific changes to the standards in order to assure they meet the new licensure standards.
I. Core (27 hours)
Educational Leadership 710 Instructional Leadership ..... 3
Educational Leadership 715 Organizational and Business Management ..... 3
Educational Leadership 730 Family and Community Engagement ..... 3
Educational Leadership 745 Measurement and Decision-Making ..... 3
Educational Leadership 750 Clinical Practice ..... 3
Educational Leadership 755 Equitable and Culturally Responsive Practices ..... 3
Educational Leadership 760 School Finance and Educational Law. ..... 3
Educational Leadership 775 Leading Educational Change. ..... 3
II. Culminating Experience (3 hours)
Educational Leadership 780 Clinical Practice II ..... 3
Minimum hours required for degree: ..... 27

## Portfolio Requirement

In addition to completing course requirements, the candidate is required to complete a satisfactory professional portfolio. Development of a portfolio provides each candidate opportunities for reflection and self-evaluation along with spotlighting skills and accomplishments that will be of interest to future employers.

## Recommendation for Licensure

In order to be recommended for licensure as a beginning administrator at the end of the degree program, the State Department of Education stipulates that a candidate take and pass the state required test/assessment.

Note: Instructional Leadership License (ILL) is the administrator license issued to an individual who after September 15, 2009 is enrolled in and completes an approved graduate program in school leadership at a college/university with acceptable accreditation, holds a valid Tennessee teacher license, and has a minimum of three years of successful education work experience.
Note: Individuals currently holding a master's degree may pursue an additional endorsement in Educational Leadership. For information regarding specific requirements, contact the graduate coordinator/designee.

## Higher Education Leadership (5052) 30 hours

The concentration in Higher Education Leadership is available for those students who have obtained a baccalaureate degree from an accredited college or university and seeking a career in postsecondary institutions or educational organizations. The Graduate Faculty has adopted the theme, "Professional Educators as Leaders and Enhancers of Human Development," to represent its goal in continuing an educator's professional development. The Conceptual Framework includes the following: Knowledge, Application, and Professionalism. Inherent within each key component are outcomes that the candidate is expected to master upon completion of the program.
I. Foundation (12 hours)
Educational Studies 720 Introduction to Leadership ..... 3
Educational Foundations 740 History of Higher Education ..... 3
Educational Foundations 710 Research in Education \& Counseling. ..... 3
Educational Foundations 721 Diversity and Equity in Higher Education. ..... 3
II. Concentration ( $\mathbf{1 8}$ hours)
Educational Studies 760 Organization \& Administration of Postsecondary Education ..... 3
Educational Leadership 761 Higher Education Law ..... 3
Educational Studies 753 Student Development and Engagement in Higher Education. ..... 3
Educational Leadership 711 Recruitment, Retention and Strategic Enrollment Management ..... 3
Educational Leadership 731 Higher Education Finance and Resource Management ..... 3
Educational Foundations 730 Seminar in Postsecondary Education. ..... 3
Major in Teaching (5017, 5025, 5026, 5021, 5023, 5022, 5024, 5019)
Curriculum and Instruction (5017) 30 hoursThe Curriculum and Instruction Option is available for those students who have obtained a bachelor's degreefrom an accredited college or university and who are professionally licensed to teach.
I. Foundations (12 hours)
Educational Evaluation 761 Educational Assessments and Evaluations. ..... 3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education and Counseling. 3
Library Service 755 Children and Adolescent Literature. ..... 3
Reading 700 Foundations of Literacy Development. ..... 3
II. Application (6 hours)
Educational Studies 750 Teaching with Technology. ..... 3
III. Concentration (12 hours)

Teacher Education 712 Learning Theory and Cognition Applied to the School Setting
Education Studies 710 Models of Instruction, Curriculum and Development, and Advanced Teaching Strategies
Special Education 680 Strategies for Differentiation in the Inclusive Classroom ..... 3
Teacher Education 716 Growth and Development in School Age Students ..... 3

## Initial Licensure (Elementary) (5025) 36 hours

The Initial Licensure Option is available for those students who have obtained a bachelor's degree from an accredited college or university and who are seeking to obtain initial licensure at the master's level to teach. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to the Educator Preparation Program, Praxis, and Licensure. Graduate (Initial Licensure Candidates)

1. Students must establish a minimum cumulative GPA of 2.75 for EPP program admission.
2. Students must maintain a cumulative GPA of 3.00 per term until program completion per University Graduate policy.
3. Students must demonstrate an acceptable level of written and oral communication skills during an interview process.
4. Student must submit to and successfully pass a criminal background check and sign the release form.
**Job-Embedded candidate requirements for admission to EPP will be clarified by Licensure Office in "Plan of Study" packet.
I. Foundations (9 hours)
Educational Foundations 720 Educational Studies: Multicultural Issues in Education and Counseling. 3
Library Service 755 Children and Adolescent Literature................................................................... 3
Teacher Education 730 Principles and Practices of Effective Teaching .............................................. 3
II. Application (15 hours)
Educational Evaluation 761 Educational Assessment and Evaluation. ..... 3
Educational Studies 750 Teaching with Technology ..... 3
Teacher Education 789 Application of Academic Language for Planning and Instruction. ..... 3
Student Teaching: Elementary Education 793 \& 794 Grades K-4, 5-8 OR Teacher Education 795 Practicum in Initial Licensure (for students who are hired before student teaching is completed) OR TCED 712 Learning Theory and Cognition Applied to the School Setting and TCED 791 Master's Culminating Experience (for students desiring the non licensure option) ..... 6
III. Concentration (12 hours)
Reading 700 Foundations of Literacy Development ..... 3
Elementary Education 730 Methods of Teaching Language Arts and Social Studies in the Elementary Classroom ..... 3
Elementary Education 731 Methods of Teaching Mathematics and Science in the Elementary Class- room ..... 3
Special Education 680 Strategies for Differentiation in the Inclusive Classroom ..... 3

## Initial Licensure (Secondary) (5026) 36 hours

The Initial Licensure Option is available for those students who have obtained a bachelor's degree from an accredited college or university and who are seeking to obtain initial licensure at the master's level to teach. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to the Educator Preparation Program, Praxis, and Licensure.
Graduate (Initial Licensure Candidates)

1. Students must establish a minimum cumulative GPA of 2.75 for EPP program admission.
2. Students must maintain a cumulative GPA of 3.00 per term until program completion per University Graduate policy.
3. Students must demonstrate an acceptable level of written and oral communication skills during an interview process.
4. Student must submit to and successfully pass a criminal background check and sign the release form.

> **ob-Embedded candidate requirements for admission to EPP will be clarified by Licensure Office in "Plan of Study" packet.

## I. Foundations (9 hours)

Teacher Education 730 Principles and Practices of Effective Teaching .............................................. 3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education and Counseling. 3
Library Service 755 Children and Adolescent Literature................................................................... 3
II. Application (18 hours)
Educational Evaluation 761 Educational Assessment and Evaluation.................................................. 3

Educational Studies 750 Teaching with Technology......................................................................... 3
Teacher Education 789 Application of Academic Language for Planning and Instruction.................... 3
Student Teaching: Secondary Education 793 \& 794 Grades 7-8, 9-12 OR
Teacher Education 795 Practicum in Initial Licensure (for students who are hired before student teaching if completed) OR
TCED 712 Learning Theory and Cognition Applied to the School Setting and TCED 791 Master's Culminating Experience (for students desiring the non licensure option
III. Concentration (15 hours)
Reading 700 Foundations of Literacy Development. ..... 3
Secondary Education 730 Practical Teaching Applications for the Middle School Classroom. ..... 3
Secondary Education 731 Advanced Instructional Practices: Teaching in the Secondary Classroom .. ..... 3
Special Education 680 Strategies for Differentiation in the Inclusive Classroom. ..... 3

## K-12 (Library Service) (5021) 42 hours

The Initial Licensure Option is available for those students who have obtained a bachelor's degree from an accredited college or university and who are seeking to obtain initial licensure at the master's level to teach Library Service K-12. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to the Educator Preparation Program, Praxis, and Licensure.

## I. Foundations ( 12 hours)

Educational Foundations 710 Research in Education ....................................................................... 3
Educational Foundations 720 Multicultural Issues in Education and Counseling ............................... 3
Special Education 640 Inclusive Practices for the Elementary Classroom ......................................... 3
Teacher Education 780 Principles and Techniques of Teaching or Teacher Education 730 Principles and Practices in Teaching: Curriculum and Instruction ..... 3
II. Application (15 hours)
Educational Foundations 711 Data Driven Decision-Making in Education ..... 3
Library Service 725 Information Representation and Retrieval ..... 3
Library Service 765 School Library Management. ..... 3
Library Service 765 School Library Internship (PreK-6) and Library Service 766 School Library Internship (7-12) ..... 6
III. Concentration (15 hours)
Library Service 715 Foundations of Library and Information Science and Library Service 735 Organization of Information ..... 6
Library Service 755 Literature for Children and Young Adults. ..... 3
Instructional Design \& Technology 720 Instructional Design. ..... 3
Teacher Education 716 Growth and Development in School Age Students OR Instructional Design \& Technology 740 Creating Collaborative Learning Environments ..... 3

## Literacy (5023) 30 hours

The Literacy concentration is available for those students who have obtained a bachelor's degree from an accredited college or university and who are professionally licensed to teach. The Graduate Faculty has adopted the theme, "Professional Educators as Leaders and Enhancers of Human Development," to represent its goal in continuing an educator's professional development. The Conceptual Framework includes the following:
Knowledge, Application, and Professionalism. Inherent within each key component are outcomes that the candidate is expected to master upon completion of the program.I. Foundations Courses (12 hours)Educational Foundations 761 Educational Tests and Measurements.3
Library Service 755 Children and Adolescent Literature ..... 3
Educational Foundations 720 Multicultural Issues in Education and Counseling ..... 3
Reading 700 Foundations of Literacy Development. ..... 3
II. Concentration ( 18 hours)
Special Education 680 Strategies for Differentiation in the Inclusive Classroom ..... 3
Educational Studies 750 Teaching with Technology. ..... 3
Reading 710 Assessment, Diagnosis, \& Intervention in the Reading Classroom. ..... 3
Reading 720 Research-based Practices for Differentiated Literacy Instruction. ..... 3
Reading 730 Literacy as a Neurologic Process ..... 3
Reading 740 Literacy Practicum ..... 3

NOTE: Candidates seeking Reading Specialist Add-on Certification will be required to take the Reading Specialist (5301) Praxis exam.

## Initial Licensure K-8 (Special Education Interventionist) (5022) 42 hours

The Initial Licensure Option is available for those students who have obtained a bachelor's degree from an accredited college or university and who are seeking to obtain initial licensure at the master's level to teach Special Education K-8. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to the Educator Preparation Program, Praxis, and Licensure.
I. Foundations ( 12 hours)
Educational Foundations 720 Multicultural Issues in Education and Counseling ..... 3
Special Education 500 The Exceptional Child ..... 3
Teacher Education 730 Principles and Practices of Effective Teaching ..... 3
Library Service 755 Children and Adolescent Literature ..... 3
II. Application (12 hours)
Educational Studies 750 Teaching with Technology. ..... 3
Teacher Education 789 Application of Academic Language for Planning and Instruction ..... 3
Elementary Education 793 Student Teaching Grades K-4 and Elementary Education 794 Student Teaching Grades 5-8
OR Teacher Education 795 Practicum in Initial Licensure. ..... 6
III. Concentration (18 hours)
Reading 700 Foundation of Reading ..... 3
Special Education 619 Clinical Field Experience III ..... 3
Special Education 634 Literacy Interventions for Students with Disabilities. ..... 3
Special Education 635 Special Education Assessment and Procedures ..... 3
Special Education 640 Inclusive Practices for the Elementary Classroom ..... 3
Special Education 660 Behavior Strategies and Interventions ..... 3

## Special Education (5024) 30 hours

The concentration in Special Education is available for those students who have obtained a bachelor's degree from an accredited college or university and who are professionally licensed to teach. The Graduate Faculty has adopted the theme, "Professional Educators as Leaders and Enhancers of Human Development," to represent its goal in continuing an educator's professional development. The Conceptual Framework includes the following: Knowledge, Application, and Professionalism. Inherent within each key component are outcomes that the candidate is expected to master upon completion of the program.

## I. Foundations Courses (12 hours)

Educational Foundations 761 Educational Tests and Measurements................................................. 3
Library Service 755 Children and Adolescent Literature................................................................... 3
Educational Foundations 720 Multicultural Issues in Education and Counseling ............................... 3
Reading 700 Foundations of Literacy Development.......................................................................... 3
II. Concentration ( $\mathbf{1 8}$ hours)

Special Education 680 Strategies for Differentiation in the Inclusive Classroom................................. 3
Special Education 701 Introduction to Autism Spectrum Disorder .................................................... 3
Special Education 702 Advanced Behavioral Interventions in Inclusive Settings................................. 3
Special Education 703 Assessment for Individuals with ASD .............................................................. 3
Special Education 710 Advanced Practicum in Special Education..................................................... 3
Special Education 712 Single Case Design ....................................................................................... 3
NOTE: Candidates are required to pass a written comprehensive examination, which is an integral part of SPED 710, in the semester they plan to graduate. Students earning at least a grade of B in SPED 710 will have represented successful completion of a comprehensive exam.

## Interdisciplinary (5019) $\mathbf{3 0}$ hours

The Interdisciplinary Option is available for those students who have obtained a bachelor's degree from an accredited college or university.

Students electing the Interdisciplinary Option select Special Education, Reading, or a discipline outside of the Department of Educational Studies for study (includes courses from several disciplines within one department). (Note: Educational Leadership and Counseling disciplines are not available; however, other Educational Studies disciplines may be available with prior approval from Graduate Coordinator/designee from the College of Education, Health, and Behavioral Sciences, as approved by CEHBS Graduate Committee.) Eighteen hours of subject area electives are decided upon in consultation with the student's adviser from the differing discipline/department and the Graduate Coordinator/designee from the College of Education, Health, and Behavioral Sciences. No more than three hours of 500-level subject area electives may be applied toward a degree. A minimum of six hours of 700-level subject area electives must be taken. Only six semester hours of workshop credit may be applied toward a degree.
I. Core (12 hours)Educational Evaluation 761 Educational Tests and Measurements3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education and Counseling ..... 3
Reading 700 Foundations of Literacy Development. ..... 3
Teacher Education 791 Master Research Project K-12 ..... 3
II. Concentration (18 hours)
Subject Area Electives. ..... 18

NOTE: A subject area examination may be a requirement in one of the courses used to satisfy the 18 -hour concentration. Students must check with their advisers regarding this requirement.

## Degree Requirements for the Department of Communications

The Department of Communications offers a Master of Arts in Strategic Communication (MASC). The MASC is a professionally oriented, executive-style degree program that will prepare students to plan, create, and manage communication to achieve organizational goals.

The MASC is unique because of the integrated curriculum. Strategic communication is a very broad area that pulls together communications disciplines that are typically separated in many academic programs. The integrated curriculum reflects a strong demand in the workplace for professionals who understand how to plan and manage many types of communication initiatives.

The MASC combines the flexibility of engaging online coursework with a small amount of required attendance on campus (approximately six weekends total). This approach allows working professionals the flexibility needed to accommodate busy work schedules and provides an opportunity to develop relationships with faculty mentors and peers through on-campus weekends.

The MASC course work was developed based on extensive industry research conducted by the Commission on Public Relations Education (CPRE), which is composed of educators and public relations professionals, and the educational standards of the Association for Education in Journalism and Mass Communication. The courses address the real-world skills and knowledge demanded by employers and business leaders.
Through the MASC coursework, students will learn:

- to use strategic communication management skills to increase the opportunity for career advancement in related or integrated disciplines.
- to integrate basic management and leadership principles and processes into the communication process.
- to use communication theory and research methods to address critical communication questions and issues in the workplace.
- to analyze the impact of global market forces on professional interactions and communication.
- to apply professional ethics in the workplace.

The MASC is open to and appropriate for students from a variety of academic backgrounds. This degree program is appropriate for anyone with a bachelor's degree in - but not limited to - public relations, communications, mass communication, communication studies, organizational communication, business communication, marketing, advertising, business administration, agriculture business, agriculture communication, and political science.

## Master of Arts in Strategic Communication, MASC (2450)-33 Hours Required

MASC students must complete a minimum of 33 credit hours (including the Capstone Professional Project) with no final course letter grade lower than a $B$.

Core Courses ( 15 hours)
All students are required to complete the following courses with a final letter grade of at least a B.
Communication 701 Professional Seminar I (Requires travel to campus on two weekends) (1)
Communication 702 Professional Seminar II (Requires travel to campus on two weekends) (1)
Communication 703 Professional Seminar III (Requires travel to campus on two weekends) (1)
Communication 710 Applied Research Methods for Professionals (3)
Communication 720 Media and Communication Theory for Professionals (3)
Communication 790 Capstone Professional Project (1-3)
Students must choose one of the following courses, depending on their career goals. Students will be allowed to count the second course as an elective should both courses be completed with a final letter grade of at least a B.

Communication 730 Organizational Communication (3)
Communication 740 Leadership Theory and Practice (3)
Elective Courses (18 hours)
Each MASC degree-seeking student will work with an academic advisor within the Department of Communications to select elective courses to fulfill the 18 hours of elective courses. Students cannot earn graduate credit for courses previously completed at the undergraduate level. Elective courses are offered in the following areas of emphasis.

Public Relations and Marketing Communication
Communication 534 International Public Relations (3)
Communication 599 Introduction to Social Media for Strategic Communication (3)
Communication 605 Social Media Management (3)
Communication 625 Strategic Communication Campaigns (3)
Communication 735 Organizational Public Relations and Communication Strategies (3)
Communication 745 Crisis Communication (3)
Mass Communication, Media Management, and Media Production
Communication 655 Digital Media Production (3)
Communication 750 Media Management (3)
Communication 760 Media Programming and Analytics (3)

Technical Communication
Communication 705 Advanced Copywriting and Editing (3)
Communication 715 Technical Communication (3)
Issues and Topics in Strategic Communication
Communication 671 Independent Study (3)
Communication 700 Seminar in Strategic Communication (3)
Communication 765 Persuasive Communication Techniques and Strategies (3)
Communication 770 Communication and the Global Audience (3)
Communication 775 Professional Ethics and Strategic Communication (3)
Communication 780 Media Ecology (3)
Communication 785 Communication Law for Professionals (3)

## Board, Faculty, and Staff



The University of Tennessee at Martin

## The University of Tennessee Board of Trustees

The University of Tennessee is governed by its Board of Trustees. The board is comprised of the commissioner of agriculture and ten members appointed by the Governor and confirmed by joint resolution of the senate and house of the Tennessee General Assembly.

Each campus also has an advisory board to advise the chancellor, president, and board of trustees on matters related to the campus and the University of Tennessee System

Both boards meet at least three times annually, and the sessions are open to the public.
Additional information regarding the board of trustees and UT Martin advisory board may be found at https:// trustees.tennessee.edu/.

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Leighton Chappell, Student Trustee, UT Martin
Brad Box, Jackson, TN
Charles Hatcher, Nashville, TN (Commissioner of Agriculture)
Decosta Jenkins, Nashville, TN
Kara Lawson, Alexandria, VA
Amy Miles, Alcoa, TN
Bill Rhodes, Memphis, TN
Donnie Smith, Rogers, AR
Kim White, Chattanooga, TN
Alan Wilson, Naples, FL
Jamie Woodson, Lebanon, TN

## The University of Tennessee System Administrative Officers

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Senior Vice President and Chief Financial Officer, David L. Miller, M.B.A.
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Vice President for Academic Affairs and Student Success, Linda C. Martin, Ph.D.
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Senior Vice President/Senior Vice Chancellor of The University of Tennessee Institute of Agriculture, Tim
Cross, Ph.D.
Chancellor of The University of Tennessee, Knoxville, Donde Plowman, Ph.D.
Chancellor of The University of Tennessee at Martin, Keith S. Carver, Jr., Ph.D.

## The University of Tennessee at Martin Administrative Units and Positions

Chancellor, Keith S. Carver, Jr., Ph.D.
Executive Assistant to the Chancellor, Edie B. Gibson, B.A.
Chief Information Officer, Amy C. Belew, M.B.A.
Equity and Diversity Officer, Joe T. Henderson, B.S.
Interim Director of Research, Outreach, and Economic Development, Todd A. Winters, Ph.D.
Interim Chief Diversity and Inclusion Officer, Mark McCloud, Ph.D.

## Division of Academic Affairs

Provost and Vice Chancellor for Academic Affairs, Philip Acree Cavalier, Ph.D. Associate Provost, Victoria S. Seng, Ph.D.
Dean of Agriculture and Applied Sciences, Todd Winters, Ph.D.
Dean of Business and Global Affairs, Ahmad Tootoonchi, Ph.D.
Dean of Education, Health, and Behavioral Sciences, Cynthia H. West, M.S.S.W.
Dean of Engineering and Natural Sciences, Shadow JQ Robinson, Ph.D.
Dean of Humanities and Fine Arts, Lynn M. Alexander, Ph.D.
Interim Dean of Graduate Studies, Joey E. Mehlhorn, Ph.D.

Director of UTM in Sienna Program, Joe Ostenson, Ph.D.
Director of Educational Outreach, Erica Bell, M.B.A.
Director of UT Online, Adam Wilson, Ph.D.
Executive Director of Enrollment Services and Student Engagement, James D. Mantooth, Ph.D. Director of Honors Programs, John V. Glass III, Ph.D.
Interim Director of Library Services, Amy C. Belew, M.B.A.
Director of Accreditation and SACS Coordinator, Stephanie Kolitsch, Ph.D.
Registrar and Director of Academic Records, Martha Barnett, M.S.Ed.
Interim Director of Institutional Research, Stephanie Kolitsch, Ph.D.

## Division of Finance and Administration

Vice Chancellor for Finance and Administration, Petra R. McPhearson, M.S.
Director of Budget and Management Reporting, Carol Williams, M.B.A.
Special Assistant to the Vice Chancellor for Finance and Administration for Strategic Initiatives, Laura G. Foltz, Ed.D.
Director of Human Resources, Michael Washington, M.H.R.
Interim Director of Physical Plant Operations, Brad Burkett, B.S.E.
Director of Public Safety, LT. Monte Belew, B.S.C.J.
Manager of University Bookstore, Calista Drone, B.S.
Bursar, Stacey Jackson, B.S.

## Division of Student Affairs

Vice Chancellor for Student Affairs, John A. Lewter, Ed.D.
Assistant Vice Chancellor for Student Affairs and Dean of Students, John C. Abel, M.B.A.
Assistant Vice Chancellor for Student and Residential Life and Chief Housing Officer, Gina McClure, M.S.
Director of Student Life and Multicultural Affairs, John W. Blue, M.S.
Nurse Practitioner/Director of Student Health and Counseling Services, Shannon R. Deal, M.S.N.
Interim Director of Campus Recreation, David Belote, M.S.
Interim Director of Career Planning and Development, Katie Mantooth, M.Ed.
General Manager of Dining Services, Thomas Oehler
Student Conduct Officer, Shannon M. Perry, B.S.
Coordinator of Student Affairs Program Evaluation, George Daniel, Ed.D.
Coordinator of Testing and Disability Services, Vacant

## Division of University Advancement

Vice Chancellor for University Advancement, Charley T. Deal, Ph.D
Associate Vice Chancellor for Development and Planned Giving, Jeanna Curtis Swafford, M.A.S.C.
Assistant Vice Chancellor of Alumni Relations and Annual Giving, Jacquelyn T. Johnson, M.B.A.
Director of Advancement Services, Dana L. Prince. B.S.
Director of Development, Jason Sullivan, B.S.

## Office of Intercollegiate Athletics

Director of Intercollegiate Athletics, Kurt McGuffin, M.S.
Assistant Athletics Director for Academics and Student-Athlete Services and Senior Woman Administrator, Danelle B. Fabianich, M.B.A.
Assistant Athletics Director for Compliance, William R. Kaler, M.S.
Assistant Athletics Director for Compliance, Ashlely Bynum, J.D.
Assistant Athletics Director for Development, Laura Suiter, B.S.
Assistant Athletics Director for Athletic Training Services, Bart A. Belew, M.S.
Assistant Athletics Director for Corporate Sponsorships and Marketing, Lora P. McDonald, M.B.A.Head Football Coach, Jason E. Simpson, M.P.A.
Head Men's Basketball Coach, Anthony W. Stewart, M.B.A.
Head Women's Basketball Coach, Kevin McMillan, M.S.
Head Baseball Coach, Phillip Ryan Jenkins, B.A.
Head Softball Coach, Brian Dunn, M.S.
Head Women's Volleyball and Beach Volleyball Coach, Jaclynn Yocum-Wilson, M.S.
Head Golf Coach, Austin Swafford, M.B.A. Head Men's and Women's Cross Country, Kevin Mangan, M.S.
Track Coach, Jolyta Henderson, M.S.
Head Women's Tennis Coach, Caitlyn Williams, B.S.
Head Women's Soccer Coach, Philip McNamara, B.A.
Head Cheer Coach, Amber Minton, B.S.
Head Rifle Coach, Mary Vowell, B.S.
Head Rodeo Coach, John F. Luthi, M.S.
Head Women's Equestrian Coach, Meghan Cunningham-Corvin, M.S.
Director of Sports Information, Ryne K. Rickman, B.S.
Coordinator of Skyhawk Radio Network, Chris Brinkley, B.S.

## Office of University Relations

Chief Communications Officer, Robert D. Grimes, M.S.
Assistant Director, Nathan Morgan, B.A.
Assistant Director for Marketing, Hannah Alexander, B.S.

# Colleges and Departments at UT Martin 2020-2021 

## College of Agriculture and

## Applied Sciences

Dean, Todd A. Winters, Ph.D.
Department of Agriculture, Geosciences, and Natural Resources
Chair, F. Wesley Totten, Ph.D.
Department of Family and Consumer Sciences
Chair, William Keith Dooley, Ph.D.
Department of Military Science and Leadership
Professor, LTC Rodric McClain
College of Business and Global Affairs
Dean, Ahmad Tootoonchi, Ph.D.
Department of Accounting, Finance, Economics, and Political Science
Chair, Christopher M. Baxter, Ph.D.
Department of Management, Marketing, and Infor-
mation Systems
Chair, B. Cooper Johnson, Ph.D.
Center for International Education
Travel Study Coordinator, Lorrie Jackson, B.S.

## College of Education, Health, and

Behavioral Sciences
Dean, Cynthia H. West, M.S.S.W.
Department of Behavioral Sciences
Interim Chair, Justin Martin, Ph.D.
Department of Educational Studies
Interim Chair, D. Kent Kelso, Ph.D.
Department of Health and Human Performance
Chair, Todd E. Sherman, D.A.
Department of Nursing
Chair, Mary E. Radford, Ed.D.

Department of Psychology
Chair, Joseph A. Ostenson, Ph.D.
Office of Interdisciplinary Studies
Coordinator, Beth Edwards, M.B.A.

## College of Engineering and Natural Sciences

Dean, Shadow JQ Robinson, Ph.D.
Department of Biological Sciences Interim Chair, Nancy Buschhaus, Ph.D.

Department of Chemistry and Physics
Chair, Robbie L. Montgomery, Ph.D.
Department of Computer Science
Chair, Joshua T. Guerin, Ph.D.
Department of Engineering
Chair, Tim Nipp, Ph.D.
Department of Mathematics and Statistics
Chair, Thomas E. Eskew, M.S.

## College of Humanities and Fine Arts

Dean, Lynn M. Alexander, Ph.D.
Department of Communications
Chair, Robert Nanney, Ph.D.
Department of English and Modern Foreign Languages
Chair, Jeff Longacre, Ph.D.
Department of History and Philosophy
Chair, David A. Coffey, Ph.D.
Department of Music
Chair, Julie A. Hill, D.M.A.
Department of Visual and Theatre Arts
Chair, Carol A. Eckert, Ph.D.

# Faculty and Staff 2020-2021 

An asterisk $\left({ }^{*}\right)$ indicates graduate faculty status.
Initial year of regular employment at the University of Tennessee at Martin is indicated in parentheses.

Abel, John C., Assistant Vice Chancellor for Student Affairs and Dean of Students (1998) University of Tennessee at Martin, B.S., M.B.A.

Adkins, Darlene A., Lecturer of Accounting (2011) Radford University, B.S.; Lynchburg College, B.S.; Old Dominion University, M.B.A.; Virginia Commonwealth University, M.A.; CPA

Alden, Kelle E., Director of Hortense Parrish Writing Center; Assistant Professor of English (2017)
Milliken University, B.A., Northern Illinois University, M.A., Ph.D.
Aleksander, Elizabeth R., Assistant Professor of Music (2013) Ohio University, B.M.; Northern Arizona University, M.M.; University of Nebraska, D.M.A.

Alexander, Jason S., Associate Professor of Physics (2013) Southeast Missouri State University, B.S.; University of Oklahoma, M.S.; Missouri University of Science and Technology, Ph.D.
Alexander, Julie J., Assessment Coordinator of Educator Preparation Program (2019) University of Tennessee at Martin, B.S.B.A., M.B.A.
*Alexander, Lynn M., Dean of College of Humanities and Fine Arts; Professor of English (1989) Phillips University, B.A.; University of Tulsa, M.A., Ph.D.

Allen, Stephanie L., Coordinator of Field Instruction, Lecturer of Social Work (2015) University of Tennessee at Martin, B.S.S.W.; Union University, M.S.S.W.

Alqusaireen, Eatedal, Lecturer of Engineering (2017) University of Tennessee at Martin, M.S.; Jordan University of Science and Technology, B.S., M.S.

An, Xiangdong, Assistant Professor of Computer Science (2016) Tianjin University,China, B.E.;

Nankai University, China, M.E.; University of Waterloo, Canada, Ph.D.

Anderson, Lindsay A., Associate Professor of Sociology (2015) Texas A \& M University, B.S.; M.S.; Ph.D.

Ary, Clint A., Assistant Professor of Animal Science (2016) University of Tennessee at Martin, B.S.; University of Tennessee, Knoxville, D.V.M.

Austin, Diane L., Assistant Professor of Nursing (2006) University of Tennessee at Martin, B.S.; Union University, M.S.N.; R.N.

Bain, Scott A., Lecturer of Physics (2018) Oregon State University, B.S.; University of Illinois, M.S.
*Baker, Patrick R., Associate Professor of Business Law (2016) Virginia Military Institute, B.A.; Appalachian School of Law, J.D.
Barber, David, Professor of History (2005) San Francisco State University, B.A. M.A.; University of California, Davis, Ph.D.

Barnett, Martha, Director of Academic Records and Registrar (2015) University of Southern Mississippi, B.Mus.Ed.

Barnett, Steven R., Director of Athletic Bands; Lecturer of Music (2019) University of Mississippi, Oxford MS, B.M.E.; Mississippi College, M.M.E.

Baron, Verna B., Lecturer of Chemistry (2015) State University of New York at Plattsburgh, B.S.; Mississippi State University, Ph.D.

Barrington, Timothy D., Instructor of Theatre, Technical Director; Visual and Theatre Arts (1974) University of Tennessee at Martin, B.S.; University of Memphis, M.A.
*Batts, Amanda B., Assistant Professor of Education (2017) Bethel College, B.S., M.A.Ed.; Union University, Ed.S., Ed.D.
*Baxter, Christopher M., Chair of Accounting, Finance, Economics, and Political Science, Professor of Political Science (2002) University of Tennessee at Martin, B.S.; University of Alabama, M.A., Ph.D.

Beam, Kayce, Director UT Martin Jackson Center (2014) University of Texas, El Paso, B.A.; Freed Hardeman University, M.A.

Behfarnia, Ali, Assistant Professor of Engineering (2020) University of Tabriz, B.S.; Iran University of Science and Technology, M.S.; Wichita State University, Ph.D.
Bell, Erica, Director of the Central Office for Educational Outreach (2001) University of Tennessee at Martin, B.S., M.B.A.

Belew, Amy, Chief Information Officer of Information Technology Services (2000) University of Tennessee at Knoxville, B.S., University of Tennessee at Martin, M.B.A.

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*Bird, William A., Assistant Professor of Agricultural Education (2016) University of Tennessee at Martin, B.S.; Trevecca Nazarene University, M.Ed.; University of Missouri, Ph.D.

Blackburn, Nicole, Lecturer of Nursing (2017) University of Tennessee at Martin, B.S.N.; Austin Peay State University, M.S.N.; R.N.
Blake, Jody, Assistant Professor of Music Education (2019) Northeast Mississippi Community College A.A.M.Ed.; Anderson University, M.M.Ed.; Auburn University, M.Ed.S.
*Blanchard, Thomas A., Director of Reelfoot Lake Environmental Field Station, Professor of Biology (2001) Augusta State University, B.S., Southeastern Louisiana University, M.S.; Louisiana State University, Ph.D.

Blount, Christy A., Assistant Professor Nursing (2013) University of Memphis, B.S.N.; Union University, M.S.N.; University of Tennessee at Chattanooga, D.N.P.; R.N.
Blue, John W., Director of Student Life and Multicultural Affairs (2018) Jackson State University, B.S.; Nova Southeastern University, M.S.

Borden, Shirley J., Lecturer of Finance (2011) Purdue University, B.S., B.S.E.; University of Tennessee at Martin, M.B.A.; CFP
*Boyles, Cindy A., Associate Professor of Criminal Justice (2014) Auburn University, B.S.; University of South Florida, M.A.; University of Central Florida, Ph.D.
Braddock, Matthew C., Associate Professor of Philosophy (2012) University of Texas, Dallas, B.A., M.A.; Texas Tech University, M.A.; Duke University, Ph.D.

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Brown, Christopher M., Professor of Philosophy (2002) Western Michigan University, B.M.; Western Kentucky University, M.A.; St. Louis University, Ph.D.
*Brown, Laura L., Professor of Pedagogy (2003) University of Tennessee at Martin, B.S.; Murray State University, M.A.; Union University, Ed.S., Ed.D.

Brown, Merry E., Lecturer of Philosophy (2008) Azusa Pacific University, B.A.; Western Kentucky University, M.A.

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Burks, Cassie, Lecturer of Nursing (2014) Union University, B.S.N.; Frontier Nursing University, M.S.N.; American Sentinel University, D.N.P.; R.N.

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Bush, John P., Lecturer of Mathematics and Coordinator of the Mathematics Lab (2008) University of Tennessee at Martin, B.S.; Southern Illinois University at Carbondale, M.S.

Bushardt, Christian, Lecturer of Marketing (2019) The University of Texas at Tyler, B.B.A.; Louisiana Tech University, M.B.A.
*Buttrey, Emalee B., Associate Professor of Animal Science (2014) University of Tennessee at Martin, B.S.; Texas A \& M, M.S.; West Texas A \& M, Ph.D.

Bynum, Ashley, Assistant Athletics Director for Compliance (2017) University of Tennessee at Martin, B.A.; University of Tennessee College of Law, PAD.

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*Capansky, Trisha K., Associate Professor of English (2012) East Carolina University, B.A.; West Texas A\&M University, M.A.; East Carolina University, Ph.D.
*Carithers, David R., Associate Professor of English (2004) Wofford College, B.A.; Western Carolina University, M.A.; University of North Carolina at Greensboro, Ph.D.
*Carls, Alice-Catherine, Tom Elam Distinguished Professor of History (1992) Polish Universite de Paris IV-Sorbonne, France, B.A.; German Universite de Paris IV-Sorbonne, France, M.A.; Universite de Paris I-Sorbonne, France, Ph.D.

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University of Tennessee at Martin, B.S.
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*Cates, Tommy A., Tom E. Hendrix Chair of Excellence in Free Enterprise; Coordinator of Graduate Program; Professor of Management (1983) University of Tennessee at Martin, B.S.; University of Memphis, M.B.A., D.B.A.
*Cavalier, Philip A., Provost and Vice Chancellor for Academic Affairs; Professor of English (2018) Swarthmore College, B.A.; Northeastern University, M.A.; State University of New York at Buffalo, Ph.D.

Cearfoss, Jennifer, Lecturer of Mathematics and Statistics (2019) Murray State University, B.A., M.S.
*Chen, Hui-Chuan (Christie), Associate Professor of Management (2013) Abilene Christian University, B.A.; Texas A\&M University Commerce, M.B.A.; University of Texas at Arlington, Ph.D.
*Chi, Yu-Ho, Assistant Professor of Accounting (2018) Feng Chia University, B.S.; Southern Illinois University at Carbondale, M.Acc.; Morgan State University, Ph.D.

Cochran, John M., Associate Professor of Mathematics and Statistics (2009) Rose-Hulman Institute of Technology, B.S., M.S.; University of Louisville, M.A., Ph.D.

Coffey, David A., Chair of Department of History and Philosophy; Professor of History (2001) Texas Christian University, B.A., M.A., Ph.D.
*Cole, John T., Assistant Professor of Agricultural Engineering Technology (2013) University of Kentucky, B.S. M.S.
*Collard, Teresa Y., Professor of Communications (1993) Eastern Illinois University, B.A., M.A.; Union University, Ed.D.

Collier, Christina M., Interim Coordinator of Dual Enrollment (2016) Murray State University, B.S.B.A.; University of Tennessee at Martin, M.Ac.

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Crews Garcia, Jessica, Lecturer of Agricultural Economics (2015) University of Tennessee at Martin, B.S., M.S.

Crews, Lionel J., Associate Professor of Physics (2000) Vanderbilt University, B.S., M.S., Ph.D.
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Culver, Texas E., Lecturer of Education (2009) Union University, B.S.; University of Memphis, M.Ed.

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Darroch, Barbara A., Associate Professor of Plant and Soil Science (2000) University of Manitoba, B.S.A.; University of Saskatchewan, Canada, Ph.D.

Darroch, Craig S., Professor of Animal Science (1995) University of Guelph, Canada, B.S.; University of Saskatchewan, Canada, M.S., Ph.D.
*Dasinger, Tim, Assistant Professor of Health and Human Performance(2018) Louisiana State University, B.S., M.S., Ph.D.
*Davis, Dexter J., Associate Professor of Sport Management (2013) Houghton College, B.S.; Canisius College, M.S.; United States Sports Academy, Ed.D.
*Davis, V. Lajuan, Associate Professor of Information Systems (2013) Mississippi State University, B.S.; University of Southern Mississippi, M.S.; Mississippi State University, Ph.D.

Davis, Peggy A., Professor of Nursing (2000) University of Tennessee at Martin, B.S.; Murray State University, M.S.N.; St. Louis University, Ph.D.; R.N.
*Davis, William L., Professor of Economics (1989) Missouri Southern State College, B.S.; University of Arkansas, M.A.; Oklahoma State University, Ph.D.
*Deal, Charles T., Special Assistant to the Chancellor; Interim Director of Research and Sponsored Programs; Executive Director of WestStar Leadership Program (1992) University of Tennessee at Martin, B.S., M.B.A.; University of Tennessee at Chattanooga, Ph.D.

Deal, Shannon R., Director of Student Health and Counseling Services and Nurse Practitioner (2000) University of Tennessee, Memphis, B.S.N.; Tennessee State University, M.S.N.

Deere, Kelli, Director of UT Martin Parsons Center (2012) Union University, B.A., M.S., Ed Spec., Ph.D.
*Delmond, Anthony R., Assistant Professor of Agricultural Economics (2018) University of North Florida, B.A.; London School of Economics, M.S.; Washington State University, Ph.D.

Dempsey, Kyle, Assistant Professor of Psychology (2014) Lambuth University, B.S.; University of Memphis, M.A., Ph.D.
*Dempsey, Mary Claire, Assistant Professor of Counseling (2015) Birmingham Southern College, B.A.; University of Memphis, M.S., Ed.D.
*DePriest, Thomas A., Associate Professor of Geology (2008) University of Memphis, B.A.; University of Tennessee at Martin, B.S.; University of Mississippi, M.A.; Union University. Ed.D.
*DeVito, Jason, Associate Professor of Mathematics and Statistics (2011) North Carolina State University, B.S., M.S.; University of Pennsylvania, Ph.D.

Devenyi, Jozsef, Professor of Chemistry (1997) Eotvos Lorand University, Hungary, M.S.; University of Tennessee, Knoxville, Ph.D.
*DiBella, Karen S., Associate Professor of Education(2013) Pennsylvania State University, B.A.; Florida Gulf Coast University, M.Ed., Ed.D.
*Dietrich, David C., Associate Professor of Counseling Psychology (2010) Rhodes College B.A.; University of Memphis, M.S., Ph.D.
Donaldson, Alicia E., Director of Social Work Program; Professor of Social Work (2009) University of Tennessee at Martin, B.S.S.W.; University of Tennessee, Knoxville, M.S.S.W.
*Donavant, Brian W., Professor of Criminal Justice (2006) Memphis State University, B.A.; William Carey College, M.Ed.; University of Southern Mississippi, Ph.D.
Donavant, Lori A., Manager of Business Services (2000) University of Tennessee at Martin, B.U.S.
*Dooley, W. Keith, Chair of Department of Family and Consumer Sciences; Associate Professor of Child and Family Studies and Gerontology (2015) University of Mississippi, B.A., M.Ed.; University of Georgia, M.S., Ph.D.
Dunagan, Stan P., Professor of Geology (2006) University of Tennessee at Martin, B.S.; University of Tennessee, Knoxville, Ph.D.

Dunn, Brian, Head Softball Coach (2019) San Diego State, B.A.; Union University, M.A.
Dye, Lori (Shawn), Success Counselor in Student Success Center (2016) Arkansas State University, B.S., M.S.

East, Shelby S., Lecturer of Social Work (2015) University of Tennessee at Martin, B.S.S.W.; University of Tennessee, Knoxville, M.S.S.W.

Eckert, Carol A., Chair of Visual and Theatre Arts, Professor of Art (2001) Austin Peay University, B.F.A.; Vanderbilt University, M.A.; Union Institute, Ph.D.

Edwards, Beth, Coordinator of Interdisciplinary Studies (2001) University of Tennessee at Martin, B.U.S., M.B.A.

Ekey, Darren, Captain, Assistant Professor of Military Science (2017) Embry-Riddle Aeronautical University, B.S., M.B.A.
Elam-Dierks, April L., Lecturer of English (2008) University of Memphis, B.A., M.A.
Elder, James D., Lab Instructor of Mathematics (2008) University of Tennessee at Martin, B.S., M.S.

Elliott, E. Steve, STEM Center Director; Professor of Mathematics and Statistics (2005) United States Military Academy, B.S.; University of Kentucky, M.A., Ph.D.

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Ericson, Kathleen A., Associate Professor of Computer Science (2015) Drexel University, B.S.; Colorado State University, M.S., Ph.D.

Erkal, Cahit, Professor of Physics (2000) Hacettepe University, Ankara, Turkey, B.S.; University of Wisconsin, Ph.D.

Eskew, Thomas E., Chair of Department of Mathematics and Statistics; Instructor of Mathematics (1975) University of Tennessee at Martin, B.S.; University of Mississippi, M.S.

Evans, Kayla, Coordinator, Office of Enrollment Services and Student Engagement (2011) University of Tennessee at Martin, B.S., M.B.A.

Ezell, Derek, Assistant Professor of Marketing (2020) University of Tennessee at Martin, B.S.; University of Tennessee at Martin, M.B.A.; The University of Mississippi, Ph.D.

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Fieser, James F., Professor of Philosophy (1993) Berea College, B.A.; Purdue University, M.A., Ph.D.

Flórido, Lúcia F., Professor of French (2002) Universidade Federal Fluminense, Brazil, B.A., M.A.; Michigan State University, Ph.D.

Floyd, Julie P., Professor of Nursing (1998) Union University, B.S.N.; University of Tennessee Health Science Center, M.S.N.; Union University, Ed.D.; R.N.
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Freed, Rodney L., Instructor of Communications (1997) Murray State University, B.S., M.S.
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Garza, Randal P., Professor of Spanish, (2002) Michigan State University, B.A., M.A., Ph.D.
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Gilbert, Jeanneda, Disabilities Specialist (2015) Murray State University, B.S.; University of Tennessee at Martin, M.Ed.

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*Glass, John V., III, Director of Honors Programs; Associate Professor of English (2007) HampdenSydney College, B.A.; Middlebury College Ecole Francaise (University of Paris), M.A.; University of Mississippi, Ph.D.
*Glunz, Angela L., Lecturer of Communications (2017) St. Cloud State University, B.A.; University of Northern Iowa, M.A.; Southern Illinois University, Ph.D.

Gorman, Kurt G., Professor of Music (2004) University of Chicago, B.A.; University of North Texas, M.M.; University of Missouri at Kansas City, D.M.A.

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Goyret, Joaquin, Associate Professor of Biology (2013) University of Buenos Aires, L.B.S.; Cornell University, Ph.D.

Green, Laurie L., Coordinator of College of Education, Health and Behavioral Sciences Graduate Programs (2013) Bethel University, B.S.; University of Tennessee at Martin, M.Ed.
*Greenwood, Jennifer L., Professor of Biology (2006) Boston University, B.A.; Bowling Green State University, M.S.; University of Georgia, Ph.D.
*Griffin, Richard B., Professor of Accounting (1983) University of Tennessee at Martin, B.S.; University of Mississippi, M.A., Ph.D.; CMA

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*Grubaugh, Jack W., Professor of Biology (2010) Central College, B.A.; Western Illinois University, M.S.; University of Georgia, Ph.D.

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Hacker, Timothy J., Instructor of English (1998) Portland State University, B.A.; Monterey Institute of International Studies, M.A.; Northern Arizona University, M.A.
*Haddad, Mahmoud M., Professor of Finance (1992) Mankato State University, B.S., M.B.A.; University of Alabama, Ph.D.

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Yang, David D., Professor Emeritus of Engineering

## Glossary

Academic calendar - official schedule of each semester's beginning and ending dates, final exams, commencement, and holidays

Academic discipline - subject area (i.e., biology, communications, special education, etc.)

Academic Fresh Start - admission policy by which grades below C will not calculate into GPA. Entrance through Academic Fresh Start must be requested and approved in advance.

Academic year - period of time beginning with fall semester and ending with summer semester

Academically eligible - 2.00 minimum cumulative undergraduate GPA; 3.00 minimum cumulative graduate GPA

Academically eligible-warning - action taken when a student fails to maintain academic eligibility

Audit - registration in a class but no credit earned or grade received

Baccalaureate or Bachelor's degree - program of undergraduate coursework including general education courses, a major, and electives; a minor may also be required. BA signifies Bachelor of Arts, BS signifies Bachelor of Science, BIS signifies Bachelor of Interdisciplinary Studies.

BeanSwitch - UT Martin literary and visual arts magazine

BIS - Bachelor of Interdisciplinary Studies
Bluebook - blank notebook with blue covers in which to write college tests and examinations

Bursar - university official who oversees student financial transactions

CAPP (Curriculum Advising and Program Planning) - a system used to monitor a student's progress toward completion of degree requirements

Classification - level of student status according to cumulative hours earned (freshman, sophomore, junior, senior)

College - academic unit of the university representing related departments (UT Martin colleges
are College of Agriculture and Applied Sciences; College of Business and Global Affairs; College of Education, Health, and Behavioral Sciences; College of Engineering and Natural Sciences; College of Humanities and Fine Arts)

Commencement - ceremony to confer degrees and recognize graduates; also known as graduation

Concentration - a focus within a major (i.e., civil, electrical, industrial, and mechanical are concentrations within the engineering major)

Contact hours - number of hours a course meets each week

Corequisite - specific courses or actions that must be completed the same semester as, or prior to, another course

Course - specific subject matter studied in a particular period of time. A course may include lecture, laboratory, workshop, seminar, internship, practicum, or independent study.

Course load - total of courses taken during a particular semester/term

Course number - three-digit number that identifies each course and indicates content level

Course title - name of a course that identifies the course content

Credit - academic value assigned to a course and awarded to student upon satisfactory completion of the course

Credit hour - time-based reference measuring collegiate educational attainment

CRN (Course Reference Number) - unique fivedigit number that identifies every course and section offered

Cumulative - accumulation of undergraduate hours attempted, undergraduate hours earned, and undergraduate quality points earned. Graduate coursework results in cumulative totals separate from undergraduate totals.

Curriculum - program of coursework required to satisfactorily complete a particular degree program

Degree - academic title conferred on student upon completion of curriculum requirements

Discipline - academic subject area
Dismissal - action taken when a student fails to achieve and/or maintain academic eligibility

Drop/Add - to revise a student's course schedule by dropping course(s) but continuing with reduced course load or adding course(s)

Electives - courses selected by student to fulfill degree requirements. Electives may be restricted in some fashion or be unrestricted (free electives).

FAFSA - Free Application for Federal Student Aid
Final exam - examination given at end of semester
FYI (First Year Initiative) - program designed to help students transition to college life

General Education requirement (Gen Ed) core of courses required in all degree programs
Grade-point average (GPA) - calculation of academic performance obtained by dividing GPA hours into quality points earned. (four-point scale: $A=4, B=3, C=2, D=1)$

Graduate-level - courses numbered at 500, 600, and 700 level; offered for graduate credit

Graduate student - individual who has completed a baccalaureate degree and is eligible to enroll in graduate level coursework because he/she has been admitted to graduate school
Incomplete - grade assigned to a student who is passing a course satisfactorily but, because of unavoidable circumstances, cannot complete all course requirements
Lab (laboratory) - hands-on application of principles learned in class; typically experiments and projects

Lecture - method of teaching course in which faculty presents material orally and students listen and take notes

Lower division (LD) - freshman and sophomore level courses numbered at 100 and 200 level

Major - student's principal field of study

Matriculation - first enrollment as a student following admission

Maymester - mini-session between spring and summer semesters

Minor - student's secondary field of study
Option - coursework approved to create a specialty within a major
Plagiarism - to use another's work and submit it as one's own. Plagiarism is a serious offense and subject to disciplinary action.
Post-baccalaureate - undergraduate classification for individual taking additional coursework after completion of the baccalaureate degree
Prerequisite - specific course(s), actions, approvals which must be satisfactorily completed before enrolling in a particular course

Quality points - value given based on student's final grade in course and used to calculate GPA
Registration - to enroll in coursework
Section - one of multiple offerings of a particular course in the same semester
Semester - designated period of time when coursework is offered. Fall, spring, and summer semesters comprise an academic year. Summer semester is comprised of two parts of term.

Sequence - a series of courses (ordinarily two courses) in a single content area, taken in numeric order (i.e., Chemistry 121-122 General Chemistry)
Skyhawk - UT Martin official athletic mascot
SOAR (Summer Orientation and Registration) - an event for incoming freshmen to receive orientation and register for coursework

Survey course - a course consisting of an overview of a broad topic or field or knowledge
Syllabus - document prepared by instructor providing an outline of course topics, specific course requirements, schedule of activities, grading and attendance criteria, and other information pertinent to a specific course
The Pacer - student newspaper

The Spirit - softbound yearbook
TOAR (Transfer Orientation and Registration) - an event for transfer students to receive orientation and register for coursework

Transcript - official record of each student's coursework and grades

Undergraduate student - individual who has graduated from high school and been admitted to the university to enroll in undergraduate level coursework

Upper division (UD) - junior and senior level courses numbered at 300 and 400 level
Withdrawal from school - officially dropping all courses for a given term; must be processed through the Student Success Center

## Index

AcademicAccreditation ..... 2
Advising ..... 30
Calendar ..... ii
Colleges \& Departments ..... 593
Continuation ..... 74, 558
Integrity ..... 70
Overload ..... 31, 555
Programs ..... 2
Residency Regulations ..... 24
Accounting ..... $143,151,160,355$
Accounting, Finance, Economics \& Political Science,Department of150
Accounting ..... 143, 151, 355
Economics ..... 144, 151, 407
Finance ..... 144, 152, 428
International Studies ..... 144, 154, 458
Political Science ..... 146, 153, 502
Administration, UT ..... 590
Administration, UT Martin ..... 590
Admission
Advanced Placement ..... 18
Concurrent/Dual ..... 20
Conditional ..... 21, 542
Didactic Program in Dietetics ..... 125
Early ..... 21, 542
Educator Preparation Program ..... 176
Engineering Program ..... 280
Fine Arts Programs ..... 347
Fresh Start ..... 23
General Requirements ..... 18
Graduate Programs
General Requirements ..... 540
MS Agriculture \& Natural Resources ..... 546
Masters in Business Administration ..... 548
MS Education ..... 550
MS Family \& Consumer Sciences ..... 547
MA Strategic Communication ..... 552
High School Units (Subjects) ..... 19
International Students ..... 22, 541
Non-Traditional Adult ..... 21
Nursing Program ..... 227
Readmission ..... 22
Regular ..... 19
Social Work Program ..... 186
Special (Non-Degree) ..... 21, 544
Transfer ..... 21
Transient ..... 22, 545
Types of ..... 541
Concurrent/Dual ..... 20
Conditional ..... 21, 542
Early ..... 21, 542
Non-Degree ..... 544
Readmission ..... 22
Regular ..... 19
Special ..... 21
Transfer ..... 21
Transient ..... 545
Unclassified ..... 543
Unconditional ..... 542
Unit Requirements ..... 19
University ..... 17
Advanced Placement Policy ..... 18
African-American Studies ..... 320, 322, 357
Agricultural Business ..... 89, 90
Agricultural Economics ..... 111, 357
Agricultural Education ..... 94, 112, 361
Agricultural Engineering Technology ..... 93, 112, 363
Agricultural Science ..... 94
Agriculture ..... 89, 92, 113, 365
Agriculture \& Applied Sciences, College of ..... 86
Departments:Agriculture, Geosciences and NaturalResources88
Family and Consumer Sciences ..... 120
Military Science and Leadership ..... 135
Agriculture, Geosciences \& Natural Resources, Department of ..... 88, 539
Agricultural Business ..... 89, 90
Agriculture ..... 89, 92, 365
Geosciences ..... 90, 103
Natural Resources ..... 90, 100, 482
Graduate Program ..... 539, 546, 567
Agriculture, Geosciences \& Natural Resources Fel-lows Research Program105, 428
Agriculture \& Natural Resources ...... 108, 546, 567
Alma Mater ..... 626
Animal Science ..... 96, 113, 367
Apartments ..... 48
Applied Music ..... 478
Army ROTC ..... 136
Art ..... 344, 348, 349, 371
Art Education ..... 350, 373
Art History ..... 348, 350, 373
Astronomy ..... 273, 374
Athletics ..... 14
Athletic Training ..... 222, 374
Audit ..... 69, 545
Automobile Registration ..... 12
Awards ..... 73
Bachelor of Arts General Education Requirements ..... 80
Bachelor of Science General Education Require- ments ..... 81
Bachelor of Science in Mechanical Engineering ..... 285
Bachelor's Degree General Requirements ..... 62
American History Requirement ..... 67
Curricular Requirements \& Senior Testing ..... 66
Fees ..... 67
General Education Core Curriculum ..... 62
Grade-Point Average ..... 67
Residency ..... 67
Bands, University ..... 11
Behavioral Sciences, Department of ..... 179, 234
Criminal Justice ..... 180, 235
Police Academy Credit ..... 182
Tennessee Correction Academy Credit ..... 183
Tennessee ..... 183
Social Work ..... 184
Sociology ..... 188
Biochemistry ..... 273, 375
Biological Sciences, Department of ..... 262
Biology ..... 262
Biology ..... 262, 265, 266, 375
Board of Trustees ..... 589
Bookstore, Barnes \& Noble ..... 7
Botany ..... 266, 378
Business Administration ..... 143, 161, 378, 572
Business Education ..... 210, 379
Business \& Global Affairs, College of ..... 141
Curricular Requirements for B.S.B.A. Majors ..... 146
Departments:
Accounting, Finance, Economics \& Political Sci-ence150
Management, Marketing \& InformationSystems164
Graduate Study ..... 548, 572
Required Achievement Examinations ..... 148
Business Law ..... 161, 379
Campus Recreation ..... 7
Career Planning \& Development ..... 9
Career \& Technical Education ..... 210, 380
CertificateMusic
Instrumental Music Performance ..... 338
Secondary Area Instrumental Music Studies ..... 338
Secondary Area Vocal Music Studies ..... 337
Vocal Music Performance ..... 338
Visual \& Theatre Arts
Video Game Design ..... 348
Chemistry ..... 268, 273, 381
Chemical Sciences ..... 269
Chemistry \& Physics, Department of ..... 268
B.S. in Chemistry ..... 271
Chemistry Major ..... 269
Child \& Family Studies ..... 122, 132, 384
Civil Engineering ..... 279, 289, 419
Class Attendance Policy ..... 71
Classification of Students ..... 72
CLEP ..... 18
Colleges
Agriculture \& Applied Sciences ..... 85
Business \& Global Affairs ..... 140
Education, Health \& Behavioral Sciences ..... 172
Engineering \& Natural Sciences ..... 239
Humanities \& Fine Arts ..... 301
Colleges \& Departments ..... 593
Communications ..... 385
Communications, Department of ..... 302
Communications Major ..... 304, 305
Broadcasting Sequence ..... 304
Media Design Sequence ..... 305
News-Editorial Sequence ..... 304
Public Relations Sequence ..... 305
Graduate Study ..... 552, 585
Communications, Strategic ..... 552, 585
Computer Science ..... 275, 277, ..... 391
Computer Science, Department of ..... 275
Computer Science Major ..... 275
Concentrations
Agricultural Business
Agricultural Business ..... 91
Farm \& Ranch Management ..... 91
Veterinary Technology \& Management ..... 92
Agriculture, General
Agricultural Science ..... 94
Agricultural Technology ..... 93
Animal Science ..... 96
Plant \& Soil Science ..... 98
Biology
Cell \& Molecular Biology ..... 262
Ecology \& Environmental Biology ..... 263
Health Sciences ..... 264
Organismal Biology ..... 263, 264
Chemistry
Chemical Sciences ..... 269
Health Sciences ..... 270
Communications
Broadcasting ..... 304
Media Design ..... 305
News Editorial ..... 304
Public Relations ..... 305
Computer Science ..... 277
Data Science ..... 276
Digital Hardware and Embedded Systems ..... 277
Software and Systems ..... 276
Criminal Justice
Corrections ..... 181
Courts \& Law ..... 181
Forensics ..... 181
Generalist ..... 181
Law Enforcement ..... 181
Economics
Economics ..... 152
General Business ..... 152
International Business ..... 152
Engineering
Civil Engineering ..... 282
Computer Engineering ..... 282
Electrical Engineering ..... 283
Industrial Engineering ..... 283
Manufacturing Engineering ..... 284
Mechanical Engineering ..... 284
Mechatronics Engineering ..... 285
English
309
Literature
310
Pre-Secondary English Education ..... 310
Family \& Consumer Sciences
Child \& Family Studies ..... 122
Dietetics ..... 125
Family \& Consumer Sciences Education ..... 123
Fashion Merchandising ..... 126
Food \& Nutrition ..... 127
Gerontology ..... 128
Hospitality \& Food Service Management ..... 130
Fine \& Performing ArtsStudio-Graphic Design346
Studio-Theatre ..... 346
Studio-Visual Art ..... 346
Teaching-Art Education ..... 346
Teaching-Dance Education ..... 346
Geoscience
103
Geography
103
103
Geology
104
104
Geosystems ..... 104
Health \& Human PerformanceExercise Science \& Wellness217
Human Performance ..... 218
Licensure K-12 ..... 219
Public Health ..... 220
Information Systems
Business Communication InformationSystems165
Management Information Systems ..... 165
Integrated Studies
6-8 ..... 198
K-5 ..... 196
PreK-3 ..... 195
Special Education Interventionist K-8 ..... 200
International Studies
International Business \& Development ..... 156
International Diplomacy \& Strategy ..... 157
International Diversity \& Multiculturalism ..... 158
ManagementManagement166
Sport Business ..... 166
Mathematics
Applied Mathematics ..... 295
General Mathematics \& Statistics ..... 294
Mathematics ..... 292
Secondary Mathematics ..... 294
Statistics ..... 293
MusicMusic Education-Instrumental K-12Licensure333
Music Education-Vocal/General K-12Licensure335
Performance-Band Instrument ..... 327
Performance-Band Instrument Pedagogy ..... 330
Performance-Piano ..... 329
Performance-Piano Pedagogy ..... 332
Performance-Voice ..... 329
Natural Resources Management
Environmental Management ..... 100
Park Administration ..... 101
Soil \& Water Conservation ..... 102
Wildlife \& Fisheries Biology ..... 102
Political Science
General Political Science ..... 153
International Security Studies ..... 154
Legal Studies 3+3 ..... 154
Public Administration ..... 154
Secondary Education
Secondary Biology ..... 202
Secondary Business ..... 202
Secondary Chemistry ..... 202
Secondary Earth \& Space Science ..... 202
Secondary Economics ..... 202
Secondary English ..... 202
Secondary French ..... 202
Secondary Geography ..... 202
Secondary Government ..... 202
Secondary History ..... 202
Secondary Mathematics ..... 202
Secondary Spanish ..... 202
Special Education Interventionist 6-12 ..... 202
Consumer Resource Management ..... 132, 395
Cooperative Education ..... 12, 272, 288
Counseling ..... 210, 395, 576
Course Loads ..... 31, 555
Course Numbers ..... 72, 555
Courses
Accounting ..... 160, 355
African American Studies ..... 322, 357
Agricultural Economics ..... 111, 357
Agricultural Education ..... 112, 361
Agricultural Engineering Technology ..... 112, 363
Agriculture ..... 113, 365
Animal Science ..... 113, 367
Art ..... 349, 371
Art Education ..... 350, 373
Art History ..... 350, 373
Astronomy ..... 273, 374
Athletic Training ..... 222, 374
Biochemistry ..... 273, 375
Biology ..... 266, 375
Botany ..... 266, 378
Business Administration ..... 161, 168, 378
Business Education ..... 210, 379
Business Law ..... 161, 379
Career \& Technical Education ..... 210, 380
Chemistry ..... 273, 381
Child \& Family Studies ..... 132, 384
Civil Engineering ..... 289, 419
Communications ..... 306, 385
Computer Science ..... 277, 391
Consumer Resource Management ..... 132, 395
Counseling ..... 210, 395 ..... 342, 480
Music Education
Criminal Justice ..... 190
350, 404 Dance
343, 481
350, 404
Dance Education
Natural Resources Management ..... 116, 482
222, 405
Driver Safety Education Nutrition ..... 134, 488
Nursing233, 485, 486
211, 405
Early Childhood Education Park Administration ..... 117, 490
161, 407
Economics
Philosophy ..... 323, 491
211, 408
Educational Evaluation Physical Activity ..... 223, 493
211, 408
Educational Foundations Physics ..... 274, 497
211, 409
Educational Leadership
212
212
Elementary Education ..... 212, 413
Engineering ..... 289, 413
English ..... 315, 421
Exercise Science ..... 222, 424
Family \& Consumer Sciences ..... 132, 425
Family \& Consumer Sciences Education ..... 133, 426
Fashion Merchandising ..... 133, 427
Fellows Research Program ..... 114, 428
Finance ..... 161, 428
Fine Arts ..... 351, 430
Plant Science ..... 117, 499
Political Science ..... 162, 502
Portuguese ..... 317, 505
Psychology ..... 236, 505
Reading ..... 213, 509
Religious Studies ..... 324, 510
Science, Technology, Engineering,Mathematics261, 510
Secondary Education ..... 213, 511
Social Work ..... 191, 236, 512
Sociology ..... 191, 514
Soil Science ..... 118, 517
Food Science ..... 133, 431
Spanish ..... 317, 518
Food Service Management ..... 134, 430
Special Education ..... 213, 520
Food Systems Management ..... 134, 431
Sport Management ..... 170, 524
French ..... 316, 432
Statistics ..... 299, 525
General Studies ..... 84, 433
Zoology ..... 267, 535
Geography ..... 114, 435
Teacher Education ..... 214, 527
Geology ..... 115, 437
Geoscience Education ..... 115, 440
Teaching English as a Second Language ..... 214, 530
Theatre ..... 351, 530
German ..... 316, 441
Gerontology ..... 134, 442
University Scholars ..... 60, 531
Veterinary Health Technology ..... 118, 532
Graphic Design ..... 351, 443
Wildlife Biology ..... 118, 533
Greek ..... 322, 444
Women's Studies ..... 84, 535
Health ..... 222, 444
Courses, Drop ..... 75, 554
Health \& Human Performance ..... 223, 445
Health \& Physical Education ..... 223, 445
Cultural Opportunities ..... 11
Criminal Justice ..... 180, 190, 235, 399
History ..... 322, 447
Honors ..... 59, 452
Dance Education ..... 344, 350, 404
Honors Seminar ..... 59, 454 ..... 68
Dance ..... 11, 344, 350, 404
Hospitality Management ..... 134, 454
Human Learning 212, 455 Dentistry ..... 244
Human Performance 223, 455 Dietetics ..... 125, 571
290, 420 Dining Services Industrial Engineering ..... 50
168, 456 Disabilities Information Systems ..... 7
Instructional Design \& Technology 212, 457 Driver Safety Education ..... 222, 405
Interdisciplinary Studies 84, 458 Dropping Courses ..... 75, 554
Interior Design ..... 134
Dropping from University ..... 75, 554
International Studies162, 458
211, 405Japanese317, 459Early Childhood Education
Leadership ..... 168, 460
Economics ..... 161, 407
Library Service ..... 212, 460Agricultural Economics357Management168, 462151, 407
Educational Evaluation ..... 211, 408
Marketing ..... 169, 465
Mathematics
Educational Foundations ..... 211, 408298, 467
Microbiology ..... 267, 473
Educational Laws ..... 76
Military Science and Leadership ..... 139, 473
Educational Leadership ............ ..... 211,409
$+\ldots . .53$
Music 340, 475 Non-Degree Programs/Courses ..... 54
Music, Applied 341, 478 Online Delivery ..... 54
Educational Studies 212, 411 Recognition of Proficiency ..... 311
Educational Studies, Department of 193 Ethics ..... 320
Integrated Studies 195 Examinations
PreK-3 ..... 195
Examination Requirements ..... 66, 565
K-5 196 Grades ..... 67
Middle Grades (6-8) 198 Exercise Science ..... 222, 424
Special Education Interventionist K-8 ..... 200
Expenses ..... 33, 559
Admission to Educator Preparation Program . ..... 194
Secondary Education ..... 202
Extracurricular Activities ..... 10
Faculty \& Staff Directory ..... 594
Graduate Programs ..... 550, 57
Failure ..... 69
Counseling ..... 576
Educational Leadership ..... 579
Teaching - Curriculum and Instruction . ..... 580
Teaching - Initial Licensure ..... 581, 582
Teaching - Interdisciplinary ..... 584
Examinations ..... 178
Options for Additional Endorsements ..... 209
Requirements for Recommendation for
Licensure177
Education, Health \& Behavioral Sciences, College of ..... 173
Departments:Behavioral Sciences179, 234
Educational Studies ..... 193
Health \& Human Performance ..... 215
Nursing ..... 226
Educator Preparation Program Admission Requirements ..... 176
Elementary Education ..... 212, 413
Employment, Student .....  8
Engineering ..... 279, 289, 413
Engineering, Department of ..... 279
Concentrations
Civil Engineering ..... 282
Electrical Engineering ..... 283
Industrial Engineering ..... 283
Mechanical Engineering
Mechanical Engineering ..... 284
Engineering Major
Engineering Major ..... 279 ..... 279
Engineering \& Natural Sciences, College of .
Engineering \& Natural Sciences, College of . ..... 240 ..... 240
Departments:
Biological Sciences ..... 262
Chemistry \& Physics ..... 268
Computer Science ..... 275
Engineering
Engineering ..... 279 ..... 279
Mathematics \& Statistics ..... 291
English ..... 309, 311, 315, 421
English \& Modern Foreign Languages,Department of308
English ..... 309
Literature Emphasis ..... 309
Pre-Secondary English Education
Emphasis ..... 310, 311
Writing Emphasis ..... 310
Foreign Languages ..... 311
French ..... 312
German ..... 312
Japanese ..... 312
Family \& Consumer Sciences .. 120, 132, 425, 5 ..... 547
Family \& Consumer Sciences, Department of .. ..... 120
Child \& Family Studies ..... 121, 122, 384
Dietetics ..... 121, 125
Family \& Consumer SciencesEducation121, 123, 426
Fashion Merchandising ..... 121, 126, 427
Food \& Nutrition ..... 121, 127
Gerontology ..... 121, 128, 442
Graduate Study ..... 547, 570
Hospitality \& Food ServiceManagement121, 130, 430, 454
Family \& Consumer Sciences Education ... 133, 426
Fashion Merchandising ..... 133, 427
Federal Work-Study Program ..... 44
Fees \& Expenses ..... 33, 559
Fellows Research Program ..... 105, 114, 428
Finance ..... 152, 161, 428
Financial Assistance ..... 38
Refunds ..... 36, 560
Repayments-Withdrawals ..... 38, 561
Scholarships ..... 39, 562
Fine Arts ..... 344, 351, 430
First-Year Initiative ..... 26
Food and Nutrition ..... 127
Food Science ..... 133, 431
Food Service Management ..... 130, 134, 430
Food Systems Management ..... 134, 431
Foreign Language Requirement ..... 82
Foreign Languages ..... 311
Fraternities ..... 10
French ..... 312, 316, 432
Frequency of Course Offerings ..... 72
Funds, Loan ..... 44, 562
General Education Requirements
Bachelor of Arts ..... 80
Bachelor of Arts in Music ..... 336
Bachelor of Fine Arts ..... 344
Bachelor of Interdisciplinary Studies ..... 238
Bachelor of Music
Music Education-Instrumental K-12 Licensure Emphasis ..... 333
Music Education-Vocal/General K-12 Licensure
335
Emphasis ..... 335
Performance-Band Instrument Emphasis ..... 327
Performance-Band Instrument Pedagogy Empha-sis330
Spanish ..... 311
Performance-Piano Emphasis ..... 329
Satisfactory (S) ..... 69
Performance-Piano Pedagogy Emphasis ..... 332
Performance-Voice Emphasis ..... 329
Bachelor of Science ..... 81
Bachelor of Science in Agricultural Business ..... 90
Bachelor of Science in Agriculture ..... 92
Bachelor of Science in Business Administration ..... 146
Bachelor of Science in Chemistry ..... 271
Bachelor of Science in Criminal Justice ..... 180
Bachelor of Science in Education Integrated Studies (6-8) ..... 198
Integrated Studies (K-5) ..... 196
Integrated Studies (PreK-3) ..... 195
Integrated Studies Special Education Intervention-ist K-8200
Secondary Education ..... 202
Bachelor of Science in Engineering ..... 281
Bachelor of Science in Health \& Human Perfor-mance
Exercise Science \& Wellness ..... 217
Human Performance ..... 218
Licensure K-12 ..... 219
Public Health ..... 220
Bachelor of Science in Nursing ..... 231
Bachelor of Science in Social Work ..... 185
University-wide Core Curriculum Requirements 62
General RequirementsAcademic62
Admissions ..... 18, 540
Bachelor of Arts ..... 80
Bachelor of Science ..... 81
Bachelor of Science in Business
Administration ..... 146
Bachelor's Degree ..... 62
General Education ..... 62
Master's Degree ..... 563
General Studies ..... 84, 433
Geographic Information Systems (GIS) ..... 106
Geography ..... 114, 435
Geology
Geology ..... 115, 437 ..... 115, 437
Geoscience ..... 90
Geoscience Education ..... 115, 440
Geosystems ..... 104
German ..... 312, 316, 441
Gerontology 128, 134, 442
Glossary ..... 613
Grade Appeals ..... 68
Grades ..... 68, 557
Auditor (AU) ..... 69
Conditional (E) ..... 69
Failure (F) ..... 69
Incomplete (I) ..... 69
Other
Not Reported (NR) ..... 69
Pass (P) ..... 69
Portfolio Passed (PP) ..... 69
Self-Paced (SP) ..... 69
Unsatisfactory (U) ..... 69
Graduate Admission Procedures \& Requirements ..... 540
Graduate Assistantships ..... 562
Graduate Study
Agriculture \& Natural Resources ..... 546, 567
Business Administration ..... 548, 572
Education ..... 550, 574
Family \& Consumer Sciences ..... 547, 570
Strategic Communication ..... 552, 585
Graduation
Requirements for ..... 62, 563
Grants ..... 43
Graphic Design ..... 346, 351, 443
Greek ..... 322, 444
Gulf Coast Research Laboratory ..... 265
Health ..... 222, 444
Health \& Human Performance 215, 223, ..... 445
Health \& Human Performance, Department of ..... 215
Exercise Science and Wellness ..... 217
Health \& Human Performance ..... 218
K -12 Licensure ..... 219
Public Health ..... 220
Health \& Physical Education ..... 223, 445
Health Sciences, Pre-Professional ..... 241
High School Subjects, Units ..... 19
History ..... 319, 320, 322, 447
History, American History Requirement ..... 67
History \& Philosophy, Department of ..... 318
History ..... 319, 447
Philosophy ..... 320, 491
Honors ..... 59, 72, 452
Honors \& Awards ..... 72
Honors Programs ..... 57
Honors Scholarships ..... 40, 58
Honors Seminar ..... 59, 454
Hope Scholarship ..... 43
Hospitality Management ..... 454
Housing Information ..... 47
Living Learning Communities ..... 48
Living Off Campus ..... 48
Reservations ..... 48
Residence Halls ..... 47
Traditional Apartments ..... 48
University Village ..... 47
Humanities \& Fine Arts, College of ..... 301
Degree Programs ..... 301
Departments:
Communications ..... 302
English \& Modern Foreign Languages ..... 308
History \& Philosophy ..... 318
Music ..... 325
Visual \& Theatre Arts ..... 344
Human Learning ..... 212, 455
Human Performance ..... 223, 455
Identification Cards ..... 27
Inclement Weather ..... 15
Incomplete Grades ..... 69Industrial Engineering283, 290, 420
Information Systems $143,165,168,456$
Communications ..... 304
Computer Science ..... 275
Criminal Justice ..... 180
Economics ..... 151
Instructional Design and Technology 212, 457 Engineering ..... 279
Insurance, Student Liability 175, 221, 231 .....
309 .....
309
English
English
Integrated Studies ..... 195Intensive English Program22
Intercollegiate Athletics ..... 14
Interdisciplinary Studies ..... 237, 458
Interior Design ..... 134
International Admission ..... 22, 541
International Agriculture ..... 106
International Education, Center for171
International Studies ..... 154, 162, 458
Internship Programs 110, 149, 221, 288, 31Intramurals10Japanese312, 317, 459
Journalism (Communications) ..... 304, 385Land Surveying \& Geomatics107
LawBusiness379Criminal JusticeCourts \& Law181
Law Enforcement ..... 181
Laws, Educational FERPA ..... 76
Leadership145, 168, 460
Leadership, Educational ..... 579175, 221, 231 Management
121
121
Family \& Consumer Sciences
Family \& Consumer Sciences
152
152
Finance ........................
Fine \& Performing Arts ..... 344
Geoscience ..... 103
Health \& Human Performance ..... 216
History ..... 319
Information Systems ..... 165
Integrated Studies ..... 195
Interdisciplinary Studies ..... 237
International Studies ..... 154
Management ..... 166
Marketing ..... 167
Mathematics ..... 291
Music ..... 327, 336
Natural Resources Management ..... 100
Nursing ..... 231
Philosophy ..... 320
Political Science ..... 153
Psychology ..... 235
Secondary Education ..... 202
Social Work ..... 185
Sociology ..... 188Liability Insurance Coverage311
Library, Paul Meek Library3 Management, Marketing and Information Systems,
Library Service ..... 212, 46
Department of ..... 164
Library Service, Initial Licensure
Information Systems ..... 165, 456
Management ..... 166, 462
582
582
Concentration
Concentration
460
460
Courses
Courses Marketing ..... 167, 465
Licensure Programs in Education Marketing 167, 169, ..... 465K-12Health \& Human Performance219
Master's Degree
Agriculture \& Natural Resources ..... 567
Business Administration ..... 572
Loans ..... 44, 562
Maintenance Fee
Maintenance Fee ..... 33, 559 ..... 33, 559
Education ..... 574
Major Requirements for Bachelor of Arts/Bachelor Family \& Consumer Sciences ..... 57083
of Science Degrees
MajorsGraduateAgriculture \& Natural Resources567
Business Administration ..... 572
Counseling576 Meals
585
Strategic Communication ..... 467
Mathematics \& Statistics, Department of ..... 291
Mathematics ..... 292
Statistics ..... 293
50
Educational Leadership 579 Merit Awards ..... 39Family \& Consumer Sciences570
Strategic Communication ..... 586
Teaching ..... 580
Undergraduate
Accounting ..... 151
Agricultural Business ..... 90
Agriculture, General ..... 92
Biology ..... 262
Chemistry ..... 271Microbiology
267, 473Military Science \& Leadership
473
Military Science \& Leadership, Department of ..... 135
Army Reserve Officers' Training Corps (ROTC) 136
Enrollment and Continuation Requirements ..... 137
Simultaneous Membership Program ..... 137
Minimum Class Size ..... 72
Minor Requirements for Bachelor of Arts/Bachelor of Science Degrees ..... 83
Minors ..... 79
79 Sustainability Studies ..... 83
Accounting 143 Theatre ..... 348
African-American Studies 320 Mission Statement ..... 1
Agricultural Business 109 Museum/Archives ..... 3
Agriculture 109 Music 327, 336, 337, 340, 475
Art 348 Music, Applied ..... 341, 478
Art History 348 Music, Department of ..... 325
Athletic Coaching ..... 174, 217
Biology ..... 265Business Administration144
Business Communication Information Systems 144 ..... 83Canadian Studies
8
Chemistry ..... 272
Communications30
Computer Science ..... 27Criminal Justice174, 182Dance348
Economics ..... 144
Electrical Engineering ..... 285
English ..... 311
Entrepreneurship ..... 144Ethics320Family \& Consumer Sciences121
Fashion Merchandising ..... 12 ..... 144
Finance
Finance
Forensic Science ..... 174, 182
French312
Geography109
Geology ..... 109
German ..... 312
478
478
Applied
Applied
480
480
Education
Education
481
481
Majors ..... 327
Music Education ..... 342, 480
Music Ensembles ..... 11, 343, 481
Natural Resources Management ..... 116, 482
Non-Degree Programs/Courses ..... 54
Nursing ..... 226, 233, 485, 486
Nursing, Department of ..... 226
Admission, Advanced Standing, Retention, \& Read- mission ..... 227
Degree Requirements ..... 231
Graduation Requirements ..... 230
RN to BSN Option ..... 230
Nutrition ..... 134, 488
Online Delivery ..... 54
Organizations
Cultural ..... 11
Student ..... 10
Orientation \& Enrollment ..... 26
Gerontology
Gerontology 121 121
Graphic Design
Graphic Design 348 Payments, Delayed Fee ..... 69 ..... 35
117, 490
Park Administration12
History 320 Phi Eta Sigma
International Studies 144 Phi Kappa Phi ..... 73
312 Philosophy Japanese ..... 320, 323, 491
145 Phone Directory Leadership
223, 493
Legal Studies 145 Physical Activity
1
1
Management
Management 145 Physical Facilities 145 Physical Facilities
272, 274, 497
272, 274, 497
Management Information Systems
Management Information Systems 145 Physics 145 Physics
27
27
Marketing
Marketing 146 Placement 146 Placement ..... 296
Meteorology ..... 109Military Science \& Leadership135
Music337 Political Science
502Neuroscience235
Nutrition ..... 122
Park Administration
109
Philosophy ..... 320
Physics 272
312
312 ..... 313 ..... 313 ..... 117, 499
Modern Foreign Languages
Modern Foreign Languages
Portuguese ..... 317, 505
Pre-Professional Programs
Pre-Chiropractic ..... 242
Pre-Cytotechnology ..... 243Political Science146 Pre-DentistryPsychology175, 235
Public Health ..... 175
Religious Studies ..... 320Sociology175, 18Spanish312
Sport Business ..... 146
Statistics ..... 297
246
Pre-Dental Hy ..... 244 ..... 244
Pre-Health Information \& Information
Management ..... 247
Pre-Medical Laboratory Science ..... 250
Pre-Medicine ..... 248
Pre-Occupational Therapy ..... 252
Pre-Optometry ..... 253
Pre-Pharmacy ..... 255
Pre-Physical Therapy ..... 257
Pre-Physician Assistant 258 Testing Center ..... 43
Speech Pathology260 Theatre346, 348, 351, 530
Proficiency Examination ..... 19 ..... 564
Psychology234, 236, 505 Time LimitsPublications, Student15
Reading ..... 213, 509
Refund of Fees ..... 36, 560Religious Studies324, 510
Repeating Courses 70, 187, 557
Requirements
18, 540
Admission
62
62
Bachelor's Degree
Bachelor's Degree ..... 68, 557
High School Units ..... 19
Hours ..... 68
Reservations for Housing ..... 48
Residence Halls ..... 47
Residency Regulations ..... 24, 563
ROTC ..... 14, 136Scholarships39Science, Technology,Engineering, Mathematics510
Secondary Education ..... 213, 511
Selective Service18Social Work$184,191,236,512$Sociology ...189, 191, 514Soil Science
563
563
Transcripts ..... 74
Transfer Students
Scholarships ..... 42
Transient students ..... 22, 545
Travel-Study Program ..... 171
Trustees ..... 589
Tuition ..... 33, 559
Undergraduate Admission Procedures and Require-
ments ..... 18
Unit Requirements ..... 19
University
Academic Programs ..... 2
Accreditation ..... 2
Equal Opportunity Institution ..... 76
Facilities ..... 1
History ..... 1
Honor Roll ..... 72
Location ..... 1
Services for Students ..... 6
Student Life \& Multicultural Affairs ..... 10
University Center ..... 9
University Scholars ..... 60, 531
Sororities ..... 10Spanish311, 317, 518
Special Education213, 520 University-Wide Degree Programs
58
University Scholars Program ..... 59
Courses ..... 59, 531
79
Special Students 72 University Village
Sport Business 146 Upper-Division Courses ..... 47 ..... 72
Sport Management 170, 524 Use of Human Subjects in Research ..... 564
Sports 7, 14 UTM Mail Services ..... 6
Sports
Sports
43 Values State Lottery Scholarship ..... 1
Statistics 293, 297, 299, $525 \quad$ Vehicles ..... 12
STEM ..... 261
Veterans Services ..... 13, 45
Student
Career Planning \& Development9
Classification ..... 72
Financial Assistance ..... 38, 563
Identification Card27
Insurance ..... 8
Organizations ..... 10 ..... 10
Publications
Publications ..... 15
Services ..... 6
Special Requests
Special Requests ..... 68 ..... 68
Student Life and Multicultural Affairs ..... 10
Vehicles ..... 12
Student Academic Support ..... 9, 30
Student Success Center ..... 9
Study-Abroad Programs ..... 314
Study Skills Center ..... 9
Sustainability Studies 83, 526. See also Minors
Teacher Education ..... 214, 527
Teacher Licensure \& Endorsements ..... 177,209
Teaching English as a Second Language ..... 214, 530
Veterinary Health Technology ..... 118, 532
Visual \& Theatre Arts, Department of ..... 344
Additional Requirements ..... 347
Admission and Retention ..... 347
Weather Policy, Inclement ..... 15
Wildlife Biology ..... 118, 533
Withdrawals ..... 37, 75, 554, 561
Women's Studies ..... 535
Work-Study Program ..... 44
Zoology ..... 267, 535


## The Ceremonial Mace

The University of Tennessee at Martin Ceremonial Mace, designed by Alfred D. Ward, is composed of silver, gold plate and wood. Total length is 48 inches. A gold-plated finial around the top depicts the UT symbol. Below this, a sterling silver cup form, $61 / 2$ inches in diameter, is engraved with the words, "The University of Tennessee at Martin." Underneath is the official seal of The University of Tennessee, gold-plated, with the UT motto written in Latin which translates to "You shall know the truth and the truth shall make you free." On the opposite side is a sterling silver and gold-plated oval design formed by lettering of the names by which the Martin campus of The University of Tennessee has been known since 1927. The oval surrounds artwork of the eternal flame presented by UT Martin alumni to the University upon the 60th anniversary of the UT Martin campus. Beneath the sterling silver cup shape, the colors of the University, orange, white and royal blue, are set around the stem in rings of gold. Black walnut forms the stem of the mace, which has a silver base featuring the UT symbol again, in gold-plated silver. The curved base plate features an engraving of the campus sassafras tree, after original artwork by UT Martin's Professor William Nelson.

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[^0]:    ** Last Scheduled Day of Class

[^1]:    Piano Ensemble is open to qualified students by audition. The group specializes in the performance of four-hand and eight-hand piano music. One credit hour.

[^2]:    Wildlife Biology 405 Principles of Aquaculture (F-even)
    Wildlife Biology 420 Wildlife Damage Management (Sp-odd)
    Wildlife Biology 441 Forensic Techniques in Wildlife Biology (F-odd)
    Wildlife Biology 450 Wildlife Habitat Management (Sp)
    Wildlife Biology 730 Wildlife Policy (as needed)
    Wildlife Biology 770 Topics in Wildlife Biology [Title] (as needed)
    Complete course descriptions can be found in the Course Description section of the catalog.

[^3]:    I. Family and Consumer Sciences Core Component 13 hours (see earlier page)

[^4]:    I. Family and Consumer Sciences Core Component 13 hours (see earlier page)

[^5]:    General Family and Consumer Sciences Concentration: 30 hours
    Family and Consumer Sciences Courses (12 hours)
    Family and Consumer Sciences electives (6)
    Family and Consumer Sciences 765 Strategies for Leadership and Team Building in Family and Consumer Sciences or Family and Consumer Sciences 705 Strategic Planning and Communications in the Workplace (3)
    Child and Family Services 744 Theories in Child and Family Studies or Gerontology 744 Theories of Adult Development (3)
    Research Related Courses (6 hours)

