## The University of Tennessee at Martin



## 2013-2014 Catalog

## Undergraduate and Graduate

Dr. Joseph A. Di Pietro, President, The University of Tennessee System
Dr. Thomas A. Rakes, 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.

## тнеUNIVERSITYofTENNESSEE GI <br> MARTIN

## Phone Directory

Academic Affairs, Division of ..... 731-881-7010
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Admissions, Office of ..... 731-881-7020
Agriculture and Applied Sciences, College of ..... 731-881-7250
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International Programs and International Admissions, Office of . ..... 731-881-7340
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## Calendars for 2013-2015 Academic Years

## Fall Semester, 2013



## Spring Semester, 2014

Jan. 9, Thursday ........Day and Evening Classes Begin Jan. 20, Monday ............... Martin Luther King Jr. Day Feb. 24, Monday..... Mid-Term Progress Reports Due March 3-7, Monday-Sunday.................Spring Break April 18, Friday.................................... Good Friday April 25, Friday..................................... Classes End April 26-May 2, Saturday-Friday..............Final Exams May 3, Saturday.............................Commencement

## Maymester, 2014

May 12, Monday .................................... Classes Begin
May 26, Monday...................... Memorial Day
May 30, Friday .................

## Summer Semester, 2014

June 2, Mon...... Classes Begin, First Half \& Full Term July 3, Thursday.................**Classes End, First Term July 4, Friday $\qquad$ Independence Day July 7, Monday......................Advising, Second Term July 8, Tuesday............... Classes Begin, Second Term Aug. 8, Friday ..... **Classes End, Second \& Full Term

## Fall Semester, 2014

Aug. 22-24, Friday-Sunday...........First-Year Initiative Aug. 22, Friday .......................................... Advising Aug. 25, Monday........Day and Evening Classes Begin
Sept. 1, Monday $\qquad$ Labor Day Oct. 10, Friday........Mid-Term Progress Reports Due Oct. 11-14, Saturday-Tuesday ................... Fall Break
Nov. 26-30, Wed.-Sunday.........Thanksgiving Holiday Dec. 5, Friday.......................................Classes End
Dec. 6-12, Saturday-Friday .....................Final Exams
Dec. 13, Saturday ........................... Commencement

## Spring Semester, 2015

Jan. 8, Thursday ........Day and Evening Classes Begin Jan. 19, Monday ...............Martin Luther King Jr. Day Feb. 23, Monday..... Mid-Term Progress Reports Due March 2-8, Monday-Sunday..................Spring Break April 3, Friday...................................... Good Friday April 24, Friday.....................................Classes End April 25-May 1, Saturday-Friday..............Final Exams May 2, Saturday..............................Commencement

## Maymester, 2015

May 11, Monday ................................. Classes Begin
May 25, Monday................................ Memorial Day
May 29, Friday...................................**Classes End

## Summer Semester, 2015

June 1, Mon...... Classes Begin, First Half \& Full Term July 2, Thursday.................**Classes End, First Term July 3, Friday ...............Independence Day Observed July 6, Monday......................Advising, Second Term July 7, Tuesday...............Classes Begin, Second Term Aug. 7, Friday ..... **Classes End, Second \& Full Term
** Last Scheduled Day of Class.
Final Exams


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## Degrees, Majors and Concentrations/Options

| Key: |
| :--- |
| Degree |
| Major |
| Concentration/ |
| Option |

## BA

Communications
Broadcasting
Neus Editorial
Public Relations
Media Design
English
Literature
Writing
Sec. English Education
History
International Studies
Mathematics
Gen. Mathematics \&
Statistics
Mathematics

BS
Biology
Cell and Molecular
Biology
Organismal Biology
Ecology \& Environ. Biology
Chemistry
Communications
Broadcasting
Neus Editorial
Public Relations
Media Design
Computer Science
Geoscience
Geograpby
Geology

## BS Agriculture

General Agriculture
Agricultural Business
Agricultural Engineering Technology

Meteorology
History
Mathematics
General Mathematics $\mathcal{E}$
Statistics
Mathematics
Secondary Matbematics
Statistics
Political Science
General
International Security Studies
Public Administration
Psychology
Sociology

Agricultural Science
Animal Science
Plant and Soil Science

BS Business Administration

Accounting
Economics
Economics
General Business
International Business
Finance

BS Chemistry
Chemistry

## BS Criminal Justice

Criminal Justice
Corrections
Courts and Law
Forensics

Information Systems
Management
Information Systems
Office Information Sys.
Management
Management
Sport Management
Marketing

## BM

Music
Music Education
Performance

BS Education

Integrated Studies
PreK-3 Licensure
K-6 Licensure
4-8 Licensure
Secondary Education
Secondary Biology
Secondary Business
Secondary Chemistry
Sec. Earth and Space
Sci.
Special Education

## BS Engineering

Engineering
Civil
Electrical
Industrial
Mechanical

## BS Family \& Consumer Sciences

Family and Consumer Sciences
Child, Family and Consumer Sciences and
Education
Food and Nutrition/Dietetics
Interior Design/Fashion Merchandising

## BS Health \& Human Performance

Health and Human Performance
Exercise Science and Wellness
Health and Human Performance Generalist
Licensure K-12

## BS Natural Resources Management

Natural Resources Management
Environmental Management
Park and Recreation Administration
Soil and Water Conservation
Wildlife and Fisheries Biology

## BS Nursing

Nursing

BS Social Work

Social Work

## BIS

Indisciplinary Studies

## MS Agriculture \& Natural Resources

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

## MS Family \& Consumer Sciences

Family and Consumer Sciences
Dietetics
General

MBA
Business Administration

## MS Education

Counseling
Clinical Mental Health
School
Educational Leadership
Teaching
Curriculum \& Instruction (Elementary or
Secondary)
Initial Licensure (Elementary or Secondary)
Initial Licensure K-12
Interdisciplinary

## 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 primary purpose of The University of Tennessee at Martin is to provide a quality undergraduate education in a traditional collegiate atmosphere characterized at all levels by close collaboration among students, faculty and staff. In addition, the university is dedicated to meeting lifelong educational needs by providing graduate programs, distance-learning opportunities and other creative endeavors. Furthermore, the university is committed to advancing the regional and global community through scholarly activities, research and public service.

## Values

UT Martin is committed to values that make the campus student-centered. In day-to-day interactions with its constituents, UT Martin students, faculty and staff exhibit:

## EXCELLENCE IN THE TEACHING/LEARNING PROCESS

UT Martin values the crucial role that faculty play in establishing high academic standards, individualizing instruction, engaging in scholarship, personalizing advising and stimulating both creative and analytical thinking.

## INTEGRITY

UT Martin places fairness, honesty, objectivity and accountability at the forefront of its policies and practices in all areas of university life.

## LEADERSHIP

UT Martin takes an active role in the development of individuals who can contribute, through leadership and public service, to the campus and to West Tennessee, creating a more globally aware, politically vital and economically diverse region.

## COMMUNITY

UT Martin is committed to being a caring campus community of students, faculty and staff working collaboratively to foster individual growth in and out of the classroom.

## INCLUSIVENESS

UT Martin provides an environment devoted to intellectual and personal discovery where ideas are freely expressed and challenged as individuals learn from and grow with one another within a global community.

## CREATIVITY

UT Martin uses creative approaches, including technology, to deliver intellectual ideas on campus and in service to people of 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 nearly 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.

## Academic Programs

UT Martin offers 17 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, and family and consumer sciences.

## National Accreditations

The University of Tennessee at Martin is accredited by the Southern Association of Colleges and Schools Commission on Colleges ( 1866 Southern Lane, Decatur, Georgia 30033-4097, telephone 404-679-4500, at http:// www.sacscoc.org.) to award bachelor's and master's degrees. 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 (111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700; BS 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 202-872-4589; 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 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 National Council for the Accreditation of Teacher Education (2010 Massachusetts Avenue NW, Suite 500, Washington, DC 20036, telephone 202-466-7496; BS, teacher licensure; MS, initial licensure, school counseling, and educational leadership).


## Educational Goals for our Students

A student seeking any bachelor's degree at The University of Tennessee at Martin must satisfy the universitywide general education 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. 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.

## Philosophy and Requirements

The purpose of the UT Martin undergraduate educational experience is to prepare all students for the opportunities and challenges of a dynamic world. The combination of general education and major field degree requirements addresses this purpose.

Such preparation begins with a systematic introduction to a variety of ideas, concepts, methodologies and works that have been developed by scholars and other individuals representing an array of academic areas. This preparation is completed through detailed study within a chosen major. Through this exposure to both the broad and deep dimensions of scholarly endeavor, students will graduate from the university with the ability to think critically and communicate effectively. Graduates will leave the university with a developing appreciation of the world's complexities and diversities along with the skills to meaningfully engage them.
The general education curriculum is comprised of six categories that, in combination, are designed to help students develop a common base of sensitivities, knowledge and skills. The six categories of study are: Biological and Physical Systems, Communication, Fine Arts (Aesthetics), Humanities, Mathematics and Social and Behavioral Sciences. The general education curriculum consists of 38-39 semester credit hours with six credit hours in two core courses.

Each category includes a set of required courses and/or a listing of course options that achieve the curriculum goals. The options allow flexibility to accommodate the programmatic needs associated with particular major fields of study and the individual interests of each student.
Students should consult with their respective academic advisers to determine which combination of courses from the General Education Curriculum best meets their individual needs and the graduation requirements for their major.

## Categories of Study: Curriculum Goals and Requirements

## Biological and Physical Systems

## Credit Hours Required: 8

Curriculum Goals: The purpose of the Biological and Physical Systems awareness requirement is to help students gain a better awareness and understanding of the natural sciences. Students will learn to analyze problems using a scientific approach and vocabulary.
Learning Outcomes for Biological and Physical Systems: Students will demonstrate the ability to:

1. use basic scientific language and processes and be able to distinguish between scientific and non-scientific explanations.
2. conduct an experiment to test a scientific hypothesis, collect and analyze data and interpret results in a lab setting.
3. identify unifying principles and repeatable patterns in nature, the values of natural diversity and apply them to problems or issues of a scientific nature.
4. analyze and discuss the impact of scientific discovery on human thought and behavior.

## All learning outcomes must be satisfied by any course(s) in this category.

Curriculum Requirements: All students must successfully complete two courses from among the following:
Astronomy 201 Astronomy (4)
Astronomy 202 Astronomy (4)
Biology $110 \quad$ Introductory Cell Biology and Genetics (4)
Biology $120 \quad$ Introductory Plant and Animal Biology (4)
Biology $130 \quad$ Foundations of Biology: Ecology, Evolution and Diversity (4)
Biology $140 \quad$ Foundations of Biology: Cell and Molecular (4)
Chemistry 111 Introduction to Chemistry I: General and Inorganic Chemistry (4)
Chemistry $112 \quad$ Introduction to Chemistry II: Organic and Biochemistry (4)
Chemistry $121 \quad$ General Chemistry (4)
Chemistry $122 \quad$ General Chemistry (4)
Geology $110 \quad$ Introduction to Physical Geology (4)
Geology $120 \quad$ Environmental Geology (4)
Physics $101 \quad$ Physics in Everyday Life (4)
Physics $102 \quad$ Physics in Everyday Life (4)
Physics $211 \quad$ College Physics (4)
Physics $212 \quad$ College Physics (4)
Physics $220 \quad$ University Physics (4)
Physics $221 \quad$ University Physics (4)
Zoology $201 \quad$ Human Anatomy and Physiology (4)
Zoology $251 \quad$ Human Anatomy and Physiology I (4)
Exceptions: No exceptions for any major

## Communication

## Credit Hours Required: 9-10

Curriculum Goals: The purpose of the Communication requirement is to prepare students to effectively communicate information, thoughts and viewpoints through oral, written and graphic forms of expression.

Learning Outcomes for Communication: Students will demonstrate the ability to:

1. analyze and evaluate oral and/or written expression by listening and reading critically for elements that reflect an awareness of situation, audience, purpose and diverse points of view.
2. articulate a primary idea as a single, compelling statement and develop major points in a logical convincing manner in support of that idea.
3. develop appropriate rhetorical patterns (i.e. narration, example, process, comparison/contrast, classification, cause/effect, definition, argumentation) and other special functions (i.e., analysis or research), while demonstrating writing and/or speaking skills from process to product.
4. manage and coordinate basic information gathered from multiple sources.
5. plan, organize, compose, revise and edit written and/or oral presentations employing correct diction, syntax, usage, grammar and mechanics.
6. distinguish among opinions, facts and inferences recognizing their use in evidence, analysis or persuasive strategy.
7. use graphic support as a means of presenting information with clarity, accuracy and precision.

Course(s) satisfying this category must meet six (6) or more of the learning outcomes.
Curriculum Requirements: All students must successfully complete each of the following courses unless noted below:
English 110 or English Composition: Critical Thinking and Writing (4)
English $111 \quad$ English Composition (3)
English $112 \quad$ English Composition (3)
Communications 230 Public Speaking (3)

## Fine Arts (Aesthetics) <br> Credit Hours Required: 3

Curriculum Goals: The purpose of the Fine Arts requirement is to help students develop an understanding of and appreciation for creative processes and expression. Students will choose their fine arts experience from a variety of aesthetics survey courses.
Learning Outcomes for Aesthetics: Students will demonstrate the ability to:

1. practice the critical and analytical methodologies of the fine arts.
2. analyze significant works of cultural and creative expression.
3. explain the ways in which creative processes and expression throughout the ages convey the culture and values of a time and place.
4. develop a personal aesthetic perspective.

## All learning outcomes must be satisfied by any course(s) in this category.

Curriculum Requirements: All students must successfully complete one of the following courses:
Art $110 \quad$ Understanding Visual Art (3)
Art History $210 \quad$ The History of Art (3)
Art History 211 The History of Art (3)
Dance $110 \quad$ Understanding Dance (3)
Music $111 \quad$ Masterpieces of Music (3)
Music $112 \quad$ Music in Our Time (3)
Music 113 Survey of Western Masterpieces and World Music (3)
Music $114 \quad$ Historical Survey of Jazz (3)
Music 115 Music for the Masses: A Study of Popular Music (3)
Theatre $110 \quad$ Understanding Theatre (3)
Theatre $111 \quad$ Understanding Theatre (3)
Exceptions: No exceptions for any major

## Humanities

## Credit Hours Required: 9

Curriculum Goals: The purpose of the Humanities requirement is to enhance students' cultural and historical knowledge and understanding of the aspects and contingencies that link people and their ideas. Students will learn about the values and benefits from diversity of culture, ethnicity and gender.

Learning Outcomes for Humanities: Students will demonstrate the ability to:

1. practice the critical and analytical methodologies of the humanities.
2. analyze significant primary sources in the humanities.
3. explain the ways in which humanistic expression reflects the culture and values of its time and place.
4. frame a comparative context through which they can critically assess the ideas and values, forces and processes and institutions and structures that have created the modern world.
5. recognize and articulate the diversity of human experience across a range of historical periods and the complexities and interconnectedness of global culture and society.
6. analyze the contributions of past cultures and societies and the patterns of continuity and change that have affected human history.

Course(s) satisfying this category must meet four (4) or more of the learning outcomes.
Curriculum Requirements: All students must successfully complete three of the following courses:

English 250
English 251
English 260
English 261
English 270
English 271
French 250
German 250
History 121
History 122
History 201
History 202
Japanese 250
Philosophy 110
Philosophy 120
Philosophy 130
Philosophy 160
Spanish 250
Exceptions:

British Literary Tradition (3)
British Literary Tradition (3)
American Literary Tradition (3)
American Literary Tradition (3)
World Literature (3)
World Literature (3)
France Today: The French People and Their Culture (3)
Germany Today: The German People and Their Culture (3)
Development of World Civilization I (3)
Development of World Civilization II (3)
History of the United States I (3)
History of the United States II (3)
Japan Today: The People and Culture of Japan (3)
The Adventure of Ideas (3)
The Adventure of Ideas (3)
Ethics and Race (3)
Introduction to Ethics (3)
Latin America Today: The Peoples and Cultures of Latin America (3)
No exceptions for any major

## Mathematics

## Credit Hours Required: 3

Curriculum Goals: The purpose of the Mathematics requirement is to teach students to organize, evaluate and solve problems using both abstract and quantitative approaches.

Learning Outcomes for Mathematics: Students will demonstrate the ability to:

1. build on (not replicate) the competencies gained through the study of two years of high school algebra and one year of high school geometry.
2. use mathematics to solve problems and determine if the solutions are reasonable.
3. use mathematics to model real-world behaviors and apply mathematical concepts to the solution of reallife problems.
4. make meaningful connections between mathematics and other disciplines.
5. use technology for mathematical reasoning and problem solving.
6. apply mathematical and/or basic statistical reasoning to analyze data and graphs.

## All learning outcomes must be satisfied by any course(s) in this category.

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

## Social and Behavioral Sciences

## Credit Hours Required: 6

Curriculum Goals: The purpose of the Social and Behavioral Sciences requirement is to help students understand human society, in relation to the interdependence among individuals, families and societies. Students will examine human behavior and social institutions within the context of multiple contributing influences.

Learning Outcomes for Social and Behavioral Sciences: Students will demonstrate the ability to:

1. recognize, describe and explain social institutions, structures and processes and the complexities of a diverse society.
2. think critically about how individuals are influenced by political, geographic, economic, cultural and family institutions in their own and other diverse cultures and explain how one's own belief system may differ from others.
3. explore the relationship between the individual and society as it affects the personal behavior, social development and quality of life of the individual, the family and the community.
4. examine the impact of behavioral and social scientific research on major contemporary issues and their disciplines' effects on individuals and society.
5. using the most appropriate principles, methods and technologies, perceptively and objectively gather, analyze and present social and behavioral science research data, draw logical conclusions and apply those conclusions to one's life and society.
6. analyze and communicate the values and processes that are used to formulate theories regarding the social context of individual human behavior in the social and behavioral sciences.
7. take ethical stands based on appropriate research in the social and behavioral sciences.

Course(s) satisfying this category must meet four (4) or more of the learning outcomes.
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 100 American Enterprise System (3)
Economics $201 \quad$ Principles of Macroeconomics (3)
Economics $202 \quad$ Principles of Microeconomics (3)
Engineering $100 \quad$ Society and Technology (3)

Geography 151
Geography 152
Geography 202
Health 111
Interdisciplinary
Studies 201
Natural Resources
Management 101
Natural Resources
Management 250
Nutrition 100
Political Science 210
Political Science 220
Political Science 230
Psychology 101
Social Work 220
Sociology 201
Sociology 202
Exceptions:

Introduction to Regional Geography: North America, Europe and Russia (3)
Introduction to Regional Geography: Asia, Africa and Latin America (3)
Introduction to Cultural Geography (3)
Principles and Concepts in Personal Health (3)
Introduction to Women's Studies (3)
Wildlife, Conservation and Environmental Issues (3)
Global Perspectives in Natural Resource Based Recreation (3)
Introductory Nutrition (3)
American Government and Politics (3)
American Political Institutions and Policy (3)
Introduction to World Politics (3)
Introduction to Psychology (3)
Understanding Human Diversity and Oppressed Populations (3)
General Sociology (3)
Social Problems (3)
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 (Aesthetics) 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.

## Facilities

UT Martin features 48 academic and support buildings, a spacious 250 -acre main campus, and 680 acres of agricultural land that serve as a research and demonstration operation. Residence hall facilities for 2,128 single students as well as 254 apartments (Grove Apartments and University Courts) are on campus.

## Margaret N. Perry Children's Center

The Margaret N. Perry Children's Center provides quality care for children of UT Martin students, faculty and 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 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 and 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, 731-881-7715.

## The Paul Meek Library

The Paul Meek Library is open to students 91.5 hours weekly during school terms, and its digital resources are available to registered students any time, day, night, weekends, or holidays. The library is an attractive 120,000 -square-foot structure containing an all-night study room with a computer lab, a coffee bar, a second floor student computer lab, a leisure reading area complete with fireplace, a faculty technology lab and a variety of group and individual study areas. The library collection contains more than 500,000 volumes in various formats, more than $2,000 \mathrm{DVDs}$, and approximately 600 print periodical subscriptions. In addition, the library 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 Meek Library also hosts the regional Tennessee Textbook depository, the state's approved current K-12 public-school teaching material.

The library faculty participate in the freshmen studies sections, and subject-specific is available to classes. Three teaching spaces are available for teaching groups about access, research skills, and information sources. Individual students can initiate one-on-one learning opportunities in person, and by telephone, chat, and email.

Electronic resources include 70+ databases supporting study and research in subject disciplines, representing over 12,000 scholarly journals and information sources. The library's Web presence provides a one-point platform for faculty and students both on and off campus to connect to full-text databases, renew checked out items, and request loans from other libraries. It also provides access to over 120,000 electronic books.

The Steven E. Rogers Media Center houses non-print media including microform, compact discs, DVDs and an Ellison die collection. The department offers two fully equipped media classrooms as well as individual multi-media workstations for students who wish to produce, view or listen to material on their own. This area also provides downlink support for campus teleconferences.

The Alliene and Jimmie Corbitt Special Collections houses the University's rare books and manuscript collections, serves as the archival repository for the campus, and maintains the library's exhibit areas. Major manuscript collections include the Wintfred L. Smith Reelfoot Lake collections, the Harry Kroll collection, and the papers of Congressmen Ed Jones and John Tanner, as well as the legislative papers of Governor Ned Ray McWherter. Replicas of Jones' and McWherter's offices are unique parts of this area. The department also curates a non-circulating collection of Tennessee regional history and genealogy through the West Tennessee Heritage Study Center.

The J. Houston Gordon Museum provides UT Martin and the community with diverse and interesting programs. It serves as an exhibit venue for local and traveling exhibits of fine art, history and culture, the sciences and natural history. Typically, two exhibitions are scheduled each term and opened with a public presentation by the artist, exhibitor or curator. The Gordon Museum is located in the Paul Meek Library and is accessible only through the Alliene and Jimmie Corbitt Special Collections reading area, adjacent to the Library's main lobby. The gallery is open to the public 8 a.m. to 4:30 p.m., Monday through Friday, except for university holidays, and by special prior arrangement with the museum director. Public parking is available near the library building. For exhibit and program information or to schedule a group visit, contact the museum at 731-881-7094 or speccoll@utm.edu.

Books acquired by the library each year are usually made available soon after being received, with rapid processing made possible by the automated acquisition and cataloging modules of the library's Integrated Library System. This system also enhances interlibrary loan services by providing fast access to collections in other libraries. In addition, the library utilizes online circulation and periodical control functions linked to the overall automation system.

In person, by telephone or electronically, students and other library users can find help with their research needs at the Reference Desk. It is staffed by qualified librarians who are available during the majority of the hours that the library is open. The library has an automated phone system that will route patrons dialing 731-881-7060 to any public service area in the building. Individuals may also visit the university's Web site at www.utm.edu/library for a closer look at the campus and the library.

## 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.

- UT Martin's current recommended student computer configuration is available on the Web site at http://www.utm.edu/departments/its/.
- Online services - available 24 hours from anywhere and anytime.
- The myUTMartin portal provides single sign-on access for students, faculty, and staff to many of the online resources available at UT Martin. The myUTMartin portal is customizable by the individual to provide the information that he/she desires.
- Register for classes, view and print schedules, view course schedules, view adviser information, view and print grades, view and print unofficial transcripts.
- Apply, view, and accept financial aid.
- View and pay fees by student or authorized user.
- See how changing majors affects graduation.
- View graduation requirement checksheets.
- Elect to receive electronic refunds.
- Register vehicles.
- All students are given email accounts that utilize Google Apps for universities for email, calendar, task management, address books, collaboration projects, and more.
- Faculty can advise students, view and print rosters and course schedules, and enter grades via Banner Self-Service web interface for faculty in the myUTMartin portal.
- Residence halls and campus apartments
- All residence halls and campus apartments have wired and wireless internet service.
- 72 cable TV channels with four premium movie channels. Local channels in HD. (A TV with a Digital Tuner is required.)
- Telephone service has optional low-cost long-distance service.
- Voice mail.
- The new apartment-style residences also have 802.11 g wireless.
- Assistance
- The Information Technology Services HelpDesk is located in the Boling University Center. Technicians are available to assist students, faculty and staff via the Web, chat, email, or telephone seven days a week from 6:30 a.m. to 12:30 a.m. Walk-in assistance is available during university center hours.
- Information Technology Services utilizes the talents of UT Martin students to assist in meeting the needs of the campus by hiring them as workers in a variety of areas.
- Security
- Anti-virus software is required prior to connecting to the UT Martin network. We recommend using the free Microsoft Security Essentials package for students. Microsoft Forefront Endpoint Protection is installed on all faculty and staff computers.
- Network authentication is required for access from the residences.
- The Skyhawk Card is utilized for access to secured areas, vending machines, laundry facilities, and printing.
- State-of-the-art technology
- One-third of student-use and classroom computers are replaced each year, providing students access to new technology.
- The current version of Microsoft Office Suite is available in the general-access labs.
- Students have access to file storage space on a Windows server for assignments and money on their Skyhawk card to print from any general-access lab.
- The general-access student lab in the library is available 24 hours a day every day.
- Wireless notebooks are available for checkout and use in the library.
- Color printers and scanners are available.
- Two multi-media stations are available in the library for students to produce and convert all types of digital media for assignments and portfolios.
- Digital Printing Services is equipped with new state-of-the-art digital printing capabilities for student, faculty and campus use.
- UT Martin has an Interactive Video Network with classrooms on the Martin campus and connections to classrooms in Jackson, Selmer, Camden, Paris, McKenzie, Ripley, Parsons, Bruceton, Knoxville, Memphis, and Lake County for teaching courses through the video network.
- Network
- UT Martin has a 600 megabit connection to the Internet.
- $802.11 \mathrm{~b} / \mathrm{g} / \mathrm{n}$ wireless is available in all academic buildings, all residence halls, the University Center, library and almost all other buildings.
- Classrooms
- Blackboard, the campus online course management system, provides an online interface between faculty and students for specific course assignments, documents, and course learning activities.
- One-third of the classroom technology is replaced every year.
- All classrooms are smart classrooms equipped with multi-media technology. Laptop connections to the projectors are also available.
- One-third of the full-time faculty members receive new computers each year. The faculty computer rotation allows faculty to always be ahead of the technology curve. The current configuration includes a monitor, keyboard, docking station, and convertible Mac or PC laptop computer.
- The Instructional Technology Center (ITC) provides training and consulting services to faculty for online and blended courses. Workshops, regularly scheduled monthly training events and individualized instruction on a variety of software and classroom technology is available on a continuing basis. State-of-the-art equipment for faculty technology needs is housed in the ITC facility in the Paul Meek Library.
- 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.
- Digital Printing Services
- Many printing services are offered for the student. Examples are school projects, large format posters, and invitations. Digital Printing Services is located in the basement of Clement Hall.
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.


## Services for Students

The Division of Student Affairs is responsive to the needs of all students. As the primary advocate for students, the staff commits to facilitating opportunities for growth and development in civility and humanity. 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:

- university center
- campus recreation and intramural sports
- dining services
- housing and residential life
- minority student affairs
- student conduct
- student health and counseling services
- student life

Student life provides oversight for student clubs and organizations, Greek life 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.

## 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 new, two-story, 96,000 square foot 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
- parlour games

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

## Office of Minority Affairs

The Office of Minority Affairs provides support to students of color at the university. The staff seeks to fulfill academic support, cultural, economic, and social needs of minority students by serving as the multicultural consultant for the entire campus. Through a variety of programs and services, the staff commits to raising cultural awareness and acceptance campus-wide. For assistance call 731-881-7282.

## 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.

## Student Health and Counseling Services

The mission of Student Health and Counseling Services is to help students achieve and maintain wellness. Student Health and Counseling Services is also available to the campus community to provide resource material and educational programs.

The office is located behind Cooper Hall and has a staff of licensed clinical social workers, nurses, and a fulltime family nurse practitioner with an M.D. consultant. The staff nurses are available during the regular office hours Monday through Friday. The family nurse practitioner and counselor are available by appointment.

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, vaccines, family planning services, HIV testing, and allergy shot administration. Some prescription medications can also be dispensed. Counseling related services include personal 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, lab tests and vaccines. Volunteer Community 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 urged to carry health insurance to cover illnesses and accidents that may occur while they are enrolled, since this coverage is not provided by the institution. Information about insurance coverage available to students at low costs can be obtained at Student Health and Counseling Services.

Note: The General Assembly of Tennessee requires first-time students to provide proof of immunity or immunization for measles, mumps, and rubella (MMR). Students must provide documentation of immunity or two doses of MMR administered at least 28 days apart and no earlier than four days before the first birthday. State law also mandates that incoming students be informed of risk factors and dangers of meningococcal disease.

Proof of vaccinations must be on file in Student Health and Counseling Services. Please visit http://www. utm.edu/departments/shcs/ to complete this process. Failure to comply will result in inability to register for classes.

For additional information, call 731-881-7750.

## University Center

The Boling University Center is the student service and activity center for the campus community. These services include: UTM Mail Services, Computer Store, fitness center, gameroom, automated teller machines, Sodexo Dining Services, University Bookstore, Student Government Association, Black Student Association, and Information Center (Information Desk, campus operator/call center, facility reservations/administration, ticket sales, campus schedules, public Internet access, etc.).

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.

## Services for Students with Disabilities

It is the policy of the university to provide reasonable accommodations (academic adjustments and auxiliary aids) to assist students with disabilities in negotiating the university system. The Office of Disabilities (203 Clement Hall) serves students with learning disabilities and ADD. For additional information on services to students with disabilities, call the coordinator of disability services at 731-881-7744. Also see the university's 504/ADA statement listed in the front of this catalog.

## 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 academic and career counseling and services, disabilities advocacy and procedures and various academic testing services. The UT Martin SSC staff and services are prepared to help all students reach their full academic potential. The full range of academic support services may be viewed at http://www.utm.edu/success.

Our academic counseling team is trained to work with conditional admission and academically eligible-warning students, non-traditional students and undeclared majors in addition to the general student population. Professional advisers and tutors offer a wide variety of academic-related services, such as study skills classes, diagnostic learning and career inventories, walk-in math assistance and an award-winning writing center. To learn what labs, courses, tutoring, and counseling UT Martin offers, students may inquire at the Student Success Center, 210 Clement Hall, or may call 731-881-7744. Students may also find assistance online at http:// www.utm.edu/success/ or by emailing the staff at success@utm.edu.

While a student at UT Martin, one may also choose to benefit from individualized career exploration and preparation using the Myers-Briggs Type Indicator test or the Strong Interest Inventory. In addition to careerrelated testing, the Student Success Center also offers CLEP (College-Level Examination Program), DANTES (Defense Activity for Nontraditional Education Support), GED (General Education Development) and Senior Major/Major Field Exams. Students seeking to further their education beyond their undergraduate degree may also elect to take various graduate aptitude tests such as the GMAT, GRE, IT Testing, LSAT, PRAXIS, and MAT through the UT Martin Testing Center. For more testing information, contact the Student Success Center, 210 Clement Hall, or call 731-881-7744.

## Study Skills

UT Martin Study Skills, located in 206-210 Clement Hall (731-881-7744), offers students help with time
management, note taking and other study skills related to academic performance. Films, tapes, written materials, and individual counseling are all available resources.

## National Student Exchange

UT Martin is a member of the National Student Exchange Consortium. This consortium includes approximately 200 colleges and universities in the United States, Guam, Puerto Rico, the U.S. Virgin Islands, and Canada. This program offers students access to a wide variety of courses in many majors that are not available on the UT Martin campus to enhance their educational, cultural, and personal perspectives. Applications to this program may be obtained from the National Student Exchange coordinator in the Student Success Center. Students wishing to participate must meet the following conditions.

1. They must secure prior approval of their NSE coursework from their faculty adviser(s) and the chair of their department and file their program with the registrar.
2. They must have a cumulative GPA of at least 2.75 .
3. They must have the approval of the UT Martin National Student Exchange coordinator.
4. They must apply to the program and be accepted by the consortium college or university they wish to attend.

## Career Employment Services

Career Employment Services provides assistance to degree candidates and alumni in securing professional employment. The services are free and available year-round. Candidates for degrees are encouraged to take advantage of the various employment services offered. Services include:

- online employment services
- on-campus interviews
- Career/Major Fair
- internship information
- employer information
- job vacancy listings
- resumé and interview assistance

The office is located in 242 Clement Hall. For additional information, call 731-881-7740.

## Student Life

The Office of Student Life 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 works to support more than 100 student organizations including professional organizations, honorary societies, service organizations, special-interest groups, and social Greek letter organizations (fraternities and sororities); coordinates a number of special activities and events throughout the academic year in conjunction with various student organizations and university departments; works closely with the Office of Campus Recreation in support of the intramural sports, sports clubs, and outdoor recreation programs; provides advisement for the Student Activities Council that is charged with providing student entertainment activities for the campus and produces in excess of 75 events annually for students.
For more information, call the Office of Student Life at 731-881-1708 or visit the Web site at www.utm.edu/ departments/studentlife.

## Opportunities at UT Martin

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.

Professional 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.

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 Second Nature Environmental Society, UT Martin hosts several student organizations that focus on the specific interests of the UT Martin community.

Student Activities Council (SAC) - The Student Activities Council is charged with providing student entertainment activities for the campus. Various committees include arts, news, and views; entertainment; film and video; game room; graphic design; and publicity. Participation on the various committees is encouraged and open to all students. The SAC produces in excess of 75 events during an academic year. For more information, see the Web at www.utm.edu/sac.

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, he/she becomes 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.

## 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.

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.

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.

Skyhawk Marching Band is organized fall semester and is open to university students who have a background in marching band. The band performs for football games, parades, and exhibition performances at area marching band contests. Band camp is held for one week before fall semester. Marching band carries one credit hour. Scholarships are available by audition.

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 $\$ 60$ 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 period 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. Information about the program and how to apply can be obtained in the Student Success Center, 731-8817744.

## Veterans Service

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.

Counseling service for veterans is available at the Office of Business Affairs in 116 Hall-Moody Administration Building. 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 30 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."

For more information, call 731-881-7810.

## Intercollegiate Athletics

The UT Martin Intercollegiate Athletics program consists of 17 sports. The seven men's sports are: football, basketball, baseball, golf, rifle, cross-country and rodeo. The women's sports are: basketball, volleyball, softball, tennis, cross-country, soccer, rifle, rodeo, equestrian and cheerleading.

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 Leader Development and Assessment Course at Fort Lewis 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 softbound yearbook and BeanSwitch literary and visual arts magazine.

The Pacer is published weekly during the academic year and distributed free to the campus community. Subscriptions are not taken because The Pacer Online also is available at no charge. The Spirit is published each semester and is distributed to all regular, full-time undergraduate students who have been assessed a yearbook fee during the academic year. Others may reserve copies of the yearbook by contacting the Department of Communications, 305 Gooch Hall, 731-881-7546.

BeanSwitch is published online each fall and both online/print each spring. 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 publication.
To apply for paid staff positions on any of the publications, students should first contact the Office of Student Publications at 731-881-7558 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, the UT Martin Facebook page, 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.
Announcement Procedures:

- A decision about main campus operations will be provided to the Director of University Relations or designee by 5:30 a.m.
- Center directors will also contact the Director of University Relations 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 Facebook. (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 Procedures and Requirements

Judy Rayburn, Director of Admissions

200 Hall-Moody Administration Building
731-881-7032
fax 731-881-7029

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

1. Complete the application for admission and forward to the Admissions Office ( 210 Administration Building, The University of Tennessee at Martin, Martin, TN 38238). An online application is available at www.utm.edu.
2. Enclose a $\$ 30$ non-refundable application fee with application.
3. First-time freshmen must have a copy of ACT scores forwarded to the Admissions Office (may be on high school transcript).*
4. 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.
5. Upon graduation, request that a final high school transcript be sent to the Admissions Office.
6. First time freshmen with college credit (such as dual) must request transcripts from the colleges where credits have been earned.
*Not required if applicant has been out of high school for three years or longer.

## Selective Service

All 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, Defense Activity for Nontraditional Education Support, 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.

| IB Exam | Minimum Score | Course Credit |
| :--- | :--- | :--- |
| Anthropology | 5 | Sociology 300 |
| English | 5 | English 111 |
| English | $6-7$ | English 111 and 112 |
| French | 5 | French $111 / 115$ |
| French | $6-7$ | French $111 / 115$ and 122 |
| Psychology | 4 | Psychology 101 |
| Spanish | 5 | Spanish $111 / 115$ |
| Spanish | $6-7$ | Spanish $111 / 115$ and 122 |

3. College Credit Recommendation Service, a program of the American Council on Education (ACE) -- only as approved by individual departments and degrees committees.
4. Defense Activity for Nontraditional Education Support (DANTES) administered by The Chauncey Group International, a subsidiary of Educational Testing Services.
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 DANTES 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. A recording fee of $\$ 30$ per course is required.
Students are limited to a total of 30 credit hours earned by any combination of AP, IB, ACE, DANTES, 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 |
| :--- | :--- |
| Mathematics | 4 units (Algebra I, Algebra II, Geometry, and a fourth higher level math course) |
| Natural/Physical Sciences | 3 units (Biology, Chemistry or Physics, and a third lab course) |
| U.S. History | 1 unit |
| Social Studies | 1 unit of world history, European history, or world geography (may be fulfilled by |
|  | completing 2 one-half units) |
| Foreign Language* | 2 units in same language |
| Visual/Performing Arts | 1 unit of theatre arts, visual arts, music theory, music history, vocal music, general <br> music, instrumental music, or art history |
| * Waived for resident aliens if it is determined that English is their second language. |  |

## 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 above and a minimum cumulative GPA of 2.50 on a 4.0 scale, OR
2. ACT Composite score of 18 or above and a minimum cumulative GPA of 2.85 on a 4.0 scale.
(Effective for Fall 2014 admission, graduates from high schools with state accreditation may enter UT Martin with regular admission status by meeting one of the following criteria:
3. ACT Composite score of 21 or above and a minimum cumulative GPA of 2.70 on a 4.0 scale, OR
4. ACT Composite score of 19 or above and a minimum cumulative GPA of 3.00 on a 4.0 scale.)

Graduates from high schools without state accreditation or home-school graduates must meet one of the following criteria:

1. a composite score of 21 or above on the American College Test (ACT) and a cumulative high school GPA of 2.85 or above on a 4.0 scale, OR
2. a minimum score of 500 on the GED.

An applicant 18 years of age or older who has not graduated from high school may be admitted to the university upon passing the General Educational Development Test (GED) with a score of 500 or above. The applicant's high school class must have graduated. Students must request their official test results be sent to UT Martin in addition to a transcript of any high school work completed. A student entering on the basis of a GED will be assessed and placed in the appropriate course(s) relative to his/her needs to include high school unit 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.

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. See Non-Traditional Admission later in this section.

## 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. Applicants will be asked to submit letters of recommendation to address leadership qualities, extracurricular activities, community service, work history and other traits that will be considered in the application process.
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.

## 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. A student admitted concurrently must meet the high school unit requirements to enroll as a regular student after high school graduation. An additional three-hour course may be taken if the student's ACT composite score is a minimum of 28 .

## 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/HSGPA 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 remove all high school unit requirements 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.

## 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 will receive Regular Admission if the applicant has a cumulative high school grade-point average (GPA) of 2.85 or above on a 4.0 scale. Although American College Test (ACT) scores are not required for non-traditional applicants, a high school graduate will also receive Regular Admission with a composite score of 19 or above on the ACT.

A non-traditional applicant who has not graduated from high school may be granted Regular Admission upon passing the General Education Development Test (GED) with a score of 500 or above.

A non-traditional applicant who does not meet the requirements for Regular Admission may be considered for Conditional Admission if the applicant is a high school graduate with a cumulative GPA of 2.00 or above. Applicants may also be considered for admission with an ACT of 18 or above, or a GED score of 450-490.

The high school unit requirements and ACT test scores are not required for non-traditional applicants, but see information regarding the American history baccalaureate degree requirement under the section, 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 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. 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 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.

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 Banner Web. 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 CAPP degree audit 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 assistant 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

International applicants seeking admission to undergraduate programs must furnish the following in addition to all other entrance requirements:

1. a completed, signed application for 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. official minimum Test of English as Foreign Language (TOEFL) score of 500 (UT Martin's institutional TOEFL only), or Internet Based TOEFL (IBT) score of 61, or International English Language Testing System (IELTS) score of 6.0, or successful completion of Level 6 of the Tennessee Intensive English Program (TIEP) is required for all students unless the applicant's native language is English. Upon arrival on the campus or after successful completion of TIEP, all degree-seeking 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 International Students" in the Department of English and Modern Foreign Languages section.
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).

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.

## Academic Fresh Start

Undergraduate students (all categories) 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. The request must be submitted in writing to the Admissions Office prior to the term for which the Academic Fresh Start 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.
This policy means that any previous college coursework in which the student received a grade below C will not be computed in subsequent calculations of grade-point average. These grades will, however, remain on the student's transcript. Credit toward graduation will be disallowed for course grades not included in the cumulative average, but this work will be included in calculations for consideration for honors graduation. A student may be admitted under the policy only one time; this admission cannot be annulled. Anyone admitted under this policy may not graduate under a catalog in existence prior to the year in which an academic fresh start was granted.

## 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 instate or out-of-state students for fees and tuition purposes.

## Rules for Determination of Status

1. Every person having his/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/her domicile in this state shall be classified "out-of-state" for said purposes.
3. The domicile of an unemancipated person is that of his/her parent.
4. The domicile of a married person shall be determined independent of the domicile of the spouse.
5. The legal spouse of a student classified as "in-state" shall also be classified "in-state."

## 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/her parent, having therefore been domiciled in the state, move from the state. However, such a 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/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 in this state or at Fort Campbell (Kentucky) 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/she is currently enrolled, shall not be required to pay out-of-state tuition if his/her parent thereafter is transferred on military orders.
3. Students whose domiciles are in Hickman, Fulton and Graves counties in Kentucky, can attend UT Martin without payment of out-of-state tuition but will be classified as non-residents for admission purposes.
4. Part-time students who are not domiciled in this state but who reside in this state and are employed full-time in the state, or who are 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. (Part-time students are those who enroll for less than 12 semester hours).
5. Military personnel and their spouses stationed in the State of Tennessee who would 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 not apply to military personnel and their spouses who are stationed in this state primarily for educational purposes.

## Residency Presumption

Unless the contrary appears from clear and convincing evidence, it shall be presumed that an emancipated person does not acquire domicile in this state while enrolled as a full-time student at any public or private higher educational institution in this state, as such status is defined by such institution.

## Residency Appeal

All resident classifications shall be made by the director of admissions at each institution in accordance with these regulations. The decision of the director of admissions may be appealed to the Extenuating Circumstances Admissions and Residency Appeals Committee at UT Martin, which shall, after granting a hearing and fully considering the merits of each case, determine the appropriate resident classification of the student. Appeals of the committee's decision may be submitted to the vice chancellor for student affairs for review by the chancellor.

## Orientation and Enrollment

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 programs begin in April and continue throughout the summer. Students who attend SOAR will meet with an adviser and register
for fall semester classes. Parents will also be involved in information sessions during the one-and-one-halfday program.
The second phase of the First-Year Initiative combines Welcome Weekend activities and the General Studies 101 (GENS 101) class. Welcome Weekend begins prior to the first day of regular classes when freshmen 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 upperclass peer leader (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.

A health history form will be provided prior to registration and should be returned to the Office of Student Health and Counseling Services upon enrollment.

## The UT Martin First-Year Initiative (FYI)

The UT Martin First-Year Initiative is a unique program designed to help students with their transition to college life. The first phase of the First-Year Initiative is SOAR, Summer Orientation and Registration. During SOAR, prospective students meet with academic advisers and register for classes. Also, students and parents receive information about various student services including academic support, housing, financial aid and student activities.

The second phase of the UT Martin First-Year Initiative involves the active participation of students in Welcome Weekend. Welcome Weekend begins prior to the start of classes in the fall semester. It is actionpacked days during which students learn more about academic and student life programs and services available for them at UT Martin. At the beginning of Welcome Weekend, each student is assigned to a group of students with similar academic interests. A faculty mentor and a peer counselor (PEP Leader) lead the group during Welcome Weekend and throughout the First-Year Initiative. It is during these days that students begin their college transition class, General Studies 101, with their group. General Studies 101 is a two credit-hour semester-long class that focuses on the strategies and skills needed to experience success in the collegiate environment.

The university strongly encourages all freshmen to enroll in the First-Year Initiative. It is the first step in living the total collegiate experience at UT Martin.

## 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. Students who do not attend SOAR should pick up their Skyhawk Cards at the Business Affairs Office Skyhawk Card Services window.

## Course Selection

UT Martin provides placement information to 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 100 and 111 instructors 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 100 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 mathematics 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, 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

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.

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 100 , 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. 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 100 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 $100,110,111$, 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. See the section on the Student Success Center for the special academic support services offered.

The objectives of the university advisement program are:

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

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 preparations and progress
2. provide advisers with an Advising Handbook containing annually updated information related to policies, procedures, programs and services
3. provide advisers with appropriate training in academic advising
4. periodically evaluate the effectiveness of the advisement program
5. consider academic advising in tenure, promotion and merit decisions
6. inform students of the advising and counseling services at UT Martin and stress the importance of academic advising.

## Student Advisement

Each student will be assigned a faculty adviser by the appropriate department chair if the student has declared a major; or by the Director of the Student Success Center for an undeclared major. 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). 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.

An Overload Approval form must be submitted to the Office of Academic Records for processing.

## 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:

## 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 other public community college or university when the catalog was in effect. However, 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 progams allow double majors. Not all programs allow minors.
D. All major and/or minor requirements must be compelted 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 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. Take the Measure of Academic Proficiency and Progress test and a test in the student's major field. In order for the university to assess and improve its academic programs, periodic measurements of students' intellectual growth must be obtained. As a requirement for graduation, therefore, every senior shall take a test which measures general education knowledge and skills and a test which measures achievement in his/her major field of study. Departmental faculties will identify the appropriate evaluation instrument for tests in the major field and may require minimum performance levels; otherwise, the evaluative information obtained through the testing is used solely to improve the quality of the educational experience for future generations of students.

## 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. 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 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.

## Correspondence and Extension Work

The candidate may offer by correspondence and/or extension as much as one-fourth of the gross total hours required for the degree sought and have this work counted toward the degree. Credit for undergraduate courses in extension and/or correspondence in the major subject shall be limited to one-fourth of the total credit hours required.

Correspondence credits are not recognized by The University of Tennessee College of Law, or - except by prior permission — by The University of Tennessee Health Science Center at Memphis. Extension credits are recognized by the College of Law in accordance with the limitation set in the above paragraph. Extension credits are accepted by the Health Science Center only with prior approval of the dean of the college concerned.

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. This policy is especially applicable to courses pertaining to teaching methods. Questions should be directed to the appropriate departmental chairs before registering for such correspondence courses. Decisions regarding approval will be made by the College of Education, Health, and Behavioral Sciences dean.

A student taking work for certification purposes should consult the Professional Assistant for Teacher Certification, College of Education, Health, and Behavioral Sciences, as to the amount of extension and/or correspondence credit allowed for a teacher's certificate.

Seniors may take a total of six semester hours required for the degree by correspondence, extension and/ or interactive distance-learning emanating from other University of Tennessee campuses. If the candidate is a senior transfer (transferred into UT Martin with 90 or more earned hours), no work may be taken by correspondence, extension or interactive distance-learning emanating from other UT campuses.

Any student wishing to add a course by correspondence must be academically eligible at UT Martin and must get the approval of the dean of the college in which the student is currently enrolled. It is strongly recommended that no course be undertaken by correspondence during the final semester before graduation.

Courses may be started at any time. A Correspondence Study Catalog, including information on enrollment, costs, credit, books, etc., may be obtained by writing to the Office of Admissions, the University of Tennessee at Martin, Martin, TN 38238 or calling 731-881-7020 or 1-800-829-UTM1.

## 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 $\mathbb{W}$, 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 | Quality Points |
| :---: | :---: | :---: |
|  | Level | 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 $\mathrm{A}, \mathrm{B}$, 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 ..........................................................................................................................................................................................................
Course Offering 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 " $\gamma$ " 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:
$\qquad$
High Honors............................................................................................................. 3.5 through 3.79 GPA
Highest Honors............................................................................................................ 3.8 through 4.0 GPA
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:
Cum Laude
3.2 through 3.49 GPA

Magna Cum Laude ..................................................................................................... 3.5 through 3.79 GPA
Summa Cum Laude..................................................................................................... 3.8 through 4.0 GPA
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. (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 file a written request with the Office of Academic Records, as far as possible in advance of the time needed. Students may call 731-8817050 (option \#1) to determine what information must be included in the written request. A transcript cannot 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. Special Services 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. The warning status will be removed upon the achievement of a 2.00 cumulative GPA. If a student on warning fails to achieve a 2.00 cumulative GPA, the student will remain on warning as long as a 2.00 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.

The student must meet with an adviser in the Student Success Center (SSC), 210 Clement, and develop a contract for improving his or her 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, work in a group of individual tutoring sessions, as well as attend conferences with a Student Success Center adviser.

Students on warning may not register for more than 16 credit hours per semester or eight credit hours per summer term, inclusive of correspondence credit, without the prior written approval of the dean of his/her college.
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. The reinstated student will not be allowed to preregister for future semesters until his/her GPA meets at least one of the two conditions identified above. 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.

Readmission following academic ineligibility is never automatic. 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 week will leave no record on the student's academic transcript. A drop executed during the second through eighth week will result in a grade of 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.

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 Student Success Center.

Within First Eight Weeks. Withdrawals executed during the first week of the fall and spring semesters will leave no record of the courses for which the student signed. Withdrawals executed between the second and eighth week of the semester will result in a grade of W (withdrawal) in all courses for which the student signed.
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.

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

In the event of such certification, and the approval of the vice chancellor for student affairs, the student shall receive a W in all courses for which the student signed.

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. Students should consult the summer term timetable for the appropriate summer deadlines.

Withdrawals executed during the first week of the fall and spring semesters will leave no record of the courses for which the student signed. Withdrawals executed after the first week of the semester will result in a grade of W in all courses for which the student signed. Students should consult the summer term timetable for the appropriate summer deadlines. 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.

## 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 in the Office of Academic Records (Administration Building 103) prior to the deadline for adding courses.

## 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 731-881-7847 (V/TTY available) or 731-881-3505. Requests for accommodation of a disability should be directed to the ADA Coordinator at the Office of Equity and Diversity.

## Fees, Expenses, Financial Assistance and Scholarships



The University of Tennessee at Martin

## Financial Information

Laura Foltz, Director

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 2013-2014, are as follows, and are subject to change.

## Fees and Expenses*

Maintenance Fee (In-state Fee) - Undergraduate Fee Per Semester ................................................. \$3,168
Programs \& Services Fee - Undergraduate Fee Per Semester .............................................................. \$407
Technology Fee - Undergraduate Fee Per Semester............................................................................. \$100
Facility Fee - Undergraduate Fee Per Semester..................................................................................... \$75
Yearbook Fee Per Semester (Fall and Spring Only) ................................................................................. \$7
Total In-State Undergraduate Full-Time Fees Per Semester ................................................................ \$3,757
Additional Tuition For Out-of-State Students Per Semester ................................................................ \$6,972
UT Online Courses (section NC) fees - In-state (per credit hour) .......................................................... \$320
UT Online Courses (section NC) fees - Out-of-state (per credit hour) ................................................... $\$ 345$
(See Residency Regulations in the section of university catalog titled Undergraduate Admission Procedures and Requirements.)
*Check the Web at www.utm.edu/bursar for revisions to fees and expenses.

## 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:

Maintenance Fee (In-state Fee) Per Hour............................................................... $\$ 264$ per semester hour
Programs \& Services Fee Per Hour .......................................................................... $\$ 34$ per semester hour
Technology Fee Per Hour .......................................................................................... $\$ 9$ per semester hour
Facility Fee Per Hour ................................................................................................ $\$ 9$ per semester hour
Total In-State Undergraduate Hourly Fee ................................................................. $\$ 316$ per semester hour
Additional Tuition for Out-of-State Students Per Hour .............................................. $\$ 581$ per semester hour Students who are enrolled for online undergraduate courses administered through UT Online are assessed additional fees at $\$ 320$ per credit hour (in-state) or $\$ 345$ per credit hour (out-of-state) as detailed at www. utm.edu/bursar under Fee Schedule.
(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. This fee 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 late registration 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 fee is not refundable and does not apply to students who withdraw from the university.

## Audit Fee/Special Fee Policy for Totally Disabled and/or Senior Citizens

Fees for courses being audited are the same as those taken for credit. For information concerning the special fee policy for totally disabled and persons 60 years old or older who wish to enroll in courses for non-credit or credit, contact the Office of Academic Records (731-881-7050).

## 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 | Academic Enrichment Fee | $\$ 20$ |
| :--- | :--- | ---: |
| College of Engineering and Natural Sciences (courses with labs) | Laboratory Fee | $\$ 15-30$ |
| Biology 475 (675) | Academic Enrichment Fee | $\$ 125$ |
| Department of Visual and Theatre Arts | Art Studio Supply Fee | $\$ 20-100$ |
| Department of Health and Human Performance--Physical Activity | Course Fee | $\$ 15$ |
| Department of Family and Consumer Sciences | Academic Enrichment Fee | $\$ 20$ |
| Reelfoot Lake Field Station | Reelfoot Lake Field Station Fee | $\$ 75$ |
| Student Teaching | Student Teaching Placement Fee | $\$ 400$ |

Music Fee (For Individual Instruction in Music)
Per Semester:
One-half hour lesson weekly................................................................................................................ $\$ 80$
One hour lesson weekly..................................................................................................................... $\$ 150$
Payment Plan Fee...................................................................................................... $\$ 30$
Late Fee on Payment Plan....................................................................................... $\$ 50$
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 advance registered), eligible students may request a payment plan. Current maintenance fee (in-state fee), out-of-state tuition, programs and services, facility, technology, publications fee, full semester dorm or apartment rent and meal plans are the only charges that can be deferred. After applying all types of financial aid, up to one-fourth of the remaining balance of these charges appliable to the payment plan. 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 charges unless special arrangements are made in the Office of Business Affairs and there are adequate funds remaining for the current semester.

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 every fourth week from the confirmation date. See www.utm.edu/bursar for payment plan details. For summer semester, the deferred charge is due no later than July 11vs. The service charge for the payment plan is $\$ 30$ and is not refundable. If the payment plan is not paid by the due date, a $\$ 50$ late fee will be added.

Students must set up the deferment and make the first payment at the Business Affairs Office cashier window (116 Administration Building), online in Banner Web (Student Records, Request Deferment of Fees, \& Online Payments and Deposits), or by phoning 731-881-7810.
Late Fee on Apartment Rentals ....................................................................... $\$ 25$
Apartment rent is due on the first day of each month. Rent not paid by the 20th day of each month will be assessed a $\$ 25$ late fee.

## E-Bills

Current students will be billed electronically by e-mail unless they sign an election for paper bill form in the Office of Business Affairs (116 Administration Building).

## Student Identification Card. <br> 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
\$15

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

## Diploma Fee.

 No ChargeThe 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 hall 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

## 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 amount is calculated based on money received, not money expected. Students can now have their refund deposited directly to their bank account by signing up for e-refunds as detailed at www.utm.edu/bursar.

## Refunds

## Financial Aid Recipients

Financial aid recipients must successfully complete two-thirds of their 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/finaid.

## Refunds <br> 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), charges for these hours will be calculated based upon the official drop day as presented to Business Affairs from the Office of Academic Records. Charges for the dropped hours will be calculated as follows:
Calendar days of Term \% Charged \% RefundDay 1-7.no charge.100\%
Day 8-14. 20\% ..... 80\%
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 <br> Withdrawing (Dropping all classes)

Withdrawals from school for any reason during any term must be made by official notification to the Division of Student Affairs. 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 institutional costs 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 and room):

| Calendar days of Term | \% Charged | \% Refund |
| :---: | :---: | :---: |
| Day 1-7. | .. no charge . | 100\% |
| Day 8-14. | 20\% | 80\% |
| 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.
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:

|  | 1st Session | 2nd Session | Full Term | \% Charged | \% Refund |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Day | $1-4$ | $1-4$ | $1-7$ | no charge | $100 \%$ |
| Day | $5-7$ | $5-7$ | $8-14$ | $20 \%$ | $80 \%$ |
| Day | $8-11$ | $8-11$ | $15-21$ | $40 \%$ | $60 \%$ |
| Day | $12-14$ | $12-14$ | $22-28$ | $60 \%$ | $40 \%$ |
| Day | 15 -end of term | 15-end of term | 29-end of term | $100 \%$ | $0 \%$ |

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 $\$ 3,757$, which was paid by a personal check. The student withdrew on the ninth calendar day following regular registration. The refund would be $\$ 2,998.60$.

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

$$
\$ 3,757-[(12) \times(20 \%) \times(\$ 316)]=\$ 2,998.60
$$

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 $\$ 3,757$. 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, $\$ 3,757 \times 86.4 \%=\$ 3,246.05$ will be returned to the federal loan or Pell accounts.
All students must settle accounts with the Office of Business Affairs and complete the registration for courses before attending classes. A confirmation of enrollment is required to complete the registration procedure. This applies to anyone whose fees are billed, prepaid, or waived. All charges are subject to subsequent audit. Errors will be corrected by refund or additional charge. Personal checks (see "Bad Check Charges"), Master Card, Visa and Discover credit cards are accepted only for the amount owed. (Discover cards are accepted on campus only by the Office of Business Affairs.)

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.

Any question regarding a student's financial account due the university should be directed to the Bursar in the Office of Business Affairs (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) Director of Business Affairs, (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.

## 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. 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 February 15.

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 $\$ 5,000$. One-half of the amount is paid each semester at registration.

## Honors Programs Scholarships

University Scholars - \$5,000 per year for four years if student maintains 3.3 GPA. Minimum 28 ACT and 3.5 GPA for consideration; 15 students selected each year for participation (see the section on UT Martin's Honors Programs in this catalog); must apply for admission by February 1.

Chancellor's Award - \$3,000 per year for four years if student maintains 3.2 GPA. Minimum 28 ACT and 3.5 GPA; must apply for admission by February 1. Please note: the minimum ACT and GPA requirements must be met by February 1 to be considered for the scholarship. Participation in the Honors Program is required.

Honors Seminar Out of State Tuition Waiver - Applicants with a $25+$ ACT and 3.5+GPA are eligible for a waiver of out of state tuition. Students must participate in the Honors Seminar program and may be eligible for University Scholars (selective) or the Chancellor's Award. Must be a U.S. citizen or permanent resident.

## Leadership Awards

Leaders-in-Residence - Presidents of student councils, presidents of senior class, Honor Society and Beta Club presidents and/or state officers in any student organization are eligible for a $\$ 1,000$ freshman year
award. Recipients participate in a special leadership development program and may apply for residence hall staff positions worth approximately $\$ 6,000$ per year. A student must have a minimum of 20 ACT and 3.00 GPA and live in approved university housing.
Hugh O'Brien Youth Leadership (HOBY) - Students who participate in HOBY may be considered for a $\$ 1,000$ leadership award. Recipients participate in a special leadership development program and must have a 20 ACT and 3.0 GPA and live in approved university housing.
Girl Scout Gold Award - Recipients of the Gold Award may be eligible for an \$800-per-year scholarship if they have a 21 ACT and a 3.0 GPA. Recipients must live in approved university housing.
UTM McWhorter Scholarship/Workship - \$500 to $\$ 1,000$ freshman year scholarship followed by $\$ 2,000$ workship for sophomore, junior and senior years. Must have minimum 20 ACT and 3.0 GPA for consideration.

## Merit Awards

Deans Scholarship - \$1,500 per year for four years if student maintains 3.0 GPA. Minimum 25 ACT and 3.5 GPA; must apply for admission by February 1. Please note: the minimum ACT and GPA requirements must be met by February 1 to be considered for the scholarship.
Students awarded the Deans Scholarship have the option of participating in the Honors Seminar Program but are not required. For more information about the Honors Seminar Program, please refer to the Honors Programs section of this catalog.

Harold Conner Scholarship - Minimum 21 ACT composite and 3.25 GPA; must apply for admission by February 1. Please note: the minimum ACT and GPA requirements must be met by February 1 to be considered for the scholarship. Preference is given to students with financial need, from underrepresented groups and first-generation college students. Scholarship amount varies.
Army ROTC Scholarships - The United States Army offers financial assistance in the form of four-, threeand two-year scholarships to qualified men and women on a merit basis. Each scholarship pays full tuition, books (up to $\$ 1,200$ per year), related mandatory academic expenses and a tiered allowance from \$300-500 per month during spring and fall semesters. To qualify, the student must:

1. complete all requirements for a commission and a college degree and be under 30 years of age on June 30 of the year in which they become eligible for commissioning.
2. meet and maintain the required medical standards and height and weight requirements of Army Regulation 40-501.
3. agree to complete the requirements for a commission, to accept either a Regular Army or Reserve commission and to serve on Army active duty, in the Army Reserve or in the Army National Guard, for a period specified.
4. be continually enrolled for 45 days after the academic start date of the fall semester at UT Martin and take and pass the Army Physical Fitness Test (APFT), in accordance with Army Field Manual 21-20.

UT Martin provides $\$ 2,000$ annually toward residence hall rooms, as available, for all Army ROTC scholarship winners. Assignment of rooms is recommended by the professor of military science.

Application for the four-year scholarship must be submitted by January 10 to ensure full consideration. ROTC scholarship winners are awarded room scholarships by UT Martin. Winners must maintain a CGPA of 2.0 on campus, an ROTC GPA of 3.0 and remain enrolled in ROTC. All application forms may be obtained online at www.goarmy.com or by visiting the Professor of Military Science at The University of Tennessee at Martin, Martin, TN 38238, phone 731-881-7682, or applicants may write directly to Army ROTC Scholarship, Fort Monroe, VA 23651.

Veterans may be eligible to compete for ROTC scholarships and, if eligible, may also receive any VA benefits to which they would normally be entitled. Veterans who return to active duty as officers may count their prior active duty enlisted time toward longevity pay and retirement.

Students who attend the Leader's Training Course may compete for two-year scholarships.
Four-year scholarships are awarded to students who will be entering college as freshmen. Three- and twoyear scholarships are awarded to students already enrolled in college. Applications for the two- and threeyear scholarships are submitted year-round. Students enrolled in an advanced education program beyond the baccalaureate degree may also apply, providing the applicant is a full-time student with a minimum of two years remaining before advance-degree completion and meets the age requirement. Additionally the Department of Military Science and Leadership annually awards three $\$ 500$ Weems one-year scholarships. The Col. Tom Elam ROTC Alumni endowment scholarship is awarded annually by recommendation of the ROTC Cadre. The Elam scholarship is a one-year scholarship with the amount varying more than $\$ 1,000$. JROTC Battalion Commanders and four selected freshmen entering ROTC are eligible for UT Martin's Leaders-in-Residence $\$ 1,000$ scholarships. Dedicated National Guard or Army Reserve scholarships of full tuition, fees and \$1,200 towards books are available for qualified guard or reserve members.

## The University of Tennessee Alumni Association

Scholarship award amounts and selection criteria may change without notice.
Andrew D. Holt Alumni Scholars - \$3,000 per year
Alumni Valedictorian Recognition Award - \$1,000 one year award
Transfer Scholarship - \$1,000 to \$2,000 one year award. Application deadline is May 1.

## 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 either completed online at www.fafsa.ed.gov or by downloading a PDF
paper version at http://federalstudentaid.ed.gov/fafsa/fafsa_options.html. Students are encouraged to apply online. Grants range up to $\$ 5,645$. Students can receive the Federal Pell Grant for no more than 12 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 January 1 each year. Award amounts vary.

## Loans

Federal Perkins Loan Program - The Perkins Loan is a low-interest campus-based loan program available to students who complete the FAFSA by the February 15 priority date and demonstrate financial need.
An eligible undergraduate student may borrow up to a maximum of \$4,500 each academic year and up to a maximum total loan of $\$ 27,500$ in undergraduate school. Interest on Perkins Loans is 5 percent annually on the unpaid balance, beginning nine months after graduation or withdrawal from school. The maximum repayment period is 10 years.
Repayment may be deferred while the borrower is enrolled as at least a half-time student at an accredited institution of higher learning or for a period of three years if he/she is serving as a member of the Armed Forces of the United States, Peace Corps or Vista. Borrowers who teach full time after graduation in a school designated as having a high concentration of students from low-income families, or who teach the handicapped, may apply for partial cancellation of their loan for each year of teaching service.

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 PLUSLoans - 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.

## Housing and Residence Hall Information



The University of Tennessee at Martin

## Housing Information

Earl Wright, Director

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

The university offers a wide variety of housing in recognition of the importance of a satisfactory housing experience and the correlation of positive housing experience with a student's success with university life, including probability of graduating.

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 residence halls at UT Martin are part of the "Total Collegiate Experience" for which UT Martin is known. 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. 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 for both freshmen and 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. Electricity, water, wireless and hard-wired data connection, cable service and local phone service are included in the lease payment. Students may choose a lease/rent option of either: an annual lease with two equal payments of $\$ 3,480$ each (proposed rate); an annual lease with monthly payments of $\$ 590$ (proposed rate); or an academic year lease at $\$ 3,100$ per semester (proposed rate). Graduating seniors can get a one semester lease for the semester they are graduating at $\$ 3,100$ (proposed rate).

## University Village Phase II

University Village Phase II is a 402-bed apartment-style complex. Each apartment is fully furnished and includes a living room suite, refrigerator and two-burner cook-top, stacked washer/dryer unit, twin-sized bed (with $36 \times 80$ mattress), desk with chair and a chest of drawers. Electricity, water, wireless and hard-wired data connection, cable service and local phone service are included in the lease payment. Only academic year leases are available. Two-, three-, and four-bedroom apartments are \$3,100 per semester (proposed rate); a one-bedroom apartment is $\$ 3,730$ per semester (proposed rate).

## 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. Electricity, water, data connection, cable service and local phone service are included in the rates. Proposed rates are \$1,390 for double occupancy and $\$ 2,075$ for a private room.

Cooper Hall is for both freshmen and upperclassmen, with males and females living on separate floors. 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. Proposed rates are $\$ 1,465$ for double occupancy and $\$ 2,085$ for a private room.

## Traditional Apartments

Campus housing facilities provide for married students, faculty, staff, sophomores and other upperclassmen one-, two- and three-bedroom apartments. Ranges, air-conditioning units, refrigerators, basic cable, data connections, water and local phone service are furnished in all units. Residents furnish their own phone instrument.

Proposed rental rates are as follows:
Grove Apartments: 1 bedroom $\$ 435$ per month
2 bedroom $\quad \$ 470$ per month
University Courts: 1 bedroom/tile $\$ 440$ per month
1 bedroom/carpet $\$ 465$ per month
2 bedroom/tile $\$ 475$ per month 2 bedroom/carpet $\$ 495$ per month
3 bedroom/tile $\$ 565$ per month 3 bedroom/carpet $\$ 590$ per month

## Reservations for Housing

Applications for Ellington, Browning, Cooper or University Village can be made online or you may obtain an application from the Office of Housing ( 269 Clement). Applications for University Courts or Grove Apartments may be obtained from the Office of Housing (269 Clement). To reserve a room in a residence hall, a \$100 prepayment is required and to reserve a space in University Village, a $\$ 150$ deposit is required. To reserve an apartment in University Courts or Grove Apartments, a $\$ 50$ reservation/damage deposit is required. At the time keys are picked up for occupancy, this deposit must be accompanied by an additional $\$ 100$ deposit. Checks should be payable to the University of Tennessee. The $\$ 100$ residence hall prepayment or the $\$ 150$ deposit for University Village will be refunded if a written request for cancellation is received in the housing office by April 1 for fall semester and by December 1 for the spring semester. The prepayment or 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 prepayment or deposit. Students may not transfer prepayments or deposits to other applicants.

## Living Off Campus

The university requires all single freshmen, except those living with their parents within a 50 -mile radius of campus, to live on campus in the residence halls. Students over 21 years of age, veterans of military service, or students with extreme health problems as verified by medical records, may be exempted from this requirement. Contact the Office of Housing at 731-881-7733 or houseme@utm.edu for additional information.

## Dining Services



The University of Tennessee at Martin

# Dining Services 

## Benjamin Long, General Manager

Boling University Center
731-881-7770
fax 731-881-7983

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 fewer than 30 earned credit hours are also required to purchase a meal plan for TWO (2) semesters. Students with 30 earned hours or less may choose from the Carte Blanche, 15 Meals per Week, 10 Meals per Week, 5 Meals per Week, and the 70 Block meal plans. Additional meal plans are offered for upperclassmen adn commuter students. Contact Customer Service for more information, 731-881-7770 or custserv@utm.edu.

- Skyhawk Café Dining Hall provides daily meal service. Our executive chef and trained team of culinarians prepare fresh food daily at each of our numerous stations. Students may choose from wholesome classics on our Entree line or they can choose their favorites from the Grill and Pizza lines. Delicious dishes from around the world are featured on the Pasta, International, and Showcase stations and students can watch as the dishes are prepared. The deli and salad bar rival those seen in favorite restaurants.
- The Food Court offers an array of on-the-go dining options, featuring retail brands such as Chick-Fil-A, Sandella's Flatbread Café, and Mein Bowl Asian Cuisine featuring Southern Tsunami Sushi. Also available are Simply To Go items that are prepared fresh daily--sandwiches, salads, desserts, sweets, yogurt parfaits, fresh fruit cups, veggie cups and much more.
- JW's Market is UT Martin's convenience store located in the University Center. The "Market" offers groceries, beverages, snack items, candies, ice cream treats and much more. Also available are Simply To Go items (sandwiches, salads, desserts, sweets, yogurt parfaits, fresh fruit cups, veggie cups and much more) that are prepared fresh daily.
- Simply To Go, located in Gooch Hall, is a satellite operation made for those who do not have time to stop by the Skyhawk Cafe or Food Court. It offers a variety of gourmet sandwiches, salads, bakery items, yogurt parfaits, vegetable cups, hot chili and soups, and much more; all are prepared fresh daily. There is also an assortment of chips, beverages and desserts to choose from, including Aspretto coffee.
- Captain's Coffee, located in the Paul Meek Library, is a full service espresso bar featuring Seattle's Best coffee and Tazo teas. Each drink is available either hot and cold. In addition, there is a large selection of pastries from the Sodexo bakery made fresh daily. Captain's Coffee also serves Island Oasis Smoothies featuring PowerBlendz. Captain's Coffee also features Simply To Go items--sandwiches, salads, desserts, sweets, yogurt parfaits, fresh fruit cups and much more.
- UT Martin Dining Services Catering - From casual to elegant, parties and banquets to wedding receptions, the catering department will accommodate needs for special events both on and off campus. The University Center has facilities to accommodate groups from 10 to 500. Room reservations are made at the University Center office. Information, menus and pricing are available from the catering office at Sodexo Dining Services, 130 Boling University Center, 731-881-7994.


## Office of Extended Campus and Online Studies



The University of Tennessee at Martin

# Office of Extended Campus and Online Studies 

Dr. Tommy A. Cates, Executive Director

110 Gooch Hall
731-881-7080
fax 731-881-7984

The Office of Extended Campus and Online Studies (ECOS) serves as an outreach entity for the university by providing support to the mission of public service and economic, educational and cultural development within the service area. These outreach efforts are accomplished by offering educational and training opportunities for the non-traditional student through degree and non-degree programs and courses. Educational opportunities are provided in many formats and at various locations to accommodate working adults and other part-time students.

Outreach activities include responsibility for managing the University of Tennessee at Martin McNairy County Center/Selmer, the Parsons Center, the Ripley Center and the Jackson Center. Degree and non-degree courses are offered at these full-service centers by traditional lecture, distance-learning and online courses.

## How to Contact ECOS

ECOS's offerings can be easily accessed on the Web site at www.utm.edu/ecos.

| Main Campus | Jackson | Ripley | Selmer | Parsons |
| :--- | :--- | :--- | :--- | :--- |
| 110 Gooch Hall | 3031 Hwy 45 ByPass | 317 S. Washington | 1269 Tennessee Ave. | 535 Tennessee Ave. S. |
| 731-881-7082 | 731-425-9277 | $731-221-8778$ | $731-646-1636$ | 731-847-3883 |
| 800-482-5199 | 888-UTM-GRAD | $866-295-8956$ | $888-654-6597$ |  |
| ecos@utm.edu | ecos@utm.edu | ecos@utm.edu | ecos@utm.edu | ecos@utm.edu |

## Degree Programs/Courses

ECOS offers an extensive schedule of college credit courses at extended-campus sites during the day, in the evening and on weekends. Programs and courses based on student need are offered throughout Tennessee with primary locations in Jackson, Selmer, Paris, Parsons, Ripley, Henderson and Dickson. The courses carry full-residence credit and provide an opportunity for working adults and other interested students to work toward a bachelor's or master's degree, gain professional recertification, occupational upgrading, or simply study in academic areas of interest. All requirements for the Master of Business Administration may be completed in Jackson.

## Dual Enrollment

ECOS offers dual-enrollment courses on-site and by distance-learning to high school students in West Tennessee. These courses depend on high schools' needs and scheduling and the availability of qualified faculty. High school students who meet the requirements for Concurrent/Dual Admission (see Undergraduate Admission Procedures and Requirements section) qualify to participate. Students receive high school and college credit for dual-enrollment courses.

## Online Studies-UT Online

Courses delivered online provide a unique opportunity for the university to provide educational resources to students inside and outside the university's conventional market areas. Online offerings provide learning anytime, anywhere. The offerings are provided in academic areas where the number of students can support online programs over time and the faculty is available to teach the courses. This program is oriented to nontraditional students, but traditional students can register for online classes with some restrictions. In addition, fees for online courses are slightly higher.

Currently the Bachelor of University Studies degree is the primary undergraduate degree offered online. At the graduate level, programs in education, agriculture, business, and family and consumer sciences are available online.

## Non-Degree Programs/Courses

## All Locations

The university offers a wide range of non-degree programs which address specific educational and training needs of the service area. Non-degree programs are non-formal educational offerings which qualify for Continuing Education Units (CEUs) and are a permanent record in the Office of Academic Records. Many of the non-degree educational offerings provide the participant with a Certificate of Completion. A complete listing of UT Martin's non-degree offerings may be obtained from the main campus ECOS office at 731-8817082 or ecos@utm.edu.

Non-degree programs include seminars, workshops, conferences, online courses and special-interest events relevant to the educational interests of the university community. These include business and industry, professional groups and the general public. These programs can be designed to meet specific educational and training needs and can be offered at a time convenient to the consumer. Many non-degree programs are offered on-site to business and industry and are designed to address educational and training needs specific to the individual organization. Programs can be developed to meet certification and in-service requirements of many professional groups.

## Professional Development

Professional Development courses are available to meet yearly in-service requirements in the following fields: Continuing Legal Education (CLE) for attorneys; Professional Development Hours (PDH) for architects, engineers and landscape and interior designers; Continuing Professional Education (CPE) for accountants; and in-service for firefighters, law enforcement and educators.

ECOS offers specialized training for law enforcement through its Institute of Professional Development (IPD). Law enforcement officers nationwide attend these schools and the instruction is provided by law enforcement personnel with expertise in the individual areas. All programs are approved by the Tennessee Peace Officer Standard Training (POST) Commission.

## Programs for Youth

Non-degree courses are available for all ages. Programs for children are developed based on educational need. UT Martin's annual Kid College is for children from five years to teenage. More than 60 classes are offered each year in areas such as science, reading, fine and performing arts and physical activities. UT Martin offers the annual Kid College program at extended sites in Lexington, Paris, Selmer, Ripley 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.

## Honors Programs



The University of Tennessee at Martin

## Honors Programs

Dr. Lionel J. Crews, Director<br>16 McCombs Center

731-881-7436
fax 731-881-1082

## Honors Programs Staff

Dr. Lionel J. Crews, Dr. Amy Park Simmons

## Mission

The mission of the Honors Programs is to provide an environment in which a select group of gifted and motivated students find opportunities for intellectual challenge, creative expression, cultural enrichment and personal growth.

The responsibility for direction of Honors Programs lies with the Honors Director and Honors Council. Current Honors Programs include the University Scholars Program, Honors Seminar Program and departmental honors courses. These programs are described under separate titles below.

## Honors Core Curriculum

All students participating in Honors Programs are required to complete the Honors Core Curriculum. Students must complete Honors 200 in the sophomore year unless the Honors Director grants an exception. It is recommended that students complete all other honors core courses by the end of the sophomore year.

## Courses

## Freshman or Sophomore

One of the following courses:
English $111 \mathrm{H} \quad$ Honors English Composition (3)
English 112H Honors English Composition (3)
Communications 230H Honors Public Speaking (3)
NOTE: The remaining two of the above courses may be used to fulfill the requirements of the larger category below.

## Sophomore

Honors 200
Topics in Honors (3)
Five of the following courses:
Art 110H Honors Understanding Visual Art (3)
Chemistry $122 \mathrm{H} \quad$ Honors General Chemistry (4)
Dance 110H
English 250H
Honors Understanding Dance (3)
English 251H
English 260H
Honors British Literary Tradition (3)
Honors British Literary Tradition (3)

English 261H
Honors American Literary Tradition (3)

Geology 110H
Honors American Literary Tradition (3)
Honors Introduction to Physical Geology (4)

Geology 120H
History 121H
History 122H
Honors 367
Honors 368
Mathematics 210 H
Mathematics 251 H
Music 111H
Music 112H
Physics 212H
Psychology 101H
Theatre 110H

Honors Environmental Geology (4)
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 Understanding Theatre (3)

## University Scholars Program

## General

The University Scholars Program is a sequence of courses and other activities for a selected group of talented and highly motivated students. A major goal is to provide special academic opportunities which will assist these students to perform with distinction in their careers and as citizens. Two themes characterize this program: interdisciplinary inquiry and independent study and research.

## University Scholars Scholarship

Students invited into the University Scholars Program will be assured of a scholarship package totaling \$5,000 for each year of their participation.

## University Scholars Curriculum

The program consists of a special 10-hour curriculum consisting of seminars, reading-discussion groups, specialized studies and a senior scholars project. All courses carry full academic credit.
CoursesCredit Hours
Freshman
University Scholars 118-128 ..... 2
Sophomore
University Scholars 218-228 ..... 2
Junior
University Scholars 318-328 ..... 2
Senior
University Scholars 418 .....  1
University Scholars 488 ..... 3
Total Hours ..... 10

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

## Admission to University Scholars

Students with a minimum 28 ACT and 3.5 GPA are invited to apply for the program as entering freshmen. Approximately 15 entering freshmen are selected largely on the basis of the formal high school record, entrance test scores, grade-point average, personal interviews and written essays. Students already in attendance at the university or transferring from another institution may be invited to apply for the program as sophomores on the basis of their academic record during the freshman year. Excellent grades and high recommendations from faculty members are among the criteria considered. Honors Programs will contact eligible sophomore students. Recommendation for continuation in the program is contingent upon performance.

## How to Apply for the University Scholars Program

Application forms, answers to specific questions and more information about the University Scholars Program and scholarships awarded to all University Scholars students are available from:

Director<br>Honors Programs<br>16 McCombs Center<br>The University of Tennessee at Martin<br>Martin, TN 38238

Applications should be mailed to reach the director by Feb. 1 each year in order to receive first consideration. Students invited to participate in the University Scholars Program receive notice approximately March 1.

## Honors Seminar Program

## General

The Honors Seminar Program brings students and distinguished campus visitors (scholars, leaders, or artists) together in seminars to discuss and examine issues and ideas.

## Chancellor's Award

Students with a minimum 28 ACT and 3.5 GPA are guaranteed this award. They must participate in the Honors Seminar Program and are assured of a scholarship of $\$ 3,000$ per year for four years. Recommendation for continuation of the award into the sophomore, junior and senior years is contingent upon performance in academic courses and in the Honors Seminar Program.

## Honors Seminar Curriculum

Students participating in the Honors Seminar Program enroll in Honors Seminar courses (108, 208, 308, 408) according to their classification and receive one hour of academic credit each year. The courses carry full academic credit.

## Admission to Honors Seminar

A student applies for admission to the Honors Seminar Program by completing the regular applications for admission and financial aid at UT Martin. When the Admissions Office receives the student's ACT score and the transcript confirming the high school grade-point average, the student will be notified of his/her eligibility. When the student agrees to participate in the program, the scholarship is awarded.

More information and answers to specific questions about the Honors Seminar Program are available from: Director, Honors Programs, The University of Tennessee at Martin, Martin, TN 38238.

## Departmental Honors Courses

Honors courses and honors sections of regular courses are offered in several departments. Students are admitted into these courses based upon superior academic records and/or placement examinations. Persons interested in the honors courses listed below, and described in detail in the Course Descriptions section of this catalog, should direct their inquiries to the several departments.

Art 110H Honors Understanding Visual Art (3)
Chemistry 122H Honors General Chemistry II (4)
Communications 230H Honors Public Speaking (3)
Dance 110 H Honors Understanding Dance (3)
English 111H-112H Honors English Composition (3, 3)
English 250H-251H Honors British Literary Tradition (3, 3)
English 260H-261H Honors American Literary Tradition (3, 3)
Geology 110H Honors Introduction to Physical Geology (4)
Geology 120H Honors Environmental Geology (4)
History $121 \mathrm{H}-122 \mathrm{H}$ Honors Development of World Civilization $(3,3)$
Mathematics 210H Honors Elementary Statistics and Probability (3)
Mathematics 251 H Honors Calculus I (4)
Physics 212H Honors College Physics (4)
Music 111H Honors Masterpieces of Music (3)
Music 112H Honors Music in Our Time (3)
Psychology 101H Honors Introduction to Psychology (3, 3)
Theatre 110 H Honors Understanding Theatre (3)

## Courses Offered by Honors Programs

Honors 200 Topics in Honors (F, Sp)
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.

## 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 universitywide 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 |
| :--- | :--- |
| Accounting ............................................ X |  |$\quad$| SUBJECT AREA |
| :--- |
| Graphic Design.......................................... X |

A student seeking any bachelor's degree at the University of Tennessee at Martin must satisfy the universitywide 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 ..... 50
Complete requirements for a major (see Major section which follows)
Complete requirements for a minor (see Minor section which follows)
General Requirements
I. Communication RequirementA. English 100-110 or 111, and 112 (or equivalent honors courses)B. Communications 230 (or equivalent honors course)
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 coursesnumbered 300 or above may be substituted for English courses.)
History: History 121-122, or 201-202 (or equivalent honors courses)
Honors 111
Philosophy and Religious Studies: Philosophy 110-120 or Religious Studies 201 or 301
B. Complete one course from each of two different areas:
Art History 210, 211
Dance 110
Music 111, 112
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
Geology 110-120Physics 101-102, or 211-212, or 220-221
V. Social Science RequirementOutside 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 112
Political Science (American Government) 210-220
Psychology 101 (or equivalent honors courses)
Sociology 101, 300
Sociology 201-202

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

## 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 ........................................................... 50
Complete 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 110 or 111, and 112 (or equivalent honors courses)
B. Communications 230

## 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 111
Philosophy 110-120
B. Complete one course selected from:

Art 110
Art History 210 or 211
Dance 110
Music 111 or 112
Theatre 110 or 111

## IV. Laboratory Science Requirement

Complete two of the following sequences outside the major:
Astronomy 201-202
Biology 110-120 or 130-140
Chemistry 121-122
Geology 110-120
Physics 211-212 or Physics 220-221

## V. Social Science Requirement

Complete two courses from different disciplines outside the major:
Economics 201, 202
Geography 151, 152, 202
Honors 112
Political Science (American Government) 210
Psychology 101
Sociology 201
VI. Mathematics Requirement

Complete 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
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 African-American Studies Minor (2030) (18 credit hours) consists of required courses: Philosophy 130, History 434, and History 435, plus nine hours to be selected from the following menu: English 345; History 303, 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 Dr. Henry Parker or Dr. David Barber.

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 Women's Studies Minor (2050) consists of Interdisciplinary Studies 201 plus 15 hours selected from the following courses (excluding any courses used to satisfy general education or major field requirements) Sociology 341, Sociology 495, Art History 350, Child and Family Studies 100, Child \& Family Studies 303, Communications 231, English 350, English 495 (when topic offered is on women's literature and issues), History 303, History 480 (when topic offered is on gender issues in history), Psychology 370, Sociology 308, Social Work 220, Fashion Merchandising 300. No more than six hours may be taken in a particular discipline and a student must complete at least 12 hours of upper-division credits from these courses.

## 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 four majors: 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 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 four baccalaureate degree programs in 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 an undergraduate program with fourteen concentrations/options in agriculture, three concentrations in geoscience, and five concentrations/ options in natural resources management. Pre-professional programs are offered in agricultural engineering, forestry and veterinary medicine. Complete information about these programs 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 three areas of concentration. 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. Students should apply for financial aid each year by completing forms from the Office of Financial Aid and Scholarships and the appropriate department in the College of Agriculture and Applied Sciences. All forms must be in the two offices by March 1 of each year for the student to be considered in the first round of recipient selection. The recipients will be notified by the Office of Financial Aid and Scholarships in May or early summer.

Application forms may be obtained from:

## Office of Financial Aid and Scholarships

205 Administration Building
The University of Tennessee at Martin
Martin, TN 38238
Phone: 731-881-7040
1-800-829-UTM1

## Pre-Professional

## Curricula in Agriculture

The University of Tennessee at Martin offers the following pre-professional curricula in agriculture:

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Biosystems Engineering (1131)
Forestry (1133)
Veterinary Medicine (1135)
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After completing two or three years of basic studies at UT Martin, students interested in one of these curricula may transfer to other universities offering advanced study leading to a degree in their chosen area of interest.

## Biosystems Engineering (1136)

The Department of Agriculture, Geosciences, and Natural Resources, in cooperation with the College of Engineering and Natural Sciences, offers a two-year program that is basic to a degree in Biosystems Engineering. After completion of freshman and sophomore years at UT Martin, students may transfer to The University of Tennessee, Knoxville, or another university to complete their junior and senior years.
Biosystems Engineering is the profession that provides engineering know-how for the development of agricultural and biological systems. Employment opportunities include: manufacturers of agricultural and industrial machinery; machinery sales and service; food processing and distribution industries; soil and water conservation engineering; and other related industries.
Freshman Year Hours
Chemistry 121-122 ..... 8
Engineering 101 ..... 4
Engineering 121 ..... 3
English 111-112 ..... 6
Mathematics 251-252 ..... 8
Social Science/Humanities elective ..... 3
Total Hours ..... 32
Sophomore Year Hours
Engineering 241 ..... 3
Microbiology 251 ..... 4
Mathematics 310, 320, 330 ..... 10
Physics 220-221 ..... 8
Soil Science 210 ..... 4
Social Science/Humanities elective ..... 3
Total Hours ..... 32

## Forestry (1133)

Forestry is the science, art and practice of managing natural resources of wood, water, forage and environmental amenities that occur in association with forest lands. Students interested in preparing for careers in forestry
may complete two years of the curriculum at UT Martin. Upon completion of the program outlined below, students may transfer with junior standing to departments of forestry at other universities.

> Freshman Year Hours Biology 130, 140 ............................................................................ 8

Chemistry 111 .............................................................................. 4
English 111, 112 ............................................................................ 6
Fine Arts Elective ........................................................................... 3
Humanities Elective ........................................................................ 3
Mathematics 140, 160 .................................................................... 6
Natural Resources Management100................................................. 3
Total Hours........................................................................... 33

## Sophomore Year Hours

Communications 230...................................................................... 3
Economics 202.............................................................................. 3
Humanities Elective ........................................................................ 6
Mathematics 210 ............................................................................ 3
Natural Resource Management 210 ................................................ 3
Wildlife Biology 250 ....................................................................... 3
Soil Science 210 ............................................................................ 4
Social and Behavioral Sciences Elective .......................................... 6
Total Hours .......................................................................... 31

## Veterinary Medicine (1135)

Students interested in pursuing studies leading to the Doctor of Veterinary Medicine (DVM) degree should complete the following program if not planning to pursue the four-year degree plan in Agriculture (Animal Science Concentration, Science option) from UT Martin. This is a three-year curriculum designed to qualify students for admission to the College of Veterinary Medicine at The University of Tennessee. Students considering application to other colleges of veterinary medicine should consult those colleges for their residency and admission requirements.

## Veterinary Medicine Pre-Professional Program Option (105 hours)

38 hours of General Education Requirements, 29 hours of Veterinary Medicine Requirements, 38 hours of Agriculture/Animal Science or Natural Resources Management/Wildlife and Fisheries Biology Requirements 105 hours.

## General Education Requirements (38 hours)

For Animal Science Concentration, Science Option, follow general education requirements for Bachelor of Science in Agriculture.
For Wildlife and Fisheries Biology Concentration, Wildlife Science Option, follow general education requirements for Bachelor of Science in Natural Resources Management.
AND
Veterinary Medicine Requirements (29 hours)
Biology 337 or 436................................................................................................................... 3
Biochemistry 411, 412 ............................................................................................................... 6
Chemistry 122, 341, 342 .......................................................................................................... 12
Physics 211, 212 ....................................................................................................................... 8
AND
Agriculture/Animal Sci/Sci Option (1115) Requirements (38 hours)
Agriculture 390, 441 ..... 5
Agricultural Economics 110 ..... 3
Agricultural Engineering Technology 110 ..... 3
Animal Science 110, 119, 350 ..... 7
Animal Science 360 or Biology 336 ..... 3
Chemistry 121 ..... 4
Communication 200, 210; English 305, 310, 315, 325 ..... 3
Mathematics 160 or 210 ..... 3
Plant Science 110 ..... 3
Soil Science 210 ..... 4
OR
Natural Resources Management/Wildlife Science Option (1156) Requirements (38 Hours)
Agricultural Engineering Technology 220 ..... 3
Biology 331, 336 ..... 6
Botany 303 ..... 3
Chemistry 121 ..... 4
Natural Resources Management 210, 390 ..... 5
Plant Science 341 or Natural Resources Management 410 ..... 3
Soil Science 210 ..... 4
Wildlife Biology 250 ..... 3
Zoology 319, 320, 321 ..... 3
Zoology 441, 442 ..... 4Students who complete this curricula may obtain the Bachelor of Science in Agriculture (Animal ScienceConcentration-Science Option) or the Bachelor of Science in Natural Resources Management (Wildlife BiologyConcentration-Wildlife Science Option) after satisfactory completion of the first year of study in The University ofTennessee College of Veterinary Medicine providing the following provisions are met:

1. the first year of academic study must be completed in the College of Veterinary Medicine with a cumulative grade point average of at least 2.00 .
2. appropriate courses from this year of study will be accepted toward fulfillment of the minimum 120 semester hour graduation requirement.
3. students must have met all other graduation requirements of the UT Martin College of Agriculture and Applied Sciences.
4. students who wish to pursue this option must assume responsibility for completing all graduation requirements and initiating a formal request for granting of the degree.
5. students should check with the Admissions Office of The University of Tennessee College of Veterinary Medicine to insure that courses completed under this option will meet the current admission requirements for the class of which they are submitting their application.

# Department of Agriculture, Geosciences, and Natural Resources 

Dr. Joey E. Mehlhorn, Interim Chair<br>257 Brehm Hall<br>731-881-7262<br>fax 731-881-7968

Faculty

James N. Butler, Jr., Erica D. Carroll, Barbara A. Darroch, Craig S. Darroch, Thomas A. DePriest, Jason D. Duggin, Stan P. Dunagan, Paula M. Gale, Eleanor E. Gardner, Michael A. Gibson, Jessica I. Hill, Benjamin P. Hooks, Joey E. Mehlhorn, Sandy A. Mehlhorn, Scott D. Parrott, Eric C. Pelren, Bradley A. Ray, Jason F. Roberts, Jefferson S. Rogers, Robert M. Simpson, Philip L. Smartt, Ashley Thompson, F. Wesley Totten, Danny R. Walker, Eric R. Walker, Tara L. Woods, Todd A. Winters<br>Teaching Center Coordinator: Charles R. Rowlett

## 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 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 Extended Campus and Online Studies 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 partici-
pate 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 Agriculture, Geosciences, or Natural Resources Management, with multiple areas of concentration and options within each degree program. Five concentrations are currently offered in Agriculture: agricultural business, agricultural science, agricultural engineering technology, animal science, and plant and soil science. Three concentrations are offered in Geosciences: geology, geography, and meteorology. Four concentrations are offered in Natural Resources Management: environmental management, park and recreation administration, soil and water conservation, and wildlife and fisheries biology. In addition to the degree programs mentioned above, UT Martin's Department of Agriculture, Geosciences, and Natural Resources also offers pre-professional programs in biosystems engineering, forestry, and veterinary medicine. 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 agriculture, in geosciences and in 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 Teacher Education.

## Bachelor of Science in Agriculture (with a major in General Agriculture)

## Concentrations

Agricultural Business (Agribusiness, and Farm and Ranch Management Options) $(1111,1126)$
Agricultural Engineering Technology (1124)
Agricultural Science (Agricultural Production, Professional Education, Agriculture Communications, and Biofuels Options) (1112, 1113, 1120, 1127)
Animal Science (Production and Management, Business, Science, Veterinary Health Technology, and Veterinary Science Options) ( $1119,1117,1115,1129,1128)$
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 and Recreation Administration (1151)
Soil and Water Conservation (1152)
Wildlife and Fisheries Biology (Wildlife Science \& Fisheries Science Options) $(1156,1155)$

The bachelor of science in agriculture degree includes 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 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)

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 geography and meteorology; a minor is optional for the geology concentration. The choice of a minor should be made in consultation with an adviser in the concentration. For the meteorology concentration, a minor in mathematics, statistics, or physics is recommended.

Geography Concentration (1161). The geography concentration is designed to provide students with a comprehensive training in geographic regions, processes and techniques. In addition to the basic characteristics of the world's regions, students learn about the dynamic processes shaping the earth's natural and cultural environments. Geography majors develop basic skills in research, cartography, remote sensing and geographic information systems (GIS). Potential career fields include: economic development, industrial site selection, transportation systems management and design, land management, publishing, education, cartography, service in state and local government, foreign service and many other professional areas reflecting the increasing uses for geographic analysis throughout the society. Students interested in attending graduate school will also be well prepared for continued study and research. Geography 151 and 152 are prerequisites to the concentration which consists of 32 hours: Geography $201 ; 202 ; 210 ; 305 ; 365,380$, or $381 ; 461$, 462 , or $472 ; 310$ or 471 ; and 12 additional hours of upper-division geography courses. A minor is required.

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. academia.

Geology 110 and Geology 120 are prerequisites to the concentration which consists of: Geology 210, 320, $330,340,350,360,370,400$ and 450 and a minimum of seven additional elective hours of upper-division geology courses. 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 geosciences. Successful students will be well positioned to enter graduate school to complete their professional meteorology training or to follow careers in the geosciences in which foundational knowledge in weather and climate is required. Potential career fields include forecasters, broadcast meteorologists, research meteorologists and climatologists, and meteorologists in the armed forces. One can be employed as a consultant in forensics, agriculture, energy, manufacturing, commodities markets, environmental planning, emergency preparedness, transportation, and teaching. Potential employers include private industry and consulting services, academia, and the federal government including NOAA, the FAA, and the EPA.
Geography 151 and Geography 201 are prerequisites to the concentration which consists of: Geography 210, 305,310 or $364,320,340,380,471,472$, any two courses from 420, 430, 440, and 460, and 9 additional hours of upper-division Geography electives. A minor in required. A math, statistics, or physics minor is recommended.

## Bachelor of Science in Agriculture

I. General Education Requirements (38-39 hours)

Biological and Physical Systems. ..... 8
Two courses from: Astronomy 201, 202; Biology 110, 120, 130, 140; Chemistry 111, 112, 121, 122; Geology 110, 120; Physics 101, 102, 211, 212, 220, 221; Zoology 200, 201, 251 Communication ..... 9-10
Communications 230; English 110 (4) or 111 (3), 112 Fine Arts (Aesthetics) ..... 3
One course from: Art 110; Art History 210, 211; Dance 110; Music 111, 112; Theatre 110, 111 Humanities ..... 9
Three courses from: English 250, 251, 260, 261, 270, or 271; French 250; German 250;
History 121, 122, 201, 202; Philosophy 110, 120, 130, 160; Spanish 250 Mathematics ..... 3
One course from Mathematics 140, 160, 185, 251
Social and Behavioral Sciences ..... 6
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 Business Concentration

## Agribusiness Option (1111)

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* (82 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 420 or Agricultural Economics 444; Agricultural Economics 440 ..... 6
Agricultural Economics 250; 325; 335; 364; 390; 410; 415; 465; 445; 471; 475 or 480; 485 ..... 36
Agriculture/Natural Resources Management Electives ..... 6
Business Electives chosen from Business Law 201, Finance 301, Economics 311, Economics 312, Management 300, and Marketing 301 ..... 9
Economics 201, 202 ..... 6
Mathematics 160, 210 ..... 6
General Electives. ..... 4*At least 30 hours of concentration requirements must be taken in upper-division courses.

## Farm and Ranch Management Option (1126)

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. 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)

Agricultural Economics 250; 271, 325, 335, 364, 371, 372, 410; 415, 445, 465.................... 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
*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.

## Agricultural Engineering Technology Concentration (1124)

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 410 ..... 3
Agricultural Engineering Technology ..... 18
220, 350, 382, 420, 470 and 482
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
Engineering 100 ..... 3
Engineering 101 ..... 3
English 325 or Information Systems 351 ..... 3
Mathematics 170; 160 or 251 ..... 6
Soil Science Elective ..... 3
Choose from any 300 or 400 level Soil Science course Agriculture and Natural Resource Management Electives. ..... 11
Adviser approved courses from Agriculture and Natural Resources General Electives ..... 6Adviser approved courses from Biology, Business, Chemistry, Engineering, Food Science,Geography, Geology, Mathematics, or Physics

## 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.

## Agricultural 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 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.

## Biofuels Option (1127)

This agricultural science option provides broad-based training in a variety of agriculture fields that relate to the production and utilization of transportation fuels derived from agricultural products and biomass. The curriculum is designed to prepare students for employment in the biofuels industry, including ethanol and biodiesel production facilities, agricultural production operations focused on producing biomass crops, or agricultural businesses related to biofuel production and marketing. Students will receive a background in plant science topics dealing with biomass production, agricultural engineering related to biofuels production and issues in agricultural economics that relate to the biofuels industry.
CONCENTRATION REQUIREMENTS (64 hours)Agricultural Science Core Courses (4 hours)Science Elective4
(Biology 130 and 140, and Chemistry 111 or 121 are prerequisites for required courses inthis concentration and can be taken to fulfill Biological and Physical Systems General Electivesrequirements and these science electives.)
PLUSAgriculture Communications Option (78 hours)Agriculture 450, 4756
Agriculture core courses: Agriculture 390, Agricultural Economics 110, Agricultural Engineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210 ..... 18
Upper Division Agricultural Engineering Technology Elective. ..... 3
Animal Science 119 ..... 1
Animal Science 240 ..... 3
Animal Science 380 ..... 3
Communications 200 or 210, 250, 320, 322 and six hours from two 3-hour upper-division Communications courses for which student has met the prerequisites. ..... 18
Plant Science 119 .....  1
Plant Science 242 ..... 3
English 325 ..... 3
Agriculture/Natural Resources Management Electives ..... 12
General Electives ..... 7
OR
Production Option (78 hours)
Agriculture9Choose 9 hours from Agriculture 390, Agricultural Economics 110, AgriculturalEngineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210
Agriculture 420, 441 ..... 6
Agricultural Engineering Technology 220 ..... 3
Upper Division Agricultural Engineering Technology Elective ..... 3
Agriculture/Natural Resources Management Electives ..... 15
Animal Science 119, 350 ..... 4
Animal Science 360 or 380 ..... 3
Agricultural Economics, Animal Science, Plant Science, or Soil Science upper-division Electives ..... 15
Chemistry 111 or 121; 112 ..... 8
General Elective ..... 2
Mathematics 210 ..... 3
Plant Science 119, 322, 333 ..... 7
Zoology 325 ..... 4
OR
Professional Education Option (78 hours)
Agriculture ..... 18
Agriculture 390, Agricultural Economics 110, Agricultural Engineering Technology 110,Animal Science 110, Plant Science 110, Soil Science 210
Agriculture 450 ..... 3
Agricultural Education 310*, 404*, 405* ..... 15
Agricultural Education 470 ..... 3
Agricultural Engineering Technology 119, 210, 220, 370 ..... 10
Animal Science 119, 240 ..... 4
English Literature elective ..... 3
English 250, 251, 260, 261, 270, 271
Human Learning 311, 325 ..... 6
Plant Science 119, 242 ..... 4
Psychology 101 ..... 3
Special Education 300 ..... 3
Teacher Education 211*, 302*, 303*, 305* ..... 9
Upper Division Electives in Agriculture, Geosciences, or Natural Resources Management. ..... 3
*Admission to Teacher Education required. See section on "Requirements for Recommendation for Licensure."
OR
Biofuels Option (78 hours)
Agriculture ..... 18
Agriculture 390, Agricultural Economics 110, Agricultural Engineering Technology 110, Animal Science 110, Plant Science 110, Soil Science 210
Agriculture 420 ..... 3
Agricultural Economics 325, 364, 475 ..... 9
Agricultural Engineering Technology 210, 350, 460 ..... 9
Animal Science 350 ..... 3
Economics 202 ..... 3
Mathematics 210 ..... 3
Microbiology 251 or 310 ..... 4
Natural Resources Management 101 or 210 ..... 3
Physics 101, 150 or 211 ..... 4
Plant Science 341, 410, 433, 442 ..... 12
Science Upper-division Electives ..... 7

## 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 five options available.

The production and management option (1119) is designed for students most interested in a terminal bachelor of science degree. The science option (1115) better prepares students for post-baccalaureate training in graduate or professional schools (including veterinary medicine). The business option (1117) prepares the student for entrance into the master of business administration degree. The veterinary science option (1128) is designed for students who wish to receive a bachelor of science degree in animal science and meet the requirements to apply to The University of Tennessee College of Veterinary Medicine. The veterinary health technology option (1129) is designed to prepare students for a career in veterinary health technology. The college is pursuing accreditation by the AVMA Committee on Veterinary Technician Education and Activities (CVTEA). The option requirements are generally started in the junior year to allow individual flexibility in selecting the degree track best suited for each individual student.

Students may also complete requirements for a minor in business administration, biology or chemistry by completing course requirements as outlined by each of these respective departments.

The animal science concentration is comprehensive and includes training in animal nutrition, physiology, breeding and reproduction, selection and evaluation, management, marketing, animal health and welfare and biotechnology. Training is provided through classroom instruction, hands-on experience in lab and field production facilities through the UT Martin Agriculture and Natural Resources Field Teaching/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. New equine facilities, recently renovated beef, swine and sheep units give students interested in production and management the opportunity to acquire skills associated with modern production practices. The West Tennessee Animal Disease Diagnostic Laboratory opened in 2008.

Excellent employment opportunities exist in career fields that include: private farming or ranching and commercial farm or ranch management and teaching; research and extension opportunities in both federal and state agencies; and government including the United States Department of Agriculture and University of Tennessee Agricultural Extension Service. Opportunities also exist in private industry in areas of production, technical services, management and marketing for commodity groups and feed, equipment manufacturing, pharmaceutical and food processing corporations; industry and private consulting; environmental and regulatory monitoring; and agricultural finance and communication. Many animal science graduates may continue their education with graduate and professional training in areas such as law, medicine, veterinary medicine, pharmacy, dentistry, business administration and advanced degrees leading to careers in teaching, research and extension.

## CONCENTRATION REQUIREMENTS (64-86 Hours)

Animal Science Concentration Core Courses (21-29 hours)
Animal Science 350, 371, 372 .
Biological and Physical Sciences.............................................................................................8-16
Biology 130 and 140 and a chemistry sequence of Chemistry 111 or 121 and Chemistry 112 or 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 Science Option and Veterinary Science Option will require students to take Chemistry 121 and 122 (instead of Chemistry 111 and 112).
Mathematics 210
PLUS
Production and Management 0ption (61 hours)Agriculture Core Requirements.18
Animal Science 110, Plant Science 110, Soil Science 210, Agricultural Economics 110, Agricultural Engineering Technology 110, Agriculoture 390 Agriculture/Natural Resources Management Electives ..... 6
Any course offering in Agriculture and Natural Resources Management excluding Animal Science courses
Animal Science Requirements. ..... 11
Animal Science 119, 240, 330, 351, 360
Animal Science General Electives ..... 7
Animal Science Production Electives ..... 6
Animal Science 380, 410, 420, 430, 440, or Wildlife Biology 405
English or Communication Speaking or Writing Elective ..... 3
Communications 200, 210; English 305, 310, 315, or 325
Science Requirements ..... 4
Microbiology 251
Plant Science and Soil Science upper-division Electives. ..... 6
OR
Science Option (61 hours)
Agriculture Core Requirements ..... 13
Animal Science 110, Plant Science 110, Soil Science 210, and 3 hours fromAgricultural Economics 110 or Agricultural Engineering Technology 110Animal Science Requirements.14
Animal Science 119, 320, 330, 351, and either 360 or Biology 336
Choose from Animal Science 410, 420, 430, 440, or Wildlife Biology 4053-4
Choose from Animal Science 210, 211, 230, 231, 240, 260, 270, or Fellows ResearchProgram 201, 202
English or Communication Speaking or Writing Elective ..... 3
Communications 200, 210; English 305, 310, 315, or 325
Science Requirements ..... 11
Chemistry 310 (and 319) or 341; Microbiology 251; Agriculture 441
Science Upper-division Electives ..... 13-14Courses chosen from Biochemistry, Biology, Chemistry, Mathematics, Physics, Microbiology,Zoology, or Veterinary Health Technology 300, 350, 400, orFellows Research Program 301, 401, 402
Agriculture and Natural Resources Management Science Electives. ..... 3
Must include one 3-hour course selected from Agricultural Engineering Technology,Plant Science, or Wildlife Biology
OR
Business 0ption (61 hours)
Agriculture Core Requirements ..... 18
Animal Science 110, Plant Science 110, Soil Science 210, Agricultural Economics 110,Agricultural Engineering Technology 110, and Agriculture 390Animal Science Requirements.16
Animal Science 119, 240, 330, 360, 380, and one course from 410, 420, 430, 440, orWildlife Biology 405
English or Communication Speaking or Writing Elective ..... 3
Communications 200, 210; English 305, 310, 315, or 325
Microbiology 251, 310, or 311 ..... 4
Business Electives ..... 18
Accounting 201* and 202* or Accounting 300;
Business Law 201* or Agricultural Economics 375;Economics 201* and 202*;Finance 301* or Agricultural Economics 465;Management 300* or Agricultural Economics 471;Marketing 301* or Agricultural Economics 364General Electives2
OR
Veterinary Health Technology Option (61 hours)
Agriculture Core Requirements ..... 7
Agricultural Economics 110, Animal Science 110, Animal Science 119 Animal Science ..... 17
Animal Science 210, 230, 231, 260 or 270, 320, 211 or 351, Animal Science 360 or Biology 336Microbiology 2514
Veterinary Health Technology ..... 33
Veterinary Health Technology 200, 300, 310, 320, 330, 340, 350, 400, 410, 420, 490
OR
Veterinary Science 0ption (61 hours)
Agriculture Core Requirements ..... 10
Animal Science 110, Animal Science 119, Plant Science 110, Agricultural Economics 110 Physics 211, 212 ..... 8
Biology Requirements ..... 7
Biology 337; Microbiology 251
Chemistry Requirements ..... 14
Chemistry 341, 342; Biochemistry 411, 412
Veterinary Science Electives ..... 5
Animal Science 210, 211, 230, 231, 240, 260, 270, 330, or 351
Veterinary Science 300-level ..... 8
Animal Science 320, Veterinary Health Technology 300, and either Animal Science 360or Biology 336
Veterinary Science upper-division ..... 3
Choose one course from Animal Science 380, 410, 420, 430, 440, 470, or Wildlife Biology 405Science Electives.6
Upper-division Agricultural Economics, Animal Science, Biology, Chemistry, Fellows Research Pro-gram, Microbiology, Plant Science, Veterinary Health Technology, Zoology*Students completing these courses will complete requirements equivalent to a minor in BusinessAdministration.

## 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)

American culture is experiencing rapid change and most Americans have more leisure time and discretionary income than ever before. Consequently a growing number of people are interested in playing golf. This has resulted in a sharp demand for more golf courses, in both urban and rural settings. New golf courses are rapidly being built and this has resulted in a corresponding increase in golf course management positions. The turf industry is also rapidly expanding as new golf courses are being built and established ones are entertaining more golfers and need to be maintained. In addition, a tremendous demand for turfgrass has resulted from new road construction. New building construction, along with an increased emphasis on using turfgrass as a fast efficient way to stabilize soil and beautify landscapes, has increased turfgrass demand. Playing fields for football, soccer, baseball and softball also use turfgrass, as well as playgrounds and parks.
CONCENTRATION REQUIREMENTS (82 Hours)General Plant and Soil Science Requirements (48 hours)
Agricultural Engineering Technology 110, Plant Science 110, Soil Science 210 ..... 10
Agricultural Engineering Technology 119, 220 ..... 4
Biological and Physical Sciences ..... 16
Biology 130 and 140 , and a Chemistry sequence of 111 or 121 and 112 or 122 are required forall Plant and Soil Science options although 8 hours may have already been applied to the Biologicaland Physical Sciences General Education requirement.)
Botany 421 ..... 3
Economics 201 and 202 (meets Social and Behavioral Science General Education) ..... 6
English 325 or Communications 356 ..... 3
Mathematics 210 ..... 3
Plant Science 119, 322, 333, 431 ..... 10
Soil Science 412 ..... 3
Zoology 325 ..... 4
PLUS
Crop and Soil Management Option (34 hours)
Agriculture 270 ..... 3
Agricultural Engineering Technology 382, 420 ..... 6
Plant Science 205, 234, 420, 422, 433 ..... 16
Upper-division Science Electives ..... 9
Choose three classes from Agriculture 441, Botany 303, Plant Science 341, or Plant Science 342
OR
Golf Course and Landscape Management Option (34 hours)
Agricultural Engineering Technology 270, 420 ..... 6
Plant Science 234, 242, 321, 363, 420, 462, 471 ..... 22
Upper-division Science Elective ..... 3Choose from Agriculture 441, Botany 303, Plant Science 341, or Plant Science 342Golf Course and Landscape Management Elective
Choose one class from Agricultural Economics 271, Computer Science 201, Management 300,Management 307, Spanish 111, or Spanish 115
Bachelor of Science in Natural Resources Management3
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
(one course must be in Philosophy 110, 120, 130, or 160)Mathematics 140,160 , or 1853
Wildlife and Fisheries students must take Mathematics 160
Social and Behavioral Sciences ..... 6
Choose from approved General Education listing(one course must be in Economics 100, 201 or 202)Park and Recreation Administration students must take Natural Resources Management 101
II. Natural Resources Management Common Course Requirements (26 hours)
Agricultural Engineering Technology 220 ..... 3
Agriculture 270 or Geography 270. ..... 3
Chemistry 111 ..... 4
Natural Resources Management 100, 210 ..... 6
Soil Science 210 ..... 4
Plant Elective ..... 3
Choose from Plant Science 333, 341, 410, or 422 (Park and Recreation Administration, andWildlife and Fisheries Biology Wildlife Science Option must take Plant Science 341)
Water Elective3
Choose from Natural Resources Management 225, 315, Soil Science 430, Geology 445, orBiology 418
III. Concentration Requirements (52 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
Geology 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 NaturalResources; Biological Sciences; Chemistry and Physics; or Engineering (Natural ResourcesManagement 420 recommended)

## Park and Recreation 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 recreation administration.
Flexibility is provided through restricted elective hours, allowing credit hours to be taken in a more specialized area of the park and recreation 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 or Accounting 201 ..... 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
Geology 110 ..... 4
History and Geosciences Electives ..... 6
Choose from any upper-division History, Geography, or Geology
Natural Resource Management 200, 390, 410, 440 ..... 11
Park \& Recreation Administration 110, 200, 300, 400, 410, 430 ..... 18
Plant Science 321 ..... 3
Restricted Electives .....  2Selected with the assistance of the student's adviser based on the student's career goals.
Soil and Water Conservation Concentration (1152)

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
Geology 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; BiologicalSciences; 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 336 ..... 3
Chemistry 112 ..... 4
Mathematics 210 ..... 3
Natural Resources Management 430 . ..... 3
Natural Resources Management 225, 315, Soil Science 315, or 430 ..... 3
Wildlife Biology 240, 250, 330, 450 ..... 12
Zoology 441, 442 ..... 4
PLUS
Wildlife Science Option (24 Hours)
Botany 303 ..... 3
Botany 431 or Plant Science $410^{*}$ ..... 3
Zoology 319, 320, 321, or 322 ..... 9
Wildlife Policy Elective ..... 3
Choose from Wildlife Biology 340 or Natural Resources Management 350
General Wildlife Elective ..... 6
Choose from Biology 444 or Wildlife Biology 311, 375, 420, or 441
*Note: Plant Science 410 may be only partially accepted for Wildlife Society Certification.
OR
Fisheries Science Option (24 Hours)
Biology 418 ..... 3
Geology 110 ..... 4
Natural Resources Management 225, 315, or Wildlife Biology 405 ..... 6
Wildlife Biology 300 ..... 3
Zoology 319, 321, or 322 ..... 3
Zoology 320 ..... 3
General Elective ..... 2
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, Parks and Recreation Administration 401-402, Soil Science 401-402, 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.
Note: Inclusion in the AGN-FRP is not affiliated with other university scholarships or honors programs. Check with the coordinator of respective programs to determine applicability of AGN-FRP courses toward other university relation scholarship/program requirements.

## 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. Agricultural Engineering Technology 482 (682) Principles of GIS and GPS for Agricultural and Natural Resources Management (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 that are used to satisfy certification requirements.

## 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, the Department of Engineering and the Department of Geology, Geography, and Physics 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

## Required

Engineering 350
Agricultural Engineering Technology 354
Agricultural Engineering Technology 454
Agricultural Engineering Technology 456
Agricultural Engineering Technology 458
(Minimum of 18 hours required)
Principles of Land Surveying and Geomatics (3)
Advanced Land Surveying and Geomatics (3)
Land Surveying with GPS (3)
Boundary Control and Legal Principles (3)
Subdivision Site Planning and Development (3)

## Electives

Engineering 352
Engineering 490
Geography 471

## List II Courses

## Required

Agricultural Engineering Technology 220

## Electives

Agricultural Engineering Technology 482
Engineering 353
Geography 310
Geography 364
Geography 410
Plant Science 341
(Choose minimum of one)
Transportation Engineering (3)
Special Topics - Surveying Projects (3)
Cartography (3)
(Minimum of six hours required)
Surveying and Soil and Water Engineering (3)
(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.

## 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 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 agriculture, geosciences, and in park and recreation 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.

## 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 and Recreation 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

Geography (M-1161).
Geography 151 and 152 are prerequisites to a geography minor which consists of the following: Geography 201 or 202 , and nine credit hours of upper-division geography courses.

Geology (M-1162).
Geology 110 and 120 are prerequisites to a geology minor which consists of a minimum of 15 hours of up-per- division geology.
Meteorology (M-1163).
Geography 201 and 305 are prerequisites to a meteorology minor which consists of a minimum of 15 hours upper- division geography courses which must include Geography 320, Geography 340, and Geography 472.

## Park and Recreation Administration

The minor in park and recreation administration consists of Park and Recreation Administration 100, 110, 200 and 12 hours of upper-division park and recreation administration courses selected from Park and Recreation Administration 300, 310, 321, 400, 430 and 440. Two hours from courses designated as Natural Resources Management 200 or 301 and 302 may be applied toward the upper-division park and recreation administration requirements.

## 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 ( $\operatorname{dog}$ 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 inclement-weather 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 "x48" digitizer, a large-format 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

Over 50 scholarships are available strictly to students in the Department of Agriculture, Geosciences, and Natural Resources. An application form separate from the University scholarship application is necessary to qualify (applications are due on February 1 each year for the following academic year).

## Student Organizations

Agriculture, geosciences, and natural resources management students are active in several organizations which include the Student Mechanization Branch of the ASABE, Agronomy Club, Alpha Gamma Rho, Block and Bridle Club, Collegiate FFA, Collegiate 4-H, Eta Alpha (UT Martin chapter of Sigma Gamma Epsilon, the Earth Sciences National Honor Society), GeoClub, National Agribusiness Marketing Association, Park and Recreation Adventure Club, Equestrian Team (Athletics), Rodeo Team (Athletics), UT Martin chapter of the Wildlife Society, Student Cattlemen's Association, UT Martin Turf Club, Sigma Alpha and UT Martin Pre-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 and recreation 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 and recreation 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 Quiz Bowl, 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)
Agricultural Economics 250 Agricultural Economics (as needed)
Agricultural Economics 271 Farm Management (Sp-odd)
Agricultural Economics 301 Special Problems [topic title] (F)
Agricultural Economics 302 Special Problems [topic title] (Sp, Su)
Agricultural Economics 325 Agriculture and Natural Resource Policy (Sp)
Agricultural Economics 335 International Agricultural Trade (F)
Agricultural Economics 350 Agricultural Marketing in North America (as needed)
Agricultural Economics 364 Agricultural Marketing (F)
Agricultural Economics 371 Advanced Farm and Ranch Management (Sp)
Agricultural Economics 372 Advanced Farm and Ranch Management Lab (Sp)
Agricultural Economics 375 Environmental and Agricultural Law (F)
Agricultural Economics 385 Agribusiness Market Planning (F)
Agricultural Economics 386 Advanced Agribusiness Market Planning (Sp)
Agricultural Economics 390 Rural Economics Development (F-even)
Agricultural Economics 395 Farm Real Estate Appraisal (Sp-odd)
Agricultural Economics 401 (601) Research Participation (F, Su)
Agricultural Economics 402 (602) Research Participation (Sp, Su)
Agricultural Economics 410 Spreadsheet Analysis in Agribusiness (as needed)
Agricultural Economics 415 Agricultural Futures and Options (F-odd)
Agricultural Economics 440 Econometrics Applications in Agribusiness (Sp)
Agricultural Economics 444 Practicum in Agribusiness (as needed)
Agricultural Economics 445 (645) Natural Resources Economics (Sp)
Agricultural Economics 465 (665) Agricultural Finance (Sp)
Agricultural Economics 471 (671) Agricultural Management (Sp)
Agricultural Economics 475 Managerial Strategies for Agribusiness (Sp-odd)
Agricultural Economics 480 Agriculture and Applied Project Management (Sp-odd)

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 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 (Sp)
Agricultural Education 310 Integrated Agricultural and Agriscience Education Studies ( $\mathrm{F}, \mathrm{Sp}$ )
Agricultural Education 404 Student Teaching Grades 7-8 (F, Sp)
Agricultural Education 405 Student Teaching Grades 9-12 (F, Sp)
Agricultural Education 430-440 (630-640) Problems in Improvement of Instruction (F, Sp, Su)
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 740 Seminar in Vocational Agriculture for First Year Teachers (as needed)
Agricultural Education 741 Supervision of Student Teaching in Agriculture (as needed)
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 (Sp)
Agricultural Engineering Technology 119 Introduction to Agricultural Engineering Laboratory (as needed)
Agricultural Engineering Technology 210 Internal Combustion Engines (F)
Agricultural Engineering Technology 220 Surveying and Soil and Water Engineering (F)
Agricultural Engineering Technology 301 Special Problems [topic title] (F, Su)
Agricultural Engineering Technology 302 Special Problems [topic title] (Sp, Su)
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 (as needed)
Agricultural Engineering Technology 401 (601) Research Participation (F, Su)
Agricultural Engineering Technology 402 (602) Research Participation (Sp, Su)
Agricultural Engineering Technology 420 Irrigation (as needed)
Agricultural Engineering Technology 450 (650) Agricultural Structures (Sp)
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)
Agricultural Engineering Technology 470 Applied Pneumatics and Hydraulics in Agriculture (as needed)
Agricultural Engineering Technology 482 (682) Principles of GIS and GPS for Agricultural and Natural
Resources Management (F, Sp)
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 (as needed)
Agriculture 295 International Food and Fiber Systems (F, Sp, Su)
Agriculture 390 Career Planning in Agriculture (F, Sp)
Agriculture 401 Research Participation (as needed)
Agriculture 402 Research Participation (as needed)
Agriculture 411 Fundamentals of Cooperative Extension (as needed)
Agriculture 420 Supervised Field Experience (F, Sp, Su)
Agriculture 441 Interpretation of Agricultural Research (F)
Agriculture 450 (650) Dynamics and Development of Leadership in Agriculture (F)
Agriculture 475 Agricultural Communications (Sp)
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)
Animal Science 210 Introduction to Horse Science (Sp)
Animal Science 211 Horse Science Laboratory (Sp)
Animal Science 230 Exotic and Companion Animal Management (F)
Animal Science 231 Companion Animal Laboratory (F)
Animal Science 240 Live Animal and Carcass Selection and Evaluation (F)
Animal Science 260 Behavior of Farm and Companion Animals (F)
Animal Science 270 Animal Welfare and Ethics (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 ( $\mathrm{Sp}, \mathrm{Su}$ )
Animal Science 320 Farm Animal Health (F)
Animal Science 330 Basic Meat Science (F)
Animal Science 350 Animal Nutrition (F)
Animal Science 351 Animal Nutrition Laboratory (F)
Animal Science 360 Breeding and Improvement of Farm Animals and Poultry (Sp)
Animal Science 371 Anatomy and Physiology of Domestic Animals (F)
Animal Science 372 Applied Animal Reproduction (Sp)
Animal Science 380 (580) Livestock Merchandising (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 410 (610) Beef Sciences (F)
Animal Science 420 (620) Swine and Poultry 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 451 Equine Selection and Evaluation (as needed)
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 201 Introduction to Physical Geography (F)
Geography 202 Introduction to Cultural Geography (Sp)
Geography 210 Methods in Geoscience (F)
Geography 270 Introduction to Geospatial Technologies (as needed)
Geography 305 Principles of Meteorology (Sp)
Geography 310 Principles of Geographic Information Systems (F, Sp)
Geography 320 Boundary Layer Meteorology (Sp-odd)
Geography 340 Synoptic Analysis and Forecasting (F-even)
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 375 (575) Earth Systems Science (as needed)
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 (Sp)
Geography 420 Applied Meteorology and Climatology (F-odd)
Geography 430 Statistical Climatology (Sp-even)
Geography 440 Atmospheric Thermodynamics (F-odd)
Geography 441-442 (641-642) Travel Study (as needed)
Geography 444 Geography Internship (as needed)
Geography 460 Atmospheric Dynamics (Sp-even)
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 110 Introduction to Physical Geology (F, Sp)
Geology 110H Introduction to Physical Geology (F)

Geology 120 Environmental Geology (F, Sp)
Geology 120H Environmental Geology (Sp)
Geology 121 Engineering Geology (Sp-even)
Geology 210 Methods in Geoscience (F)
Geology 315 (515) Principles of Oceanography (F-odd)
Geology 320 (520) Mineralogy (F-odd)
Geology 325 (525) Fossils: Life Through Time (Sp-even)
Geology 330 (530) Igneous and Metamorphic Petrology (Sp-even)
Geology 340 (540) History of the Earth (F-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 (F-even)
Geology 365 (565) Tennessee's Geologic and Cultural Landscapes (F-odd)
Geology 370 (570) Principles of Statigraphy (Sp-odd)
Geology 375 (575) Earth Systems Science (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 450 Methods in Field Geology (F)
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)
Geoscience Education 700 Advanced Earth Systems Science (as needed)
Geoscience Education 705 Earth/Space Science and STEM Integration for Middle Grades 5-9 Teachers (2)
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)
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 Mediating Environmental Conflicts (F)
Natural Resources Management 225 Introduction to Aquatic Science (F)
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 (Sp-even)
Natural Resources Management 350 Environmental Regulation Sp-odd)
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 (as needed)
Natural Resources Management 420 Supervised Field Experience (F, Sp, Su)
Natural Resources Management 430 Natural Resources Research (Sp)
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 461 Selected Topics in Natural Resources Management (as needed)
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 and Recreation Administration 100 Fundamentals of Park and Recreation Administration (F-odd)
Park and Recreation Administration 110 Introduction to Park Management (F-even)
Park and Recreation Administration 200 Recreation Leadership, Programming, and Interpretation (Sp)
Park and Recreation Administration 220 Outdoor Recreation (as needed)
Park and Recreation Administration 300 Technological Applications in PRA (Sp)
Park and Recreation Administration 310 Recreation Area Design and Comprehensive Planning (as needed)
Park and Recreation Administration 315 Special Event Management in PRA (as needed)
Park and Recreation Administration 321 Landscape Management (Sp)
Park and Recreation Administration 400 (600) Advanced Interpretation of Natural and Cultural Resources
(F-even)
Park and Recreation Administration 401-402 Research Participation (as needed)
Park and Recreation Administration 410 (610) Advanced Park Management (F-odd)
Park and Recreation Administration 430 Supervised Field Experience (F, Sp, Su)
Park and Recreation Administration 760 Management of Interpretive Resources (as needed)
Park and Recreation Administration 765 Conservation and Preservation of Historic Structures (as needed)
Park and Recreation 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 (F)
Plant Science 234 Lawn and Turf Management (F)
Plant Science 242 Fundamentals of Horticulture ( Sp )
Plant Science 250 Crop 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 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 (as needed)
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 (Sp)
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-even)
Plant Science 431 (631) Principles of Plant Breeding (F-odd)
Plant Science 433 (633) Field Crop Production (F-even)
Plant Science 442 (642) Crop Adaptation and Ecology (Sp-odd)
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)
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)
Soil Science 321 Soil Genesis, Morphology and Classification (Sp-even)
Soil Science 401 Research Participation (F, Su)
Soil Science 402 Research Participation (Sp, Su)
Soil Science 412 (612) Soil Chemistry and Fertility (F)
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)
Soil Science 440 (640) Soil Physics (Sp-odd)
Veterinary Health Technology 200 Introduction to Veterinary Technology (F)
Veterinary Health Technology 300 Veterinary Technology Medical Terminology (F)
Veterinary Health Technology 310 Veterinary Technology Advanced Lab Sciences (F)
Veterinary Health Technology 320 Veterinary Technology Lab Animals, Exotics, and Pocket Pets (Sp)
Veterinary Health Technology 330 Veterinary Technology Diagnostic Imaging (Sp)
Veterinary Health Technology 340 Veterinary Technology Animal Nursing (Sp)
Veterinary Health Technology 350 Veterinary Technology Parasitology (F)
Veterinary Health Technology 400 Veterinary Technology Pharmacology (F)
Veterinary Health Technology 410 Veterinary Technology Hematology and Clinical Chemistry (Sp)
Veterinary Health Technology 420 Veterinary Technology Surgery, Anesthesia, and Dentistry (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 (F)
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 Mangement (Sp-even)
Wildlife Biology 320 White-tailed Deer (as needed)
Wildlife Biology 330 Wildlife Biopolitics (F)
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)
Wildlife Biology 405 Principles of Aquaculture (F-odd)
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.

# Department of Family and Consumer Sciences 

Dr. Sue G. Byrd, Interim Chair<br>340B Gooch Hall<br>731-881-7100<br>fax 731-881-7106

## Faculty

Sue G. Byrd, Martha C. Herndon, Lisa C. LeBleu, Lori H. Littleton, Kathy Stanczyk

## Mission

The mission of the Department of Family and Consumer Sciences at The University of Tennessee at Martin is twofold. The primary mission 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. Dietetics and Child and Family Programs improve the quality of life for the individuals and families in the region through public service and research.

## Expected Outcomes

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

1. utilize computers and the latest technologies in all aspects of their careers, particularly as managerial and instructional tools.
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. be knowledgeable and active in the legislative process of public policy, as it relates to the student's specific discipline.
6. interact effectively with individuals and families, taking into consideration social, psychological and cultural differences.
7. apply physical/biological and social sciences foundations in family and consumer sciences careers.
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 department 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 three concentrations. The student will select one of the following concentrations.

Child, Family and Consumer Sciences and Education
Option 1: Child and Family Studies (1212)
Option 2: Family and Consumer Sciences Education (1213)
Option 3: Gerontology (1215)
Food and Nutrition/Dietetics (1214-FNTR and 1214-DIET)
Option 1: Dietetics
Option 2: Food and Nutrution
Interior Design/Fashion Merchandising (1218-INTD and 1218-FASH)
Option 1: Interior Design
Option 2: Fashion Merchandising
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. The 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.

Study beyond the baccalaureate degree is necessary to attain membership and credentials in certain professional organizations such as the American Society of Interior Designers (ASID) and 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 202 (3), Nutrition 100 or Food Science 200 (3), Interior Design 100 or 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 lowerdivision if a prerequisite is being satisfied for the remaining upper-division courses.

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

## Gerontology

The minor in gerontology (1215) consists of Social Work 220 (3), Child and Family Studies 100 or 421 or Psychology 313 (3), Child and Family Studies 314/Sociology 314 (3), and nine additional hours selected
from Social Work 355 (3), Health 325 (3), Psychology 360 or Health 351 (3), Health 410 (3), Psychology 325 (3), Health 360 (3), Health 406 (3), Consumer Resource Management 413 (3), Health 353 or Social Work 425 (when the topic is Love, Sex, and Relationships) (3), Social Work 320 (3), and Social Work 330 (3).

## Nutrition

A minor in nutrition (1214) consists of the following courses: Child and Family Studies 100 Lifespan Human Development (3), Health 111 Principles and Concepts in Personal Health (3), Nutrition 100 Introductory Nutrition (3), Nutrition 322 Advanced Nutrition (3), one course from either Health 410 Health Education and Promotion (3) or Health 406 Facilitating Behavior Change (3), and one course from Nutrition 422 Lifespan Nutrition (3), Nutrition 433 Nutrition in Disease (3), or Nutrition 443 Community Nutrition (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 interior design/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
Interior Design 100 ..... 3
Nutrition 100 ..... 3
Fashion Merchandising 300 ..... 3
Total Hours ..... 16

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

## Child, Family and Consumer Sciences and Education Concentration

The child, family and consumer sciences and education concentration (1213) includes three options: Child and Family Studies, Family and Consumer Sciences Education, and Gerontology. The concentration is designed to provide a broad-based education in child development and family relationships and Family and Consumer Sciences, 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, early intervention teacher, family and consumer sciences teacher, 4-H agent, senior activity coordinator, and adult care administrator. Observations of young children and hands-on experiences at the Margaret N. Perry Children's Center, with child and family grant programs, community programs, and student teaching for those in the family and consumer sciences educa-
tion option, 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 NCATE (National Council for the Accreditation of Teacher Education) 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 Teacher Education 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, and, if eligible, for additional endorsement 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 14-15 semester hours in each subject matter area related to the endorsement.

## Degree Requirements

I. Family and Consumer Sciences Core Component ..... 16 hours(see earlier page)
II. General Education Component ..... 45-46 hours
Art 120
Chemistry 111-112 or Chemistry 121-122 or Biology 110-120
Communications ..... 230
Human Learning 311
Economics 201 or 202
English 110 or 111, 112
Mathematics 140
Microbiology 251 or Zoology 201
Psychology 101 or Sociology 201
Fine Arts (Aesthetics) Elective (3 hours) from approved general education listing
History Elective (3 hours) selected from History 121, 122, 201, or 202
Humanities Electives (6 hours) selected from approved general education listing
III. Family and Consumer Sciences Component ..... 22-25 hours
Child and Family Studies 303, 411
Food Science 200 or 313
Consumer Resource Management 302
Consumer Resource Management 403 or Interior Design 210
Nutrition 322
Fashion Merchandising 303
Fashion Merchandising 103 or Fashion Merchandising 415 (for Family and Consumer SciencesEducation option only)
IV. Professional Development Component.................................................................. 31-34 hours
Child and Family Studies Option
Electives in Child and Family Studies 9 hours (Courses selected to meet student's own interest in
specialization for career)
Child and Family Studies 211
Electives Unspecified 10 hours (Courses to be selected to meet student's own interest in
specialization for career)
Select Alternative A or B to complement electives and to develop specialization. Certain
combinations of the two alternatives may be approved.
A. Supervised Field Experience: Family and Consumer Sciences 460, 48-, 49-
B. Approved Electives 300-400

## Family and Consumer Sciences Education Option

Family and Consumer Sciences Education 300*, 330*, 340*, 404*, 405*
Child and Family Studies 211
Communication 231
Special Education 300
Teacher Education 211, 303*
*Admission to Teacher Education required for courses marked with an asterisk.

## Gerontology Option

Child and Family Studies 211
Child and Family Studies 100 or Child and Family Studies 421 or Psychology 313
Child and Family Studies 314/Sociology 314
Social Work 220
Electives 10 hours selected from Consumer Resource Management 413, Health 325, Health 353 or Social Work 425 (when the topic is Love, Sex, and Relationships), Health 360, Health 406, Health 410, Psychology 325, Psychology 360 or Health 351, Social Work 320, Social Work 330, Social Work 355
Select Alternative A or B to complement electives and to develop specialization. Certain combinations of the two alternatives may be approved.
A. Supervised Field Experience: Family and Consumer Sciences 460, 48-, 49-
B. Approved Electives 300-400

Minimum hours required for a B.S.F.C.S. degree .................................................................. 121
A minimum of 36 hours is required in upper-division courses.

## Food and Nutrition/Dietetics Concentration

## Option 1: Dietetics

The Dietetics option (1214-DIET) 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 2000, Chicago, IL 60606-6995, 800-877-1600 ext 5400. The mission of the didactic program in dietetics is to prepare graduates for their dietetic internships, the Registration Examination for Dietetians, 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 didactic Program Handbook that is distributed to all dietetics majors.

Students who successfully complete the program will receive their verification statements on the commencement date immediately following the completion of all requirements. They are then qualified to apply for accredited dietetic internships as a means for achieving eligibility for active membership in the Academy of Nutrition and Dietetics (AND) and for writing the examination for registered dietitian (RD) status. 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.

Students seeking to enroll in the dietetics option will be required to meet the following requirements before entering the final two years of the dietetics option:

1. completion of the first two years of the food and nutrition option
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 111, 112, Food Science 200, 313, Nutrition 100
4. completion of 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. completion of interview with dietetics faculty.

## Degree Requirements

I. Family and Consumer Sciences Core Component

16 hours

(see earlier page)
II. General Education Component ..... 53-55 hours
Biology 140
Chemistry 111-112
Communications 230
Economics 201 or 202
English 110 or 111, 112
Mathematics 110 or 140,210
Microbiology 251
Psychology 101
Zoology 201Fine Arts (Aesthetics) Elective (3 hours) from approved general education listingHumanities Elective (9 hours) from approved general education listing
III. Family and Consumer Sciences Component ..... 30 hours
Food Science 200, 313
Food Systems Management 203, 312, 410
Nutrition 322, 422, 433, 443, 475
IV. Business Component ..... 9 hours
Accounting 201
Management 300, 350
V. Professional Development Courses ..... 7 hours
Supervised Field Experience: Family and Consumer Sciences 487, 497; Food Systems Management 415
VI. Electives ..... 5 hours
Minimum hours required for a B.S.E.C.S. degree ..... 120A minimum of 36 hours is required in upper-division courses.

## Option 2: Food and Nutrition

The Food and Nutrition option (1214-FNTR) is designed to provide a broad education in the food and nutrition sciences, with a supporting background in the physical and biological sciences. Students choosing the Food and Nutrition option may or may not aspire to become Registered Dietitians credentialed through the Commission on Dietetic Registration. For those students wishing to pursue a career in dietetics and write the Registration Examination for Dietitians, the Food and Nutrition option is the preliminary step in that process (see Dietetics option for admission criteria to the DPD Program). For those students who do not aspire to become Registered Dietitians, the Food and Nutrition option 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 who do not apply or are not accepted to the Dietetics Option and remain in the Food and Nutrition option must complete 15 hours of upper-division restricted electives. This allows students the opportunity to align their academic program with their career goals.

## Degree Requirements

I. Family and Consumer Sciences Core Component ..... 16 hours (see earlier page)
II. General Education Component ..... 55-57 hoursBiology 140, 300Chemistry 111-112
Communications 230
Economics 201 or 202
English 110 or 111, 112
Mathematics 110 or 140,210
Microbiology 251
Psychology 101
Zoology 201
Fine Arts (Aesthetics) Elective (3 hours) from approved general education listingHumanities Elective (9 hours) from approved general education listing
III. Family and Consumer Sciences Component ..... 25 hours
Food Science 200, 313
Food Systems Management 312, 410Nutrition 322, 422, 433, 443
IV. Business Component ..... 9 hours
Accounting 201
Management 300, 350
V. Restricted Electives ..... 15 hours
Choose 15 hours from: Exercise Science 430; Health 330, 351, 410; Human Performance 432, 435;Microbiology 401, 410
VI. Electives 5 hours
Minimum hours required for a B.S.E.C.S. degree ..... 120
A minimum of 36 hours is required in upper-division courses.
Interior Design/Fashion Merchandising Concentration

In the Interior Design/Fashion Merchandising concentration (1219) a student may choose a specialized subject area from the following options: Interior Design or Fashion Merchandising. The student has the choice of selecting unspecified electives or a minor in a supporting discipline. Minors in art, business administration, communications, sociology, political science, psychology 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. 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, residential interior designer, 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

I. Family and Consumer Sciences Core Component ..... 16 hours
(see earlier page)
II. General Education Component ..... 45-46 hours
Art 120
Chemistry 111-112 or 121-122 or Biology 110-120 plus one additional Biological and PhysicalSystems course from the approved general education listing
Communications 230
Economics 201 or 202
English 110 or 111, 112
Mathematics 140
Psychology 101 or Sociology 201
Fine Arts (Aesthetics) Elective (3 hours) from approved general education listingHumanities Elective (9 hours) from approved general education listing
III. Family and Consumer Sciences Component ..... 18 hours
Fashion Merchandising 102 or Interior Design 210
Fashion Merchandising 200 or Interior Design 340
Consumer Resource Management 302
Fashion Merchandising 206 and 303
Consumer Resource Management 403 or Fashion Merchandising 305
IV. Professional Development Component ..... 27 hours
Interior Design Option
Marketing 301
Choose 12 hours from the following courses:Interior Design 302
Interior Design 410, 411, 412
Interior Design 442
Interior Design 443
Interior Design 450
Select option A or B to develop specialization. Certain combinations of two options may beapproved.A. Supervised Field Experience: Family and Consumer Sciences 460, 484, 494 (12 hours)B. Approved Electives: 300-400 (12 hours)
Fashion Merchandising Option
Marketing 301
Choose 12 hours from the following courses:
Fashion Merchandising 103
Fashion Merchandising 307
Fashion Merchandising 308
Fashion Merchandising 309
Fashion Merchandising 405
Select option A or B to develop specialization. Certain combinations of two options may be approved.
A. Supervised Field Experience: Family and Consumer Sciences 460, 485, 495 (12 hours)
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 ..... 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, serving as laboratories for courses in child and family studies. The Margaret N . Perry Children's Center is a facility providing services designed for the social and educational enrichment of young children. This includes a kindergarten-readiness program. Services are also available at the center for school-aged children after school.
The Child and Family Resource Center is another facility, housing the Infant Stimulation Program which provides services to preschool children who are developmentally delayed and their families. Students interested in careers in this field do observations at these facilities.

Other specially funded programs which are a part of the Department of Family and Consumer Sciences include: Northwest Tennessee Child Care Resource and Referral-providing services, referrals, training and materials to child care providers; Infant Stimulation Program-providing educational assistance and speech therapy to developmentally delayed young children; and Healthy Start-providing parent education for firsttime parents.

## 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 Interior Design Group, the Student Dietetic Association 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 2.75 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)<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 314 Death, Dying and Bereavement (as needed)<br>Child and Family Studies 400 (600) The Hospitalized Child (as needed)<br>Child and Family Studies 411 Preschool Laboratory Practicum (F, Sp)

Child and Family Studies 412 Early Childhood Program Administration (as needed)
Child and Family Studies 421 Adult Development (as needed)
Child and Family Studies 442 (642) Developmental Disabilities in Children (as needed)
Child and Family Studies 443 (643) Community Care and Curriculum Planning for Developmentally
Disabled Preschool Children (as needed)
Child and Family Studies 740 Ecology of Human Development (as needed)
Child and Family Studies 742 Administration of Programs for Children (as needed)
Child and Family Studies 744 Theories in Child and Family Studies (as needed)
Child and Family Studies 751 Resources in Family Life Education (as needed)
Child and Family Studies 753 Assessment in Child and Family Studies (as needed)
Child and Family Studies 755 Advanced Laboratory Practicum in Child Development (as needed)
Consumer Resource Management 202 Consumers and the Market (as needed)
Consumer Resource Management 205 Cultural Etiquette (as needed)
Consumer Resource Management 210 Leadership Roles in Resident Settings (Sp)
Consumer Resource Management 302 Personal and Family Finance (F)
Consumer Resource Management 403 (603) Housing and Home Equipment (Sp)
Consumer Resource Management 413 (613) Resource Management for Special Groups (as needed)
Consumer Resource Management 711 Consumption and Standards of Living (as needed)
Consumer Resource Management 712 Housing Programs and Policies (as needed)
Consumer Resource Management 713 Environmental Design (as needed)
Consumer Resource Management 722 Management and Family Resources (as needed)
Consumer Resource Management 723 Consumer Economics (as needed)
Family and Consumer Sciences 100 Family and Consumer Sciences Perspectives (F)
Family and Consumer Sciences 28- Preprofessional Practice (Su)
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] (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 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 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 (as needed) Fashion Merchandising 200 Introduction to Fashion Merchandising (Sp-odd)
Fashion Merchandising 206 Visual Merchandising and Presentation (Sp)
Fashion Merchandising 300 Clothing/Adornment and World Cultures (F)
Fashion Merchandising 303 Textiles (Sp)
Fashion Merchandising 305 Fashion Industry Processes (as needed)
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 (Sp-even)
Fashion Merchandising 412 (612) Environmental Textiles (as needed)
Fashion Merchandising 415 (615) Fashion Design (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 Principles (F)
Food Science 313 Food Management (Sp)
Food Science 332 Nature of Food (Sp)
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 Systems Management 203 Orientation to Food Service Systems (Sp)
Food Systems Management 312 Quantity Food Management (Sp)
Food Systems Management 410 Food Service Systems (F)
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)
Interior Design 100 Design Selection (F)
Interior Design 210 Interior Design Studio (Sp)
Interior Design 302 Historic Furniture Design (Sp-odd)
Interior Design 303 Human Needs in Housing (as needed)
Interior Design 340 Interior Design Applications (F)
Interior Design 410 Lighting (as needed)
Interior Design 411 Materials and Finishes (as needed)
Interior Design 412 Professional Procedures (as needed)
Interior Design 442 Residential Interior Design (Sp-even)
Interior Design 443 Commercial Interior Space Planning (Sp-odd)
Interior Design 450 Computer Applications in Interior Design (Sp-even)
Nutrition 100 Introductory Nutrition (F, Sp)
Nutrition 322 Advanced Nutrition (F, Sp)
Nutrition 422 (622) Lifespan Nutrition (Sp)
Nutrition 433 (633) Nutrition in Disease (F)
Nutrition 443 (643) Community Nutrition (F)
Nutrition 455 (655) Nutrition Assessment and Counseling (Sp)

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Nutrition 475 Medical Nutrition Therapy (Sp)
Nutrition 720 Human Nutrition (as needed)
Nutrition }723\mathrm{ Advanced Nutrition (as needed)
Nutrition }724\mathrm{ Preprofessional Practice II (Sp)
Nutrition 726 World Food Supply and Human Need (as needed)
Nutrition }733\mathrm{ Advanced Clinical Nutrition (as needed)
Nutrition }734\mathrm{ Preprofessional Practice III (F)
Nutrition }754\mathrm{ Preprofessional Practice V (Sp)
Nutrition }755\mathrm{ Nutrition in Mental Retardation and Developmental Disorders (as needed)
Nutrition 764 Preprofessional Practice VI (Sp)
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Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Military Science and Leadership 

Major Michael Johnson, Professor of Military Science<br>109 ROTC Building<br>731-881-7153<br>fax 731-881-7161

## Faculty

Captain Jeff Crawford, Master Sergeant Billy Rogers, Major Michael Johnson

## Mission

Recruit, retain, motivate, develop, lead, train 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, judgement, leadership skills and physical stamina indicative of leaders of character committed to service to the Army and the Nation.

## 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 five-week long Leader Development and Assessment course (LDAC) at Fort Lewis, Washington, 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 long Leader's Training Course (LTC) 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.
Military Science and Leadership 101, 102, 201, 202
3 semester hours per course
Military Science and Leadership 301, 302, 401, 402 .......................................... 4 semester hours per course
Military Science and Leadership Electives ......................................................... 3 semester hours per course
National Advanced Leadership Camp ................................................................................. 6 semester hours
Leader's Training Course .................................................................................................. 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 the LDAC; 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 LDAC, 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 tiered subsistence allowance of from $\$ 300-500$ (depending on academic year standing) per month for 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 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 Leader Development and Assessment Course at Fort Lewis 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 Leader's Training Course (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 Leadership Development and Assessment Course (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 

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## Mission

The College of Business and Global Affairs, consistent with the overall Mission of The University of Tennessee at Martin, develops graduates whose skills, abilities and ethical standards contribute to a diversified and dynamic society. With a primary focus on teaching, the College emphasizes quality undergraduate and graduate instruction and faculty commitment to student and regional development. Programs are delivered in an environment that encourages a broad understanding of the forces shaping social, political and economic change in a global society. The College promotes and supports cooperative alliances with stakeholders and outstanding teaching, research and service.

## 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 the Office of International Programs and International Admissions and the Travel-Study/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:

1. include discipline-based research, contributions to practice, and learning and pedagogical research;
2. emphasize peer-reviewed and application-oriented scholarly works;
3. provide opportunities for dissemination of relevant findings at professional conference academic meetings and seminars.

## III. Provide service to individuals and organizations in the public and private sectors of the region which:

1. enhance the quality of life and facilitate economic growth;
2. build partnerships among stakeholders through student internships, community service programs and professional organizations;
3. promote professional development and provide continuing education opportunities through the academic departments, chairs of excellence and university and community partners;
4. 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.

## 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 bnusiness 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 gradees 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 minors 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, office information systems, and sport management. 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, fnformation systems, management, marketing, and sport management.

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 taking the course that requies 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 and 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)
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
Management Information Systems (4632)
Office Information Systems (4634)
Management
Management (4610)
Sport Management (4617)
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, Economics 201 or 202, Finance 301, Management 300 and Marketing 301.

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 non-business studies. The minor requires 18 credit hours consisting of the following courses: Accounting 321, Finance 341, Management 304, Management 307, Management 481 and Marketing 302.

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. Students are required to take History 200 plus one course from five of the following areas of study: Agriculture 295; Agricultural Economics 335, 350; Art History 340; Economics 321, 322, 333; English 330, 401; Finance 332; French 311, 321, 360, 370, 381, 382; Geography 380, 381, 441, 442, 461, 462; German 321, 360, 370, 381, 382; History 320, 321, 343, 420, 421, 441, 442, 448, 468, 470, 482, 484; Japanese 315, 341, 342, 360, 370; Management 461; Marketing 410; Political Science 321, 322, 341, 401, 467, 480; Psychology 312; Religious Studies 301; Sociology 300, 304, 306, 433, 495; Spanish 321, 322, 360, 370, 381, 382, 385, 386.

The minor in leadership (M-4615) consists of the following courses: Economics 322, Leadership 321, Leadership 323, Management 304, Natural Resource Management 100 or Natural Resource Management 101 plus three additional hours from one of the following: Engineering 100 or Philosophy 210.

The minor in legal studies (M-4173) 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 410; 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-4610) 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 221, or Computer Science 250 and one course chosen from Computer Science 360, Computer Science 410, or Information Systems 361; Information Systems 310; three hours chosen from Computer Science 201, Information Systems 211, 212, 213, 221, 222, 223, 231, 232, 233 and six additional hours at least three of which must be upper-division selected from Computer Science 211, Computer Science 221, Computer Science 222, Computer Science 250, Computer Science 351, Computer Sci-
ence 352, Computer Science 360, Computer Science 410, Information Systems 291, Information Systems 361, Information Systems 461, or Information Systems 491.

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 office information systems (M-4634) consists of Information Systems 212-213, 222-223, 232-233, Information Systems 310, Information Systems 351 or English 325, Information Systems 461 and Information Systems 462.

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 management (M-4617) consists of Marketing 301, 450; Management 304; Sport Management 406, 413; and three addtional upper-division Sport Mangement hours (excluding Sport Management 305). 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. In order 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. In order 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 or 152 or 202; Interdisciplinary Studies 250; Management 461; Marketing 410; or Political Science 321 or 322 or 341. 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 Systems ..... 8
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
(Marketing 205 is required for Marketing majors in lieu of Computer Science 201)
Political Science 220 ..... 3
Electives - sufficient hours so that the total General Education hours equal 53.
II. Business Common Course Requirements (37 hours)
Accounting 201-202 Fundamentals of Accounting I, II. ..... 6
Business Law 201 Legal Environment of Business or Business Law 301 Business Law I ..... 3
Note: Accounting Majors and Management--Sport Management majors must take Business Law 301 Business Law I.
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 Communications. ..... 3
Management 300 Management and Behavior, Management 310 Operations Management, Management 490 Business Policy ..... 10
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, Economics Club, Financial Management Association, Institute of Management Accountants (IMA), Mu Kappa Tau, Phi Alpha Delta, Phi Chi Theta, Pi Sigma Alpha, Pi Sigma Epsilon, Political Science Club, Pre-Law Club, Society for Human Resource Management (SHRM), Beta Gamma Sigma, Students in Free Enterprise (SIFE) and American Production and Inventory Control Society (APICS). 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

Computer Science Award. Given to a student selected as the outstanding senior in computer science. This student is chosen by the faculty.

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.

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.

Political Science Award. A cash award of $\$ 100$ made by the political science faculty to the outstanding senior political science major.

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 

William L. Davis, Interim Chair

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Faculty

Darlene A. Adkins, Christopher M. Baxter, Shirley Borden, William L. Davis, Ross N. Dickens, Mary F. Geddie, Richard B. Griffin, Nell S. Gullett, Mahmoud M. Haddad, Ronald W. Kilgore, Myoung-Shik (Mason) Kim, Malcolm G. Koch, Sandra F. Koch, Kevin A. Long, Paula H. Moore, Ernest R. Moser, Bryan M. Parsons, Darshak Patel, Thomas H. Payne, Arnold L. Redman, Glenna L. Sumner, Kenneth W. VanVuren, P. Richard Williams, PbilipJ. Young

## 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 Accounting, Economics, and Finance will:

1. demonstrate an understanding of the global aspects of business.
2. demonstrate an understanding of the ethical aspects of business.
3. demonstrate competence in appropriate technology in business.
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 Political Science will:

1. develop an understanding of political structures and processes, including those relating to elections, policy making, and policy implementation.
2. develop an understanding of global political dynamics, encompassing an appreciation for the interconnectedness of international political, economic, and social activity.
3. develop problem solving and analytical skills through an understanding of contemporary methods of political science research and analysis.
4. 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 partof the common 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 courses with an International Focus approved by adviser* ..... 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 finance 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. Computer Science 201 must also be completed. 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.

$$
\begin{aligned}
& \text { Course Requirements for Major Hours } \\
& \text { Prerequisites } \\
& \text { Political Science } 220 \text { American Political Institutions and Policy, } \\
& \text { and either Political Science } 210 \text { American Government and Politics } \\
& \text { or Political Science } 230 \text { Introduction to World Politics*............ } 6 \\
& \text { Political Science } 303 \text { Scope and Methods of Political Science............ } 3 \\
& \text { Political Science } 321 \text { International Relations or } \\
& \text { Political Science } 322 \text { American Foreign Policy or } \\
& \text { Political Science } 341 \text { Comparative Government ........................... } 3 \\
& \text { Concentration Requirements (see below) }
\end{aligned}
$$

*Majors who intend to take a majority of their upper-division electives in American politics and/or public administration are encouraged to take Political Science 210-220; those who intend to take a majority of their upper-division electives in international relations, international security, and/or comparative politics are encouarged to take Political Science 220-230.

## General Political Science Concentration (4171).

## Concentration Requirements <br> Hours

Upper-division (300-400) Political Science courses ........................ 21
Note: Paralegal courses Political Science 391, 392 and 393 cannot be used for the major 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
A minor is required for both the B.A. and B.S. degree.

## Public Administration Concentration (4172).

Concentration Requirements<br>Hours<br>Political Science 314, 353, 361, 362, 363, 420, 432 ...................... 21<br>In lieu of a minor, complete the following: Accounting 201-202 Fundamentals of Accounting I, II OR<br>Accounting 300 Accounting for Non-business Students<br>Business Law 201 Legal Environment of Business<br>Economics 201-202 Principles of Macroeconomics, Microeconomics<br>Management 300 Management and Behavior<br>Management 350 Human Resource Management

## Preparation for Legal Study

The Official Guide to U.S. Law Schools, 2007 edition, published by the Law School Admission Council, lists 192 American Bar Association-approved law schools in this country. Three of these are in Tennessee: the Cecil C. Humphreys School of Law at the University of Memphis, the University of Tennessee College of Law and the Vanderbilt University School of Law.

All law schools require an undergraduate degree and place major emphasis on two factors for admission: undergraduate grade point average and the score on the Law School Admission Test (LSAT). Each law school will vary on the specific grade average and the test score. Generally, it is assumed that a 3.00 (B) average is the minimum. The LSAT scores range from 120-180 with 163 about the 90 th percentile in recent administrations. The LSAT is a standard three-hour examination with focus on reading comprehension, reasoning, and analytic skills. There is also a writing sample. The test is given four times a year; seniors are advised to take the examination in June, October or December. The undergraduate grade point average and the LSAT score remain the most important determinants for law school admission. Many schools will also consider significant experiences, including overseas study and internships. Admission to law school continues to be very competitive. Most law schools admit students only at the beginning of the fall semester. Prospective law school students need to start the process early in their senior year to meet the admission deadlines.

Some schools require letters of recommendation. Select endorsers who have had you in class and can specifically comment on skills such as writing and analytic ability which will be beneficial in law. Be sure to give references adequate lead time to meet deadlines.

There is no specified pre-law program according to law schools. Law students come from a variety of backgrounds. Law schools do recommend all students have well-developed communicative skills, analytical ability and background on human institutions and values. Students should keep this in mind when deciding on majors and also in selecting electives.

## International Studies Major (4180)

B.A. Curriculum. This is a multidisciplinary major for students interested in acquiring personal enrichment and a broadly based international perspective for eventual careers in government, foreign service, international organizations or foundations, international business, foreign area studies, international law, or journalism. The major consists of a minimum of 42 hours. The general education requirements for the B.A. degree must be met. The student must complete the following requirements for the major (core, area concentration and travel-study) and the required minor.
A. Core Courses (18 hours from selected courses) *denotes required courses

Agricultural Economics 335 International Agricultural Trade
Agricultural Economics 350 Agricultural Marketing in North America

Economics 321 International Economics
Economics 333 International Business
English 330 Topics in World Literature
Finance 332 International Finance
Geography 461 Economic Geography
Geography 462 Political Geography
History 441 History of Latin America
History 470 Topics in World History
International Studies 200* Introduction to International Studies
International Studies 485* The Changing World Order (capstone course)
Management 461 International Management
Marketing 410 International Marketing
Political Science 230 Introduction to World Politics
Political Science 321 International Relations
Political Science 322 American Foreign Policy
Political Science 341 Survey of Comparative Politics
Political Science 423 International Organizations and Law
Political Science 481 Topics in International Security Studies
Political Science 482 Introduction to International Security Studies
Political Science 490 Topics in Non-U.S. Political Science
Political Science 491 Dimensions of Globalism
Psychology 312 Social Psychology
Religious Studies 301 Major Religions of the World
Sociology 300 Cultural Anthropology
Sociology 304 Race, Class and Power
Sociology 433 Population Processes and Problems
Sociology 495 Comparative Family Systems
B. Area Concentration (18-21 hours)

Students will select an area concentration with a distinguishable business, cultural, geographical, historical or global interest. Students should consult with their advisers to plan their programs of study. Some suggested areas are listed below. Other areas may be considered.
African-American Studies
Agriculture/Economics
Anthropology/Sociology
Asian Studies
Business with an emphasis on international
Canadian Studies
Central and South American Studies
European Studies
Geography/History
Global Finance
International Relations
Philosophy/Religious Studies
C. Foreign Language Minor (12 upper-division hours)

Students must minor in French, German, Japanese or Spanish. International students and resident aliens for whom it is determined that English is a second language may minor in English. A minor
consists of at least $\mathbf{1 2}$ hours numbered $\mathbf{3 0 0}$ or above, plus any prerequisite courses. Students may wish to receive a certificate of proficiency, which requires 15 hours. It is highly recommended that students take an additional year of a second foreign language.
D. Travel-Study ( 6 hours minimum- 12 hours maximum)

Majors must participate in a travel-study program in a foreign country so that the student may draw upon unique cultural and intellectual resources in the host country(ies) which will extend subject matter competence and develop language proficiency. A sensitivity to other cultures, together with a new perspective on the American culture, will contribute to the development of particular career interests. Although students may participate in any approved study-abroad program, we strongly recommend that students take advantage of the many foreign-study opportunities available at UT Martin which involve a summer, one semester, or a year.

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

Accounting 201 Accounting Information for Decision Making I ( $\mathrm{F}, \mathrm{Sp}, \mathrm{Su}$ )
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 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 701 Advanced Business Law (as needed)
Business Law 711 Legal and Ethical Environment of Business (Su)
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 (Sp)
Economics 322 Economic Development (F)
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 485 The Changing World Order (Sp)
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-even)
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-even)
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 (F-even)
Political Science 381 American Political Behavior (F-even)
Political Science 382 Political Parities and Interest Groups (Sp-odd)
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 and Legal Philosophy (Sp-even)
Political Science 410 Political Science Internship (as needed)
Political Science 420 Public Administration Internship (as needed)
Political Science 423 International Organizations and Law (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 (F)
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 Internatioal Security Studies [Topic Title] (as needed)
Political Science 482 Introduction to Internatioal Security Studies (as needed)
Political Science 490 (690) Topics in Non U.S. Political Science: [Topic Title] (as needed)
Political Science 491 Dimensions of Globalism (Sp)

# Department of Management, Marketing, and Information Systems 

Dr. John D. Overby, Chair<br>115 Business Administration Building<br>731-881-7238<br>fax 731-881-7231

## Faculty

Tommy A. Cates, Hui-chuan (Christie) Chen, Dexter J. Davis, Lajuan V. Davis, Samuel C. Faught, C. Bryan Foltz, Kevin L. Hammond, Robbie Green Hillsman, Ashley J. Kilburn, Brandon R. Kilburn, John E. Knight, Mary A. Lemons, P. Michael McCullough, John D. Overby, Hyung-jin (Michael) Park, Christina Saenger, Sean C. Walker, Mary K. Wallace, Daisy Wang, 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 Management, Marketing and Information Systems will:

1. demonstrate an understanding of the global aspects of business.
2. demonstrate an understanding of the ethical aspects of business.
3. demonstrate competence in appropriate technology in business.
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 information systems and/or training others to use those systems should select the Office 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.
Course Requirements for Major Hours
Information Systems 315 Introduction to Internet Programming for E-business. ..... 3
Information Systems 361 Network Administration ..... 3
Option Requirements (see below) ..... 24-25
Total Hours ..... 30-31
Management Information Systems Concentration (4632)The Management Information Systems Concentration is designed to prepare the student for organizationalroles involving the design, development and administration of information systems. Typical positions forgraduates include systems analyst, programmer, network administrator, computer consultant and computerapplications support specialist.
Concentration Requirements Hours
Computer Science 221 Programming Concepts and Problem Solving I ..... 3
Computer Science 222 Programming Concepts and Problem Solving II ..... 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 upper-division Information Systems Electives ..... 7
Total Hours ..... 25

## Office Information Systems Concentration (4634)

The Office Information Systems concentration stresses the integration of people, procedures and technology to produce information in the office environment. Emphasis is on computer applications, technology management strategies, software selection and end-user training/support. Interpersonal, written and oral communications skills are developed. Typical positions for graduates include software support specialist, administrative assistant, records manager, office manager, training specialist and office systems analyst.
Concentration Requirements Hours
Information Systems 235 Advanced Productivity Applications ..... 3
Information Systems 251 Office Procedures ..... 3
Information Systems 461 End-User Technology Solutions ..... 3
Information Systems 462 Office Management ..... 3
Information Systems 481 Current Issues in Office Information Systems ..... 3
Business Electives ..... 9
Total Hours ..... 24

## 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 Management concentration (4617) students can pursue positions in recreation, sports administration, information, merchandising, sales or various other venues. This 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.
Course Requirements for Major ..... Hours
Management 320 Data Analysis for Managerial Decision Making. ..... 3
Management 350 Human Resource Management ..... 3
Management 461 International Management ..... 3
Total Hours ..... 9
Management Concentration (4610)
Concentration Requirements Hours
Upper-division Management Electives ..... 15
Upper-division Business Electives ..... 6
Total Hours ..... 21
Sport Management Concentration (4617)
Concentration Requirements Hours
Sport Management 305 Introduction to Sport Management and Administration ..... 3
Sport Management 406 Advanced Sport Management and Administration ..... 3
Sport Management 413 Facilities Planning. ..... 3
Sport Management 480 Internship in Sport Management** ..... 10
Marketing 372 Sports Marketing I .....  1
Marketing 373 Sports Marketing II ..... 1
Total Hours ..... 21

Note(s): Sport Management students must take Business Law 301 as part of the common business core.
**For the Sport Management 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 internships require 450 hours of work experi-
ence. No other course work may be taken during the internship without faculty supervisor approval, and should not exceed four hours. Student may or may not receive 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 Hours
Marketing 105 Introduction to Marketing* .....  1
Marketing 320 Consumer Behavior ..... 3
Marketing 330 Advertising and Promotion Management. ..... 3
Marketing 360 Research Methods ..... 3
Marketing 465 Marketing Management ..... 3
Marketing 302 Personal Selling OR
Marketing 340 Logistics Supply Chain Management OR Marketing 450 Business to Business Marketing ..... 3
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 have completed Marketing 301 may substitute 1 credit hour of upper-division business elective for Marketing 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 721 Critical Thinking (F)<br>Business Administration 722 Leadership, Group Dynamics and Teamwork (Sp)<br>Business Administration 723 Creativity, Innovation and Design (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)

Information Systems 205 Introduction to Productivity Applications (F, Sp, Su)
Information Systems 235 Advanced Productivity Applications (as needed)
Information Systems 241 Current Productivity Tools (F, Sp)
Information Systems 251 Office Procedures (Sp-even)
Information Systems 290 Topics in Information Systems: [Topic title] (1-3)
Information Systems 310 Management Information Systems (F, Sp)
Information Systems 315 Introduction to Internet Programming for E-business (F)
Information Systems 331 Professional Word Processing (as needed)
Information Systems 351 Business Communications (F, Sp)
Information Systems 361 Network Administration (F)
Information Systems 371 Object-Oriented Systems Analysis and Design (as needed)
Information Systems 410 Data Base Management Systems (as needed)
Information Systems 420 Information Systems Security (as needed)
Information Systems 461 End-user Information Systems (F-even)
Information Systems 462 Office Management (Sp-odd)
Information Systems 480 Internship in Management Information Systems (as needed)
Information Systems 481 Current Issues in Office Information Systems (as needed)
Information Systems 490 Advanced Topics in Information Systems: [Topic title] (as needed)
Information Systems 491 Current Issues in Management Information Systems (Sp)
Information Systems 761 Information Systems (Sp)
Leadership 321 People, Power, and Change (F)
Leadership 322 Leadership: Theory, Innovation and Policy (Sp)
Leadership 323 Leadership: Global and Local (F, Sp)
Management 300 Management and Behavior ( $\mathrm{F}, \mathrm{Sp}, \mathrm{Su}$ )
Management 301 Organization and Management (as needed)
Management 303 Organizational Behavior and Theory (as needed)
Management 304 Introduction to Entrepreneurship (F)
Management 305 Creativity and Innovation (as needed)
Management 307 Small and Family Operated Businesses (as needed)
Management 310 Operations Management (F, Sp, Su)
Management 312 Introduction to Management Science (F)
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 351 Management and White Collar Crime (as needed)
Management 412 Service Operations Management (Sp)
Management 430 Quality Management in Business (as needed)
Management 440 Staffing and Performance Appraisal (F)
Management 450 Compensation Management (Sp-odd)
Management 461 International Management ( $\mathrm{F}, \mathrm{Sp}, \mathrm{Su}$ )
Management 470 Training and Development (Sp)
Management 471-479 Topics in Management [topic title] (as needed)
Management 480 Internship in Management (as needed)
Management 481-482 Independent Study 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 ( $\mathrm{F}, \mathrm{Sp}, \mathrm{Su}$ )
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 371 Forensic Marketing (F, Sp)
Marketing 372 Sports Marketing I (F, Sp)
Marketing 373 Sports Marketing II (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 Direct Marketing Management (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 305 Introduction to Sport Management and Administration (F, Sp)
Sport Management 306-307 Sport Management Practicum (F, Sp)
Sport Management 35-Topics: [Selected Areas] (F, Sp, Su)
Sport Management 400 Legal Aspects of Sport (as needed)
Sport Management 406 Advanced Sport Management and Administration (Sp)
Sport Management 413 Event and Facility Planning (F)
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.

# Center for International Education 

Dr. Malcolm G. Koch, Executive Director<br>124 Gooch Hall<br>731-881-1023<br>fax 731-881-1023

The Center for International Education has as its mission to promote the internationalization of UT Martin students, faculty and programs and to provide for the discussion of global issues and student and faculty experiences abroad. The Center serves as a clearinghouse for the international activities of campus units and strives to develop synergy among them. It also sponsors an International Lecture Series and maintains a collection of books and pamphlets intended to help students prepare for international educational experiences.

The Center oversees the campus' Travel-Study and Study-Abroad Programs, provides advising to students interested in such opportunities and maintains close working relationships with a network of overseas partner institutions, including the University of Orléans (France), the Technical University of Braunschweig (Germany), the University of Quebec at Chicoutimi (Canada), the University of New Brunswick at Saint-John (Canada), the University of Guanajuato (Mexico) and the Autonomous Agrarian University Antonio Narro (Mexico). The Center's staff includes a university travel agent who helps all members of the university community meet their professional travel needs.

Each year, the Center distributes various scholarships to students planning to travel and study abroad, including over one hundred awards funded by the Student Government Association's travel-study fee.

# Office of International Programs and International Admissions 

Gary Wilson, Director<br>144 Gooch Hall<br>731-881-7353<br>fax 731-881-7322

## Intensive English Program Staff

Samuel Anderson, Robert G. Byrd, Katie Clark, Ryan Diffee, Ken Fackler, Brandy Hudson, Tom Johnson, Vachik Lazarian, Frank Leach, Lynn Patterson, Nelda Rachels, Janice Routon, Gary Wilson

The Office of International Programs and International Admissions offers a wide variety of services to international students: English as a Second Language instruction, international admissions, counseling, sponsorship of extracurricular and cultural activities and maintenance of appropriate records.

The office coordinates sister college relationships and professor and student exchanges with Hirosaki University. It designs and implements short-term educational/cultural programming for student groups from around
the world. The office holds membership in NAFSA, the University Consortium of Intensive English Programs (UCIEP), and the American Association of Intensive English Programs (AAIEP).

The office administers the Tennessee Intensive English Program, which provides instruction in English as a Second Language (ESL). This program offers courses at the beginning, intermediate and advanced levels. The institutional TOEFL (Test of English as a Foreign Language) is offered each term for all international students. (See Student Academic Support Services section for information on computer-based testing.)
International students applying to The University of Tennessee at Martin must present evidence of a minimum TOEFL score of 61 (internet-based) or a minimum IELTS score of 6.0 and the equivalent of at least a 2.50 average in high school. (See Undergraduate Admission Procedures and Requirements section for instructions for international students.) Students who have a score below that level must study in the Tennessee Intensive English Program until that score is obtained or until they have satisfactorily completed Level 6 of the program. Applicants must also furnish evidence of financial support, submit immunization records and have a complete physical examination before arriving at the university. 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.

## Travel-Study/Study-Abroad Programs

## Lorrie Jackson, Coordinator

124 Gooch Hall

731-881-1023

The Center encourages students in all majors to take advantage of study-abroad programs. These programs offer college credit at UT Martin (directly or through transfer credit) for coursework taken at one of our international partner institutions. Study-abroad programs generally last between two weeks and a full semester in length and often include an immersion experience in the host country's language. Contact the Center for International Education for additional information about partner universities and available programs in other countries.

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 

Dr. R. Mark Kelley, Dean<br>237 Gooch Hall<br>731-881-7125<br>fax 731-881-7975

## Mission

The College of Education, Health, and Behavioral Sciences has as its primary mission the preparation of a diverse clientele of students through a variety of program offerings which meet state, regional and national accreditation standards for either entry into the world of work or further academic study at the graduate level. Those who choose to enter the world of work include those prepared to teach K-12 students and perform other school service functions as well as others who may choose to embark upon careers in such public services areas as business, government, social and psychological services, personnel management, nursing and other health-related services, and the criminal justice system. Those who continue academic study at the graduate level may pursue a degree leading to leadership certification in education or an advanced degree in a wide range of occupations related to health and behavioral sciences.

## Organization

The College of Education, Health, and Behavioral Sciences is composed of four academic departments: Behavioral Sciences, Educational Studies, Health and Human Performance, and Nursing. The College of Education, Health, and Behavioral Sciences also houses the Office of Interdisciplinary Studies and the Office of Education Student Services.

## 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 NCATE (National Council for the Accreditation of Teacher Education) 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 educational 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 National Council for the Accreditation of Teacher Education (2010 Massachusetts Avenue NW, Suite 500, Washington, DC 20036, telephone 202-466-7496).

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. The student should keep in contact with the appropriate department 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), formerly the National League for Nursing Accrediting Commission (NLNAC). 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 | Degree |
| :--- | :--- |
| Criminal Justice | B.S.C.J. |
| Health and Human Performance | B.S.H.H.P. |
| Integrated Studies | B.S.Ed. |
| Nursing | B.S.N. |
| Psychology | B.A. or B.S. |
| Secondary Education (various majors) | B.S.Ed. |
| Sociology | B.A. or B.S. |
| Social Work | B.S.S.W. |
| Special Education | B.S.Ed. |
| Interdisciplinary Studies | 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 later in this catalog.

## 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.

## Admission to Teacher Education

Requirements are noted below.

## A. Admission to Teacher Education will be granted if students:

1. *take and pass the state-approved Pre-Professional Skills Test (PPST), or have an ACT composite score of 22 or better. Note: A student who has taken and failed the PPST twice can make an appeal to be admitted to the Teacher Education Program.
2. have and maintain a cumulative 2.75 GPA.
3. demonstrate an acceptable level of oral skills and a successful interview before the Teacher Education Program Interview Board.
4. submit to and successfully pass a criminal history background check.
B. Admission to Student Teaching will be granted if students:

Note: Student Teaching Application Request for Placement must be submitted to the Office of Education Student Services 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 Teacher Education.
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. have satisfactory progress on teacher education portfolio.
*The State Department of Education establishes passing scores for the Praxis Series I and II. 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 Student Services (Gooch 205).

## Requirements for Recommendation for Licensure

Tennessee state regulations stipulate that the applicant for a professional license must be recommended by the teacher-training 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. complete all courses requiring admission to the teacher education program with a grade of C or higher. A student earning a D or an F in a course requiring admission to the teacher education program must retake the course.
5. pass the Praxis Principles of Learning and Teaching.
6. pass the appropriate Praxis Series Specialty Area Exam(s) if a minimum score is required.
7. complete an approved program in teacher education which conforms to the above 2.75 grade point guidelines.
8. complete an application for a teacher's license. Application 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 current mandate requires candidates seeking licensure in elementary education (K-6, 4-8) or early childhood education (P-3) to take and pass Principles of Learning \& Teaching: (Grades K-6, 5-9, or Early Childhood, respectively). Candidates seeking licensure in secondary education (7-12) will take Principles of Learning \& Teaching: (Grades 7-12). Candidates seeking licensure in P-12 areas may choose from any PLT tests offered. In addition, Specialty Area test(s) also must be taken and passed to obtain licensure.

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. Information bulletins and applications for the Praxis are available in the Office of Education Student Services, Room 205 Gooch Hall or in the Office of Academic Records, Room 103 Administration Building. Students must register for exams online at www.ets. org.

During the 2011-2012 academic year, $90 \%$ of the UT Martin students completing the Teacher Education Training Program passed the Praxis II exam(s) required for licensure.

## 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 Education Student Services, 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 number of tests that can be taken on the same day. Refer to the Praxis web site to determine the exact session the specialty area tests are offered.
Testing requirements for all majors are posted in the Office of Education Student Services located in 205 Gooch Hall and on the Office of Education Student Services web site, www.utm.edu/ess. Students must register for exams online at www.ets.org.

## Teacher Education Degree Requirements

The curricula in teacher 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-6 or 4-8 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.

# Department of Behavioral Sciences 

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## Faculty

Susan P. Buckelew, S. Denise Connell, Brian W. Donavant, Daphne M. Henderson, B. Michelle Horton, Brian A. Johnson, Tina L. Lee, Angelina S. MacKewn, James N. Maples, Donna M. Massey, Alicia E. MayaDonaldson, Judy L. Maynard, Michelle M. Merwin, Joseph Ostenson, Darwin-Tamar Ramsey, 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 undergraduate majors in Psychology and Sociology in support of the B.S. and B.A. degrees. Minors are available in Psychology, Sociology, 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 of 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. The maximum number of hours in criminal justice courses allowed to count toward graduation is fifty (50). A minor is required.
I. General Education (54-59 hours)

Biology 110-120 or 130-140
Communications 230
English 110 or 111, 112
Any English Language Literature (3 hours)
Fine Arts (Aesthetics)-Complete three hours from approved general education listing.

Foreign Language (Completion of 122 or higher in any language)
History 201-202
Mathematics 140 and 210
Social Science:
Sociology 201-202 and any other two courses from the following:
Political Science 210-220
Psychology 101
Sociology 101, 300
Social Work 220
II. Major Field Core Courses (27 hours)

Criminal Justice 200, 220, 300, 303, 320, 325, 364, 370, 460

## III. Concentration (18 hours)

A. Law Enforcement Concentration (5831) (18 hours)

This concentration is designed to prepare students for careers in law enforcement, with a special emphasis on course work that will develop the knowledge and skills necessary for entry-level police work. This course work will also assist those students who wish to pursue educational opportunities at the master's level.

## Concentration Requirements

Criminal Justice 310, 400, 405, 420 and six (6) upper-divsion hours (300-400) of criminal justice courses in addition to those listed under the major field core courses.
B. Corrections Concentration (5832) (18 hours)

This concentration is designed to prepare students for careers in the fields of institutional and community-based corrections, with a special emphasis on developing the knowledge and skills necessary for entry-level corrections, probation, or parole-officer positions. This course work will also assist those students who wish to pursue educational opportunities at the master's level.

## Concentration Requirements

Criminal Justice 380, 415, 425 and 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)

This concentration is designed to prepare students for the development of knowledge and skills to assist with their pursuance of careers in the legal field, as well as provide preparation courses for those students planning to pursue further legal education.

## Concentration Requirements

Criminal Justice 400, 410, 413, 420 and 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)

This concentration is designed to give students an understanding of forensic science, and its impact and application within the field of criminal justice. This course work provides a strong preparation for graduate school and enhances opportunities for careers in criminal investigation.

## Concentration Requirements

Chemistry 201 and 202; Criminal Justice 310; and nine (9) additional hours selected from Biology 462 Special Topics: Medical Entomology; Criminal Justice 330, 420, 435; Wildlife Biology 441 or Zoology 325. Students must earn a grade of C or better in all courses, and are responsible for satisfying any necessary prerequisites.

## E. Generalist Concentration (5834) (18 hours)

This concentration is designed to allow students to create their own concentration areas through the development of knowledge and skills needed to address a wide array of employment choices and opportunities. This course work will also assist those students who wish to pursue educational opportunities at the master's level.

## Concentration Requirements

18 upper-division hours ( $300-400$ level) of criminal justice courses in addition to those listed under the major field core courses
IV. Minor Field ( 12 hours minimum)
Completion of course requirements (at least 12 hours) and any prerequisites for a minor in any area
approved by the student's adviser.

Minimum hours required for a B.S.C.J. degree 120

## Criminal Justice Minor

A criminal justice minor (5830) consists of Criminal Justice 200, 220, and twelve additional hours selected from upper-division criminal justice courses.

## Forensic Science Minor

A forensic science minor (5835) 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, 425; Wildlife Biology 441 or Zoology 325. Students are responsible for satisfying any necessary prerequisites.

## 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 pilot 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 300 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 pilot 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 220 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

## Psychology Program

The mission of the Psychology Program is to offer a broadly based liberal arts education with a major in Psychology that incorporates the educational goals of the profession as enumerated by the American Psychological Association. Achievement of these goals prepares the undergraduate student for graduate study or successful entry into a wide variety of occupations at the Bachelor's level. Both faculty and students engage in public service and research related to needs of the region and the profession.

The program offers a major and minor in psychology. 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 in a graduate department compatible with their interests and needs.

## 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 each of the following groups: (a) Psychology 312, 313, 350; (b) Psychology 320, 330, 470; at least one course from the following group: (c) Psychology 450, 475; one course from the following group: (d) Sociology 304, 341, Social Work 220; and an additional eight 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 (human or animal) 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.

## 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.

## 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 (38-40 hours)
Biological and Physical Systems ..... 8
Complete two courses: Zoology 201 or 251, and any other lab science under general education lab science listing Communication ..... 9-10
Complete 9-10 hours from approved general education listing Fine Arts (Aesthetics) ..... 3
Complete three hours from approved general education listing Humanities ..... 9
Complete nine hours from approved general education listing Mathematics ..... 3-8
Mathematics 100-110 or 140
Social and Behavioral Sciences ..... 6
Sociology 201 and Psychology 101
II. Other Required Courses (16-20 hours)
Complete any two courses from the following: ..... 6
Economics 201 or 202 Principles of Macroeconomics/MicroeconomicsPolitical Science 210 or 220 American Government and PoliticsConsumer Resource Management 205 Cultural EtiquetteForeign Language (completion of 122 or higher in any language)4-8
Mathematics 210 Elementary Statistics and Probability ..... 3
Sociology 202 Social Problems or 308 Marriage and Family. ..... 3
III. Social Work Requirements (51 hours)
Social Work 200 Introduction to Social Work and Social Welfare ..... 3
Social Work 220 Understanding Human Diversity and Oppressed Populations. ..... 3
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. ..... 2
Social Work 470 Social Work Field Instruction Preparation ..... 1
Social Work 490 Social Work Field Instruction ..... 12
Social Work Elective - any two Social Work Electives. ..... 6
IV. Electives (10-15 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 .

## 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 (and all preceding required social work courses 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 .

## 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 and all preceding required social work courses 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.

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.

## 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 a 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) Exceptional Child*
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 is consistent with the College of Education, Health, and Behavioral Sciences, and the Department of Behavioral Sciences mission. The mission is to teach students how to apply the sociological perspective to social life. Students learn fundamental sociological concepts, as well as sociological theory, methods of social research and data analytic techniques. Through in-depth analysis of major social institutions and processes, students arrive at an understanding of how people and organizations behave in society.

The outcomes of the Sociology Program are that students:

1. should be able to apply the sociological perspective to social life;
2. should understand sociological concepts;
3. demonstrate comprehension of sociological theory;
4. understand methods of social research and data analytic techniques;
5. understand how people and organizations behave in society and have a detailed knowledge of the organization of society;
6. be able to describe the similarities and differences between pre-industrial and industrial societies;
7. describe similarities and differences between rural and urban dwellers in the same society.

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 101, 201, 202, 300, 303, 402, 497, and 12 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. degree.

## Sociology Minors

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

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.

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.

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. 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 organization is open to all students.
Alpha Delta Mu is a national honor society exclusively for social workers. The society gives special recognition to social workers who have performed at an exceptionally high academic level. Junior and senior students who have a GPA of at least 3.0 are eligible for membership.

## Courses Offered by Department of Behavioral Sciences

Criminal Justice 200 Introduction to Criminal Justice (F, Sp)
Criminal Justice 220 Criminal Justice Ethics (F, Sp)
Criminal Justice 300 Principles of Law Enforcement (F, Sp)
Criminal Justice 303 Methods and Analysis in Social Research (F, Sp)
Criminal Justice 310 (510) 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 (520) Criminal Procedure (F)
Criminal Justice 325 (525) Criminology (F, Sp)
Criminal Justice 330 Serial Killers (F)
Criminal Justice 360 Child Abuse (F-even)
Criminal Justice 364 (564) Corrections (F, 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 405 Law Enforcement Administration (Sp)
Criminal Justice 410 Victimology (Sp)
Criminal Justice 411 (611) 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 425 Penology (Sp-even)
Criminal Justice 435 Forensics and Physical Evidence (as needed)
Criminal Justice 450 (650) Current Issues in Criminal Justice (as needed)
Criminal Justice 455 Travel Study in Criminal Justice [Selected Topics] (as needed)
Criminal Justice 460 (660) 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 Studies in Criminal Justice (as needed)
Criminal Justice 701 Program Planning and Curriculum Development (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 Qualitative Research Methods (Sp-odd, Su-even)
Criminal Justice 706 Juvenile Justice Theory and Practice (F-odd)
Criminal Justice 707 Seminar in the Juvenile Justice System (Sp-even)
Criminal Justice 708 Seminar in Criminological Theory (Sp-even)
Criminal Justice 709 Advanced Topics in Victimology (Sp-odd)
Psychology 101 Introduction to Psychology (F, Sp, Su)
Psychology 101H Honors: Introduction to Psychology (as needed)
Psychology 301 Careers in Psychology (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, Su)
Psychology 313 Developmental Psychology (F, Sp, Su)
Psychology 315 Experimental Psychology I (F, Sp)
Psychology 318 Experimental Psychology II (F, Sp)
Psychology 320 Learning and Cognition (Sp)
Psychology 325 Health Psychology (as needed)
Psychology 330 Applied Behavior Analysis (F, Sp)
Psychology 340 Industrial and Organizational Psychology (F, Sp)
Psychology 350 Abnormal Psychology (F, Sp)
Psychology 355 (555) Abnormal Child Psychology (Sp)
Psychology 360 Drugs and Behavior (F, Sp, Su)
Psychology 365 Special Topics in Psychology [topic title] (as needed)
Psychology 370 Psychology of Women (as needed)
Psychology 410 Sleep and Dreams (as needed)
Psychology 415 Internship in Psychology (as needed)
Psychology 418 Advanced Research Methods (Sp)
Psychology 445 Undergraduate Research Participation (F, Sp, Su)

Psychology 450 Theories of Personality ( $\mathrm{Sp}, \mathrm{Su}$ )
Psychology 455 Psychology Travel Study [Selected Topics] (as needed)
Psychology 460 Fundamentals of Clinical Neuropsychology (F)
Psychology 470 Physiological Psychology (F)
Psychology 475 History of Psychology (F, Sp)
Psychology 480 Senior Seminar (as needed)
Psychology 490 Field Work in Psychology (as needed)
Psychology 701 Directed Studies in Psychology (F, Sp, Su)
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 300 Social Welfare Policies and Services (Sp-even)
Social Work 315 Social Work in Health Care (Sp-even)
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 (as needed)
Social Work 365 Ahcohol and Drugs (as needed)
Social Work 375 Social Work in the School Setting (F-odd)
Social Work 400 Social Work Practice II (F, Sp)
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)
Sociology 101 Introduction to Anthropology (F)
Sociology 201 General Sociology (F, Sp)
Sociology 202 Social Problems (F, Sp)
Sociology 300 Cultural Anthropology (Sp)
Sociology 303 Methods and Analysis in Social Research (F, Sp)
Sociology 304 (504) Race, Class and Power (F-even)
Sociology 305 (505) Sociology of Deviant Behavior (F)
Sociology 306 (506) Religion and Society (Sp-even)
Sociology 308 Marriage and Family (F)
Sociology 310 (510) U.S. Health Care and Policy (Sp-odd)
Sociology 312 (512) Social Psychology (F, Sp)
Sociology 314 Death, Dying, and Bereavement (as needed)
Sociology 341 (541) Men and Women: Gender Roles in American Society (Sp-even)
Sociology 364 (564) Corrections (F, Sp)
Sociology 381 (581) Special Topics [topic title] (as needed)
Sociology 402 (602) Sociological Theory (Sp)
Sociology 404 Who's Got the Money: Income and Inequality (Sp-odd)

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Sociology 413 (613) Criminology (F, Sp)
Sociology 415 Who's in Charge: Social Control and Society (Sp-odd)
Sociology 420 The Sociology of Dilbert: Organizations and Society (as needed)
Sociology 431 (631) Urban Society (F-odd)
Sociology 433 Population Processes and Problems (Sp)
Sociology 434 Community, Society, and Change (Sp-odd)
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 495 (695) Comparative Family Systems (as needed)
Sociology 497 Senior Seminar (F)
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Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Educational Studies 

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Faculty

Becky J. Cox, Betty A. Cox, Karen DiBella, David C. Dietrich, Robert R. Erk, Virginia C. Esch, Kathy D. Evans, Louis C. Glover, Beverly J. Hearn, Jeffrey M. Hewitt, Patricia A. Hewitt, Suzanne Maniss, Sandra S. Murray, Glenda C. Rakes, Thomas A. Rakes, Michael W. Spaulding, Joyce H. Swan, Cherry Watts, Crystal K. Whitlow, Kimberly G. Williams

## 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 Department of Educational Studies primary mission, programs are designed to prepare classroom teachers who exhibit understanding and proficiency in knowledge skills and applications, reflective practice, professional and ethical behavior, and inquiry with emphasis in assessment, technology and diversity.

## Curricula for Integrated Studies

A Bachelor of Science in Education degree with a major in Integrated Studies is available with three concentrations which can lead to licensure in PreK-3 (5161), K-6 (5162) or Middle Grades 4-8 (5163) for those students who complete the outlined program of study.

PreK-3 licensure includes a preschool practicum and a 60 -hour supervised kindergarten field experience and a semester-long student teaching assignment in either PreK or $K$ and primary grades one, two, or three.

K-6 licensure includes clock hours of observation participation, clock hours of clinical lab experiences and a semester-long program of supervised student teaching at grades K- or PreK and 1-3 and 4-6.

4-8 licensure includes clock hours of observation participation, clock hours of clinical lab experiences and a semester-long program of supervised student teaching in grades 4-8.

## Curricula for Integrated Studies (PreK-3)

## General Education Requirements (59-60 Hours)

I. Communications (9-10 hours)

Communications 230
English 110 or 111
English 112 or equivalent honors course
II. Humanities (12 hours)

Art 110
Music 112
Three hours selected from English 250-251, 260-261
Three hours selected from Dance 110 or Theatre 110 or 111
III. Social Sciences (18 hours)

History 201 or 202
Philosophy 130
Psychology 101
Sociology 201
Geography 151 or 152
Political Science 210 or 220
IV. Mathematics and Computers (9 hours)

Human Learning 311
Mathematics 140
Mathematics 191
V. Science (8 hours)

Biology 110 or Biology 120
Physical Lab Science (four hours selected from Astronomy, Chemistry or Geology; must fulfill
Biological and Physical Systems requirement)

## VI. Health and Human Performance (3 hours)

Health 111

## Professional Education Requirements (25 Hours)

Courses with asterisk (*) require admission to Teacher Education; see Non-Licensure Option.

## 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-6)

General Education Requirements (63-64 Hours)
I. Communications (12-13 hours)

Communications 230
English 110 or 111, 112 or equivalent honors courses
Library Service 451
II. Humanities ( 12 hours)

Three hours selected from English 250-251
Three hours selected from English 260-261
Three hours selected from Art 110, Dance 110, Music 111-112, Music 113, or Theatre 110-111
Human Learning 325
III. Social Sciences (15 hours)

Geography 151 or 152
History 201-202
Psychology 101
Social Work 220
IV. Mathematics and Computers (6 hours)

Human Learning 311
Mathematics 140
V. Science (12 hours)Choose eight hours from Biology 110, 120, 130, or 140Physics 150
VI. Health and Human Performance (6 hours)
Health 111Health and Physical Education 310
Professional Education Requirements (28 Hours)
Courses with asterisk (*) require admission to Teacher Education; 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-6 licensure majors, students may opt to student teach in Kindergarten or grades 1-4.
Specialty Area Requirements (30 Hours)
*Reading 448
*Special Education 440
*Teacher Education 340
*Teacher Education 3 ..... 350
*Teacher Education ..... 450
Sciences
Choose eight hours from Biology 110, 120, 130, 140 (satisfied by general education)
Physics 150 (satisfied by general education)
Choose four hours from Geology 110 or Astronomy 201
Mathematics
Mathematics 140 (satisfied by general education)
Mathematics 191-192
Social Science
Geography 151 or 152 (satisfied by general education)
History 201-202 (satisfied by general education)
Psychology 101 (satisfied by general education)
Language ArtsEnglish 110 or 111, and 112 (satisfied by general education)
English 260 or 261 (satisfied by general education)
*Reading 438
Minimum total hours required for B.S.Ed. degree with a major in Integrated Studies (K-6) ..... 121

## Non-Licensure Option (5164)

Candidates for the non-licensure option of the K-6 concentration must work out a program of study with their advisers for those hours in place of coursework requiring admission to Teacher Education, to be selected from the following coursework:

- any upper-division education course not requiring admission to Teacher Education
- 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 (4-8)

Students who plan to teach in grades $4-8$ will follow similar programs during their first two years. The electives in all areas should be carefully chosen so that the student can complete professional and subject matter requirements for graduation and licensure in the chosen subject matter teaching fields.

## General Education Requirements (60-61 Hours)

These requirements are based on a concept of human development which sees the individual as having unique interests and needs; therefore, a number of options are provided so that the student may build an individualized curriculum within the broad framework of the academic disciplines.

Courses with asterisk (*) require admission to Teacher Education.
I. Communications (9-10 hours)

Communications 230
English 110 or 111, and English 112 (or English 111 and 112 equivalent honors courses)
II. Humanities ( 15 hours)

English 261
History 201 and 202
One course from Art 110 or Dance 110
One course from Music 111 or 112 or Theatre 110 or 111
III. Social Science ( 15 hours)

Geography 151
Human Learning 325
Political Science 210
Psychology 101
Social Work 220
IV. Mathematics and Computers (6 hours)

Mathematics 130
Mathematics 140
V. Science ( 12 hours)

Biology 110 or 140
Biology 120 or 130
Physics 150
VI. Health and Human Performance (3 hours)

## Professional Education Requirements (30 Hours)

Courses with asterisk (*) require admission to Teacher Education; see Non-Licensure Option.
Human Learning 311
*Reading 438
Teacher Education 211
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 403
*Teacher Education 404
*Teacher Education 450

## Specialty Area Requirements (33-37 Hours)

Library Service 452
Special Education 300, 440
Teacher Education 380
One of the following concentrations: (12-15 hours)
English (15 Hours)
English 250 or 251, 260, 270, 425
One of the following: English 330, 343, 380, 385, 395, or 475
Mathematics ( 12 Hours)
Mathematics 191, 192, 210
Mathematics 170
Science ( 15 Hours)
Chemistry 121
Geology 110
Botany 301, 302, or 303
One of the following: Astronomy 201, Chemistry 122, or Physics 211
Social Science ( 15 Hours)
Economics 100 or 201
Geography 152
History 121, 202
Sociology 201 or 202
One of the following areas of emphasis: (8-9 hours)
Note: A student must select an area of emphasis different from his/her concentration.
English (9 hours)
English 250 or 251, 260, 425
Mathematics ( 9 hours)
Mathematics 191, 192, 170
Science (8 hours)
Chemistry 121
Geology 110
Social Science (9 hours)
History 202

Two courses from the following:
Economics 100 or 201, Geography 152, History 121 or 122, Sociology 201 or 202

Minimum hours required for B.S.Ed. degree with a major in Integrated Studies (4-8) 123

## Curricula for Secondary Teachers 7-12

Students who plan to teach in grades 7-12 will follow similar programs during the first two years. The electives in all areas should be carefully chosen so that the student can complete professional and subject matter requirements for graduation and licensure in the chosen subject matter teaching fields.

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 (55-63 hours)

These requirements are based on a concept of human development which sees the individual as having unique interests and needs; therefore, a number of options are provided so that the student may build an individualized curriculum within the broad framework of the academic disciplines.
I. Communications (12-13 hours)

English 110 or 111, 112 (or equivalent honors courses)
Communications 230
Reading 433
II. Humanities (12-20 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (12 hours)
Six hours selected from English 250, 251, 260, or 261
Three hours selected from Art 110 or Music 111
Three hours selected from History 201 or 202

## Concentration in Business (12 hours)

History 201 and 202
Three hours selected from English 250, 251, 260, or 261
Three hours selected from Art 110, Music 111 or 112

Concentrations in Economics, Geography, Government, and History (15 hours)
History 121, 122, 201 and 202
Three hours selected from Art 110, Dance 110, Music 111 or 112, Theatre 110 or 111
Concentration in English (20 hours)
English 250, 270
Three hours selected from Art 110, Music 111, or Theatre 110
Three hours selected from History 201 or 202
Eight hour Foreign Language sequence

## Concentrations in French and Spanish (12 hours)

Six hours selected from English 250, 251, 260, 261
Three hours selected from History 201 or 202
Three hours selected from Art 110, Music 111 or 112, or Theatre 110
III. Social Science (9-18 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (9 hours)
Human Learning 325
Psychology 101
Social Work 220

## Concentration in Business (15 hours)

Economics 201 and 202
Human Learning 325
Psychology 101
Social Work 220

Concentrations in Economics, Geography, Government, and History (18 hours)
Geography 151 and 152
Human Learning 325
Political Science 210
Social Work 220
Sociology 201
Concentration in English (9 hours)
Human Learning 325
Psychology 101
Social Work 220
Concentrations in French and Spanish (12 hours)
Human Learning 325
Social Work 220
Psychology 101
Sociology 201
IV. Mathematics and Computers (6-14 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, \& Mathematics (6-10 hours)
Human Learning 311
Mathematics 140 (for Biology, Earth and Space Science)
Mathematics 251 (for Chemistry and Mathematics)
Mathematics 210 (for Mathematics)

## Concentration in Business (12-14 hours)

Computer Science 201
Human Learning 311
Mathematics 210
Mathematics (selected from university-wide general education)

Concentrations in Economics, Geography, Government, and History (6-8 hours)
Human Learning 311
Mathematics (selected from university-wide general education)

## Concentration in English (6-8 hours)

Human Learning 311
Mathematics (selected from university-wide general education)
Concentrations in French and Spanish (6-8 hours)
Human Learning 311
Mathematics (selected from university-wide general education requirement)
V. Science (8-16 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (16 hours)
Biology 130 (for Biology, Chemistry, and Earth and Space Science)
Biology 140
Chemistry 121-122
Physics 211 (for Mathematics)

## Concentration in Business (8 hours)

Biology 110, 120
Concentrations in Economics, Geography, Government, and History (8 hours)
Biology 110
Four hours selected from Biology 120 or Chemistry 111
OR
Chemistry 121-122 sequence (for students wishing more extensive overview of chemistry)
Concentration in English (8 hours)
Biology 110
Four hours Physical Lab Science selected from Astronomy, Chemistry, Geology, or Physics listed in university-wide general education Biological and Physical Systems requirements

Concentrations in French and Spanish (8 hours)
Four hours selected from Biology 110, 120, 130, or 140
Four hours Physical Lab Science selected from Astronomy, Chemistry, Geology, or Physics
VI. General Elective (1-3 hours)

Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (1 hour)
Chemistry only --1 hour
Concentrations in Economics, Geography, Government, and History (1 hour)
Concentration in English (2 hours)
Concentration in French and Spanish (1-3 hours)

## Professional Education Requirements (24 hours)

Courses with asterisk (*) require admission to Teacher Education.
Teacher Education 211
Special Education 300
*Teacher Education 302
*Teacher Education 303
*Teacher Education 305
*Teacher Education 404
*Teacher Education 405

## Specialty Area Requirements (37-46 hours)

Courses with asterisk (*) require admission to Teacher Education.

## Concentrations in Biology, Chemistry, Earth \& Space Science, and Mathematics (39-44 hours)

Biology (44 hours)
Biology 331, 336, 337, 391
Chemistry 341
Mathematics 160
Microbiology 310
*Secondary Education 411
Teacher Education 380
Three hours selected from Botany 301 or 302
Three hours selected from Zoology 315, 325, or 326
Zoology 251, 352
Chemistry (40 hours)
Biochemistry 411
Chemistry 320, 341, 342, 351, 352
Mathematics 252
Physics 211, 212
*Secondary Education 411
Teacher Education 380
Earth and Space Science (44 hours)
Astronomy 201, 202
Geography 305, 472
Geology 110, 120, 340
*Secondary Education 411
Teacher Education 380
Eight hours selected from other upper-division Geology courses
Three hours upper-division science elective
Mathematics (39 hours)
Mathematics 252, 310, 314, 320, 410, 420, 451, 471
*Secondary Education 412
Teacher Education 380
Six hours selected from upper-division mathematics or statistics courses

## Concentration in Business (39 hours)

Accounting 201-202
Business Education 430
Business Law 201, 301
Finance 301
Information Systems 211, 212, 213, 221, 222, 223, 232, 233, and 351
Management 300
Marketing 301
Teacher Education 380
Note: The core program certifies a student to teach accounting and basic business which includes Business Law and General Business.

## Endorsement in Business Technology (9 hours)

Information Systems 310, 331, and 461
Note: In order to add the Business Technology endorsement, the preceding nine additional hours must be completed. These additional nine hours are not included in the 120 hours required for program completion.

## Concentrations in Economics, Geography, Government, and History (37 hours)

Economics ( 37 hours)
Economics 201, 202, 321, 333
Three of the following: Economics 331, 335, 416, 417
*Secondary Education 415
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 302, 303, 310, 331, 403, 404, 434, $435,444,460,461,462,480,483,494,495,496,497,498$
European History - Three hours selected from History 340, 341, 342, 343, 414, 415, 420, 421, 422, 447, 448, 490
World History - Three hours selected from History 320, 321, 323, 324, 441, 442, 460, 470, 484
Geography Emphasis (9 hours)
Geography 201, 202, 310
Government Emphasis (9 hours)
Political Science 220, 321, 322

Geography (37 hours)
Geography 201, 202, 310, 380, 381, 471, 472
*Secondary Education 415
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 302, 303, 310, 331, 403, 404, 434, $435,444,460,461,462,480,483,494,495,496,497,498$

European History - Three hours selected from History 340, 341, 342, 343, 414, 415, 420, 421, 422, 447, 448, 490
World History - Three hours selected from History 320, 321, 323, 324, 441, 442, 460, 470, 484
Government Emphasis (9 hours)
Political Science 220, 321, 322
Government (37 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
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 201, 202, 310
History Emphasis (9 hours)
American History - Three hours selected from History 302, 303, 310, 331, 403, 404, 434, $435,444,460,461,462,480,483,494,495,496,497,498$
European History - Three hours selected from History 340, 341, 342, 343, 414, 415, 420, 421, 422, 447, 448, 490
World History - Three hours selected from History 320, 321, 323, 324, 441, 442, 460, 470, 484

## History (37 hours)

History 299
*Secondary Education 415
Teacher Education 380
American History (9 hours)
Three hours selected from History 302, 303, 310, 331, 403, 404, 434, 435
Six hours selected from History 444, 460, 461, 462, 480, 483, 494, 495, 496, 497, 498
European History (6 hours)
Three hours selected from History 340, 341, 342, 343
Three hours selected from History 414, 415, 420, 421, 422, 447, 448, 490
World History (3 hours)
Three hours selected from History 320, 321, 323, 324, 441, 442, 460, 470, 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 201, 202, 310
Government Emphasis (9 hours)
Political Science 220, 321, 322

## Concentration in English (40 hours)

English 260, 261, 305, 425, 485
English 320 or 420
English 365, 370, 401, 465, or 470
English $360,375,460,480$, or 490
English 330, 335, 343, 380, 385, 395, or 475
English 345 or 350
Library Service 452
Teacher Education 380
*Secondary Education 414

## Concentrations in French and Spanish (43-46 hours)

French (43-46 hours)
French 111 or $115,122,222,321,341,342,451$
French literature (3 hours)
*Secondary Education 413
Teacher Education 380
Six hours selected from French 350, 381, 382, 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)

Spanish (43-46 hours)
Spanish 111 or $115,122,222,321$ or $322,341,342,451$
Spanish literature (3 hours)
*Secondary Education 413
Teacher Education 380
Six hours selected from Spanish 381, 382, 385, 386, 420
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)

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 or Spanish.

## 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.
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.

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 Office of Education Student Services, 205 Gooch Hall (731-881-7203).

1. Agriculture (7-12)
2. Art (K-12)
3. Biology (7-12)
4. Earth and Space Science (7-12)
5. Economics (7-12)
6. English (7-12)
7. French (7-12)
8. Geography (7-12)
9. Government (7-12)
10. Health Education (K-12)
11. History $(7-12)$
12. Mathematics $(7-12)$
13. Music - Instrumental/Vocal (K-12)
14. Physical Education (K-12)
15. Spanish (7-12)
16. Special Education (K-12)
17. Special Education Preschool/Early Childhood (P-1)

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.

## Curricula for Special Education

A Bachelor of Science Degree in Education with a major in Special Education is offered for those students who complete the outlined program of study listed below. The program includes clock hours of clinical lab experiences, directed observations, limited participation in classroom settings and a semester-long program of supervised student teaching. Course work fulfills the requirement for licensure in Special Education P-3 and/or Special Education Modified K-12.

## General Education Requirements (57-58 Hours)

I. Communications (12-13 hours)

English 110 or 111, 112 (or equivalent honors courses)

Communications 230
Reading 438
II. Humanities (6 hours)

Three hours selected from English 250-251, 260-261
Three hours selected from Art 110, Music 111-112, Theatre 110-111, or Dance 110
III. Social Sciences (12 hours)

History 201-202
Political Science 210
Geography 151 or 152
IV. Mathematics and Computers (12 hours)

Mathematics 140
Mathematics 191-192
Human Learning 311
V. Science (12 hours)

Biology 110-120
Physical Lab Science
VI. Health and Human Performance (3 hours)

Health 111

## Professional Education Requirements (24 Hours)

Courses with asterisk (*) require admission to Teacher Education.
Teacher Education 211
*Teacher Education 302
*Teacher Education 340
*Teacher Education 350
*Teacher Education 407
*Teacher Education 408

## 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 Teacher Education to be selected from the following course work:
any upper-division education course not requiring admission to Teacher Education
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

## Specialty Area Requirements (41 Hours)

Human Learning 325
Special Education 300

Special Education 386 (P-12 Placement)
Special Education 415
Special Education 432
Special Education 437
Special Education 420
Special Education 430
Special Education 440
Special Education 460
Teacher Education 475
Two electives from Library Service 451; Special Education 450, 451; or Teacher Education 450

## Minimum total hours required for B.S.Ed. degree with a major in Special Education 122

## Courses Offered by Department of Educational Studies

Business Education 430 Instructional Strategies in Business Subjects (F)
Career and Technical Education 290 Workshop in Education: 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)
Counseling 710 Research in Counseling (as needed)
Counseling 712 Learning and Instruction ( $\mathrm{F}, \mathrm{Sp}$ )
Counseling 715 Advanced Educational Psychology (as needed)
Counseling 716 Growth and Development Across the Life Span (birth to adult) (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 ( $\mathrm{Sp}, \mathrm{Su}$ )
Counseling 740 Group Dynamics (F)
Counseling 745 Current Issues in Counseling (Topic) (as needed)
Counseling 746 Expressive Arts in Counseling (as needed)
Counseling 748 Principles of Crisis Intervention (Su)
Counseling 750 Mental Health and Psychopathology (Sp)
Counseling 760 Individual Appraisal (Sp, Su-even)
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 788 Internship in Clinical Mental Health 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 791 Supervised Practicum in Secondary Counseling (F, Sp)
Counseling 792 Internship in Clinical Mental Health II (F, Sp, Su)
Early Childhood Education 341 Mathematics/Science in Early Childhood Education (Sp)
Early Childhood Education 351 Language Arts/Social Studies in Early Childhood Education (F)
Early Childhood Education 360 Assessment in Early Childhood (as needed)
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 475 (675) Learning and the Kindergarten Child (F, Sp)
Early Childhood Education 480 (680) Emergent Literacy in the Content Areas: Language Arts, Social Studies, Math, Science and Health (Sp)
Early Childhood Education 481 (681) Emergent Literacy (as needed)
Early Childhood Education 485 (685) Creativity and Play (F)
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 Tests and Measurement (as needed)
Educational Foundations 700 Educational Studies: Historical and Philosophical Dimensions (F, Sp)
Educational Foundations 710 Research in Education (F, Sp, Su)
Educational Foundations 720 Multicultural Issues in Education \& Counseling (F, Sp, Su)
Educational Foundations 730 Seminar in Post-Secondary Education (as needed)
Educational Foundations 731 Internship in College Teaching (as needed)
Educational Leadership 710 Introduction to Supervising and Leading Educational Change (F, Su)
Educational Leadership 715 Personnel Management and Professional Development (F)
Educational Leadership 730 Public Relations and Resource Allocation in the School Setting (Su)
Educational Leadership 735 Electronic Tools for Educational Leaders (F)
Educational Leadership 745 Measurement and Decision Making (F)
Educational Leadership 750 Facility Management for a Safe, Efficient and Effective Learning Environment (Sp)
Educational Leadership 755 Topics in Special Education for School Leaders (Sp)
Educational Leadership 760 Law and Policy in the Educational Setting (Sp)
Educational Leadership 775 Classroom and School-wide Behavior Management (Sp)
Educational Leadership 780 Clinical Supervision (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 (F, Sp, Su)
Educational Studies 450 (650) The School, the Teacher, and the Law (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 Learning and Foundations (F)
Educational Studies 725 Integrated STEM Curriculum Design for Middle School 5-9 Teachers (as needed)
Educational Studies 730 Legal and Policy Challenges in an Online Setting (as needed)
Educational Studies 740 Project in Education (as needed)
Educational Studies 750 Teaching with Technology (F, Sp)
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 760 Supervision of Student Teaching and Field Experiences (as needed)
Elementary Education 790 Seminar: [Selected Topics] (as needed)
Elementary Education 792 Master Research Project, K-8 (F, Sp, Su)
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)
Reading 100 The Strategic Dimension of Reading (F, Sp)
Reading 111 Effective Reading (F, Sp)
Reading 433 (633) Reading in the Content Area Classroom (F, Sp)
Reading 438 (638) Classroom Approaches to the Teaching of Reading in the Elementary School (F, Sp)
Reading 448 Reading Instruction and Assessment for Upper Elementary Grades (as needed)
Reading 700 Foundations of Reading (as needed)
Reading 710 Advanced Reading Diagnosis and Corrective Reading (as needed)
Reading 720 Research Based Techniques for Teaching Reading and Language Arts (as needed)

Reading 730 Reading as a Neurolinguistic Process (as needed)
Reading 740 Practicum in Reading (as needed)
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 715 Principles and Practices of Secondary Education: Curriculum and Instruction (as needed)
Secondary Education 725 Advanced Education Seminar [Selected Topics] (as needed)
Secondary Education 730 Problems in Teaching in a Secondary School: [Subject Area] (as needed)
Secondary Education 760 Supervision of Student Teaching and Field Experiences (as needed)
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 (F)
Special Education 387 (587) Practicum in Teaching Children with Exceptionalities (Birth-6) (F)
Special Education 415 (615) Characteristics and Needs of Children with Moderate/Severe Exceptionalities (Sp)
Special Education 416 Math for Children with Exceptionalities (Su)
Special Education 420 (620) Language Development and Disorders (F)
Special Education 425 Sign Language (as needed)
Special Education 430 (630) Early Childhood-Special Education (Sp)
Special Education 431 (631) Behavior Management for the Young Child (Su)
Special Education 432 (632) Educational Procedures for Children with Exceptionalities (Sp)
Special Education 437 (637) Assessment of Children with Exceptionalities (Sp)
Special Education 440 (640) Advanced Methods for Students with Mild Disabilities (F)
Special Education 450 (650) Characteristics and Needs of the Gifted/Talented (F)
Special Education 451 (651) Strategies and Programs for Teaching the Gifted/Talented (Sp)
Special Education 452 (652) Advanced Methods in Gifted Education (F-odd)
Special Education 453 (653) Theories and Trends in Gifted Education (F-odd)
Special Education 460 (660) Behavior Interventions (F)
Special Education 470 (670) Integrating Students with Exceptionalities in Regular Education (as needed)
Special Education 490 (690) Workshop in Special Education: [Title of Workshop] (as needed)
Special Education 700 Consultation Approaches and Strategies (as needed)
Special Education 709 Practicum in Gifted Education (F-odd)
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 (as needed)
Teacher Education 301 Foundations of Education (F, Sp)
Teacher Education 302 Integrated Teaching Strategies (F, Sp)
Teacher Education 303 Diagnosis and Evaluation (F, Sp)
Teacher Education 305 (505) Classroom Management (F, Sp)

Teacher Education 340 Applied Mathematics and Science (F, Sp)
Teacher Education 350 Applied Social Studies and Language Arts (F, Sp)
Teacher Education 380 Teaching Strategies in Middle Level Content (as needed)
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-12) (F, Sp)
Teacher Education 408 Student Teaching in Special Education: Non-School Setting (PreK-1) (F, Sp)
Teacher Education 409 Student Teaching in Kindergarten (F, Sp)
Teacher Education 450 (650) Designing Curriculum for the Early Adolescent (F, Sp)
Teacher Education 475 (675) Learning and the Kindergarten Child (F, Sp)
Teacher Education 705 Advanced Strategies for Classroom Management (F, Sp)
Teacher Education 712 Learning Theory and Cognition Applied to the School Setting (F, Sp)
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 in Teaching Curriculum and Instruction (Sp)
Teacher Education 780 Principles and Techniques of Teaching (F, Sp)
Teacher Education 791 Master Research Project, K-12 (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)

Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Health and Human Performance 

Dr. Deborah J. Gibson, Interim 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 Currie, Deborah J. Gibson, Cbristina D. James, Andrea K. Johnson-Stevenson, Ajit Kargaokar, Todd E. Sherman, Tara Tansil-Gentry, Mark Walton, Janet M. Wilbert

## Mission

The mission of the Department of Health and Human Performance is to prepare students for employment or graduate study in the areas of Exercise Science and Wellness, Coaching and Teaching Physical Education, Health and Wellness as K-12 licensed professional educators. Both faculty and students engage in public service and limited applied research related to the needs of the surrounding communities and the region. The educational programs of the department are aimed at developing graduates whose skills, abilities, and ethical standards contribute to a diversified and dynamic society. The faculty is committed to the concept of lifetime patterns that promote health, fitness, sport and leisure activities.

## Expected Outcomes

Our students will be facilitators of learning who will:

1. possess higher-order thinking skills.
2. be effective communicators.
3. convey methods, knowledge and skills as they relate to their chosen professions.
4. reflect upon their learning as evidenced in examples of their writing.
5. recognize differences and be able to relate to other cultures, races, values and exceptionalities.
6. assess performance and provide feedback.
7. collaborate with others in joint projects.
8. demonstrate a professional attitude and demeanor.

The faculty expects each student who graduates with a major in Health and Human Performance to demonstrate appropriate mastery of the following goals:
a. students will apply the scientific foundations of human movement in order to educate exercise and sport consumers.
b. students will gain a theoretical and experiential exposure to a variety of culturally determined aspects of human expression through movement, exercise and sport.
c. students will relate the importance of physical activity in achieving and maintaining an active and healthy lifestyle.
d. students will acquire the professional skills necessary for successful quality program planning, implementation and evaluation.
e. students will gain an awareness of their personal selves and of appropriate behaviors incumbent upon a Health and Human Performance professional.

## Major

The department offers three concentrations within the Health and Human Performance Major: Exercise Science and Wellness (5216), Health and Human Performance Generalist (5217), and Licensure K-12 (5213). A myriad of career choices are available with a major in Health and Human Performance. The Licensure K-12 program provides a dual credential in physical education and health. Students choosing the Exercise Science and Wellness concentration may prepare for graduate and/or pre-professional coursework in the areas of physical therapy, occupational therapy, cardiac rehabilitation, speech pathology and other related fields. Preparation in health promotion and personal/group fitness training is also included in this concentration.

## Minor

## Athletic Coaching (5240) (21 Hours)

Athletic Training 207, Exercise Science 305, 430, Health and Physical Education 390, Human Performance 207, Sport Management 305 and three hours selected from Health and Physical Education 460, 465, 470, 475, or Nutrition 322.

## 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

## 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 and in Zoology 251 and 352.
A. University General Education Core (38-39 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 and Psychology 101 ..... 6
B. Additional HHP General Education Requirements (20 hours)
Choose 20 hours from the following list of courses. Hours can be taken in any combination. Athletic Training 200 ..... 3
Biology 130 ..... 4
Biology 300 ..... 2
Biology 336 ..... 3
Chemistry 111-112 or 121-122. ..... 8
Child and Family Studies 100 ..... 3
Computer Science 201 ..... 3
Health 485 Workshop with adviser approval ..... 2-3
Mathematics 210 ..... 3
Microbiology 251, 310, or 311 ..... 4
Music 365 ..... 2
Nutrition 322, 422, 433, or 455. ..... 3
Philosophy 110, 120, 130, 160, 350 ..... 3
Physics 101-102 or 211-212. ..... 8
Psychology 312, 313, 350. ..... 3
Psychology 365 Special Topics specifically Health Psychology. ..... 3
Sociology 101, 201, 202 ..... 3
Sport Management 305 ..... 3
C. Exercise Science \& Wellness Concentration Core (50 hours)
Exercise Science 305; 429; 430; 431; and 433 or 434 or 436 ..... 13
Health 220, 330, 351, 410 ..... 12
Human Performance 207, 350, 415, 432, 440; and either HPER 435, NUTR 322, or NUTR 443. ..... 18
Nutrition 100 ..... 3
Zoology 352. ..... 4
D. World of Practice ( 12 hours)
Human Performance 491 ..... 12$75 \%$ of Exercise Science \& Wellness Concentration Core coursework must be taken at this university. In-cluded in the $75 \%$, the following courses must be taken at the main UT Martin campus: Exercise Science 429,431, 433, 434; Human Performance 207 and 491.Minimum hours required for B.S.H.H.P. degree120/121
B.S. in Health and Human Performance
Concentration: Health and Human Performance Generalist

## 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 112 ..... 6/7
Communications 230 . ..... 3
Biological and Physical Systems (choose from approved General Education listing) ..... 8
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
Social and Behavioral Sciences Electives (choose from approved General Education listing) ..... 6
B. Additional HHP General Education Requirements (12 hours)
Social and Behavioral Sciences Electives (choose from approved General Education listing) ..... 6
Health 111 ..... 3
Humanities Elective (choose from approved General Education listing) ..... 3
C. HHP Generalist Concentration Core (45 hours)
Exercise Science 305 ..... 3
Health 220, 351 ..... 6
Human Performance 415; 432; 440; 435 or NUTR 322 or 433 ..... 12
Nutrition 100 ..... 3
Choose 21 hours from the following list of courses:
Athletic Training 200, 207, 301, 302, 400, 401, 402
Exercise Science 429 and 430, 431, 433, 434, 436
Health 325, 330, 353, 360, 406, 410, 485
Health and Physical Education 320, 321, 390, 400, 410, 412, 460, 465, 470, 475, 485
Human Performance 207, 350, 485
Sport Management 305, 306, 35(1-5), 400, 406, 413, 485Physical Activity classes (limit 4 hours)
D. HHP Generalist Optional Electives ( 25 hours)
Twenty-five (25) hours may be taken from the following content areas:
Business Administration, Biology, Business Law, Chemistry, Child and Family Studies, Communica-tions, Computer Science, Driver Safety Education, Economics, Exercise Science, Finance, Health,Health and Physical Education, Human Performance, Management, Marketing, Mathematics,Microbiology, Nutrition, Philosophy, Physics, Psychology, Sociology, Sport Management, Zoology
Note: Community college classes taken in the following programs will be accepted into the Health and
Human Performance Generalist concentration in Section D, Optional Electives, to fulfill up to 22 hours.Jackson State Community College--Respiratory Care Technology, Radiology, Physical Therapist Assistant, MedicalLaboratory Technician, Emergency Medical TechnicianComunbia State Community College--Respiratory Care Technology, Radiology, Emergency Medical Technician
Volunteer 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, Emer- gency Medical Tehnician, Biotechnology
Western Kentucky Community and Technical College--Clinical Laboratory Technician, Phlebotomy, Dental As- sisting, Dental Hygiene, Diagnostic Medical Sonography, Health Physics, Health Science Technology, Medical Information Technology, Paramedic Completion Program, Pharmacy Technology, Physical Therapist 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 articulated institution. For students who have not completed an associate's degree or who are transferring from an institution where there is no articulation agreement, courses will be assessed individually. A single course may not be used in multiple categories.
$75 \%$ of Health and Human Performance Generalist Concentration Core coursework must be taken at this university.
Minimum hours required for B.S.H.H.P. degree 120/121

## B.S. in Health and Human Performance Concentration: Licensure K-12

## 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 112 ..... 6/7
Communications 230 ..... 3
Biology 110 and any 4 hours from Biological and Physical Systems ..... 8
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
Social \& Behavioral Sciences Elective (choose from approved General Education listing) ..... 3
Health 111 ..... 3
B. Additional HHP General Education Requirements (15 hours)
Social \& Behavioral Sciences Elective (choose from approved General Education listing) ..... 6
Health 220 and Nutrition Elective. ..... 6
Human Learning 311 ..... 3
C. Licensure K-12 Concentration Core (45 hours)
Exercise Science 305 ..... 3
Health 330, 351, 353, 410 ..... 12
Health and Physical Education 320, 321, 400, 410, 412 ..... 15
Human Performance 207, 350, 432, 440 ..... 12
Special Education 300 or Health and Physical Education 304 ..... 3
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

## 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 in the Health and Human Performance Office ( 3006 Elam Center) and should be filed no later than February 15 each year.

## Student Organizations

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 American Alliance of Health, Physical Education, Recreation and Dance 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. 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 (as needed)
Driver Safety Education 430 (630) Basic Driver and Traffic Safety Education (as needed)
Driver Safety Education 435 (635) Advanced Driver and Traffic Safety Education (as needed)
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 (629) Applications in Exercise Physiology (F, Sp)
Exercise Science 430 (630) 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 Exercise Testing and Prescription for the Athletic Population (F)
Exercise Science 436 Introduction to Electrocardiograph (as needed)
Exercise Science 710 Advanced Exercise Physiology (as needed)
Exercise Science 750 Workshop in Selected Topics [Title of Topic] (as needed)
Health 111 Principles and Concepts in Personal Health (F, Sp, Su)
Health 220 Advanced First Aid and CPR (F, Sp, Su)
Health 303 (503) Pharmacology and Sports (Sp)
Health 325 (525) Stress Management (F, Sp)
Health 330 (530) Introduction to Epidemiology (F, Sp)
Health 351 Substance Abuse Prevention (F, Sp)
Health 353 (553) Human Sexuality (F, Sp)
Health 360 Healthy Aging (as needed)
Health 406 Facilitating Behavior Change (as needed)
Health 410 Health Education and Promotion (F, Sp)
Health 475 Health Methods (as needed)
Health 485 (685) Workshop in Health: [Title of Workshop] (as needed)
Health 700 Developing, Implementing and Evaluating Health Promotion Programs (as needed)
Health 703 Advanced Pharmacology and Sports (as needed)
Health 750 Workshop in Selected Topics [Title of Topic] (F, Sp)
Health 775 School Health Methods (as needed)
Health and Physical Education 20-Topics in Sports Officiating [Name of sport] (as needed)
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 Developmental Physical Education for Elementary and Middle School Children (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 400 Anatomy and Exercise Physiology (Sp)
Health and Physical Education 410 Teaching Models in Physical Education (F)
Health and Physical Education 411 (611) Secondary Instruction Strategies and Curriculum Development (F)
Health and Physical Education 412 (612) 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 (685) Workshop in Physical Education: [Title of Workshop] (as needed)
Health and Physical Education 730 Theory and Application in Physical Education \& Sport Pedagogy (as needed)
Health and Physical Education 750 Workshop in Selected Topics [Title of Topic] (F, Sp)
Human Performance 206 Tumbling, Fitness and Self-Testing Activities (as needed)
Human Performance 207 Principles of Fitness Training (F, Sp)
Human Performance 209 Professional Orientation (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 Sport (as needed)
Human Performance 350 (550) 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 (632) Sport and Exercise Psychology (F, Sp)
Human Performance 435 (635) Nutrition for Health, Fitness and Sport (F, Sp)
Human Performance 440 (640) Evaluation in Human Performance (F, Sp)
Human Performance 485 Workshop in Human Performance [Title of Topic] (F, Sp, Su)
Human Performance 491 Internship (F, Sp, Su)
Human Performance 705 Applied Scientific Principles of Human Performance (as needed)
Human Performance 713 Research in Health and Human Performance (as needed)
Human Performance 715 Leadership in Health and Human Performance (as needed)
Human Performance 740 Sport and Exercise Nutrition (as needed)
Human Performance 750 Workshop on Selected Topics [Title of Topic] (as needed)
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 (F, Sp)
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 138 Country/Western and Line Dancing (as needed)
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 (F)
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 150 Pickleball and Paddle Tennis (as needed)
Physical Activity 152 Snowskiing/Snowboarding (as needed)
Physical Activity 155 Racquetball (F, Sp)
Physical Activity 160 Tennis (F, Sp)
Physical Activity 161 Intermediate Tennis (F, Sp)
Physical Activity 165 Backpacking/Geocaching (F)
Physical Activity 170 Special Topics in Physical Education (as needed)
Physical Activity 175 Volleyball (F, Sp)
Physical Activity 180 Intermediate Basketball (F, Sp)
Physical Activity 182 Flag Football (F)
Physical Activity 185 Physical Fitness Training (as needed)
Physical Activity 190 Softball (F)
Physical Activity 195 Varsity Athletics (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, Ruby L. Black, Gloria A. Browning, Peggy A. Davis, Chelsey Elliott, Julie P. Floyd, Shirley A. Fry, Linda W. Luther, Alissa R. Parrish, Mary E. Radford, Esther C. Sellars, Victoria S. Seng, Ethel B. Spivey, Jeannie Walker, Nancy A. Warren

## Mission

The Department of Nursing's mission is to assist in meeting a regionally recognized need for nurses by preparing a professional nurse capable of synthesizing theoretical and empirical knowledge incorporating concepts from the physical and behavioral sciences, humanities and discipline of nursing in developing and implementing nursing practice. Faculty are committed to mentoring students and to advancing the profession of Nursing through a variety of scholarly activities and service to both the campus and community.

## Expected Outcomes

Upon successful completion of the program, the graduate is expected to:

1. demonstrate synthesis of theoretical and empirical knowledge in developing and implementing nursing practice reflecting understanding of the arts, sciences, humanities and the discipline of nursing.
2. practice the scope of professional nursing with its multiple roles and responsibilities in providing care of the client/client system, as influenced by the historical, ethical, technological and legal aspects of nursing's current and evolving practice.
3. use critical thinking to initiate scientific and creative methods of problem solving to explore, evaluate and select solutions to challenging situations.
4. assess client/client system utilizing the Neuman Systems Model, focusing on physiological, psychological, sociocultural, developmental and spiritual variables in response to environmental stressors.
5. analyze the data collected to determine the client/client system's energy state and the need for nursing intervention.
6. plan nursing interventions to assist the client/client system in retaining, attaining, or maintaining optimal health with regard to the wellness-illness continuum.
7. intervene using the plan of care formulated to assist the client/client system in retaining, attaining or maintaining an optimal level of health.
8. evaluate the client/client system's response to nursing interventions in primary, secondary and tertiary preventions to determine their effectiveness in strengthening the lines of defense and resistance and managing the environmental stressors within the context of the physiological, psychological, sociocultural, developmental and spiritual variables possessed by humankind.

## Major

## Bachelor of Science in Nursing (5310)

Nursing is a profession for individuals interested in a lifetime of challenge. As a critical part of the health-care 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 71 semester hours of nursing courses and 52 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), formerly the National League for Nursing Accrediting Commission, Inc. (NLNAC).

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.

## Admission, Advanced Standing, Retention, and Readmission

The nursing program is open to men and women who satisfy the entrance requirements of the university and the nursing program. Students are eligible to participate in extracurricular activities made available by the university to students of all disciplines.

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

All students not currently enrolled at UT Martin are required to apply for admission to the university by submitting an application to the Admissions Office.
Admission to the B.S.N. clinical program is separate from admission to the university. Applicants must submit a separate application to the Department of Nursing for admission to clinical nursing. Priority is given to applicants whose application is received by February 1 before the fall semester in which admission to B.S.N. clinical nursing courses is desired. Admission priority will also be given to students who have successfully completed all the courses listed in the B.S.N. curriculum for the freshman year (or at least 33 semester hours of required general education courses which include Chemistry 121, Mathematics 140 or 185 or 251, Microbiology 251, Psychology 101, and Zoology 251 or equivalent courses). A grade of D or F in any of these specified
required courses will delay or alter admission to the clinical nursing program. The applications are screened for selection on a competitive basis by the Department of Nursing Admissions and Policies Committee.

Students accepted to begin B.S.N. nursing courses are required to:

1. have met all UT Martin admission requirements.
2. complete a nursing pre-entrance exam as designated by UT Martin Department of Nursing. The applicant's score on this exam will be used in the selection process.
3. be certified in CPR (Cardio-Pulmonary Resuscitation) Basic Health Care Provider before beginning Nursing 212 clinical experiences.
4. maintain a grade of C or above in all required courses (otherwise the student may not be allowed to begin the B.S.N. program) and a cumulative GPA of 2.00 or above.
5. 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.
6. provide evidence of negative report on drug screen and felony background checks.
7. provide documentation of current screenings and immunizations as required by the Centers for Disease Control and Preventions and clinical site guidelines in addition to those required by UT Martin.
8. 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 1 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. successfully pass any written exams and skills evaluations required by the Department of Nursing to demonstrate nursing competencies comparable to the placement level requested.
6. if licensed practical/vocational nurse, successfully pass Nursing 212 and 231 Fundamentals I \& II by challenge examinations (will include skills evaluation). Nursing 221 Concepts and Theory, Nursing 201-202 Pharmacology I-II and Nursing 241 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 a C 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 a C 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 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. CPR (cardiopulmonary resuscitation) Basic Health Care Provider certification must be kept current while enrolled in nursing courses.
6. Students enrolled in clinical nursing courses are required to have 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.
8. Students enrolled in clinical courses may be subjected 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 Preventions and clinical agency guidelines.
10. Personal health insurance must be kept current while enrolled in clinical nursing courses.

## Readmission

1. A period of one year may elapse before a student is readmitted to B.S.N. clinical nursing program since nursing courses are taught in sequence and normally are offered only once a year.
2. Application for readmission to clinical nursing courses must be filed with the Department of Nursing by February 1 for readmission to fall semester and June 15 for readmission to spring semester. Before readmission is considered,
a. all grades of less than C in required non-nursing courses must have been removed if offered by UT Martin prior to the readmission date, and
b. the applicant will be required to demonstrate evidence of retention of knowledge and skills acquired from previous nursing courses, and
c. the applicant will be required to retake Kaplan Integrated tests given in corequisite nursing courses and/or the previous level of nursing. For readmission, the applicant must meet designated bench marks on Kaplan Integrated tests, and/or complete Kaplan remediation, and successfully pass skill evaluations.
3. Readmission is contingent on space availability.
4. All students will be evaluated on an individual basis with consideration given to each student's potential
for successfully completing the program, which includes both clinical and academic performance. Readmission may be denied even if space is available.
5. A student may repeat only one time any nursing course in which a grade of D or F had been achieved.
6. A student who receives two grades of $D$ or below in nursing courses will not be eligible for readmission, even if the student has already repeated one of the courses and received a grade of C or above.
7. Students must comply with admission and retention policies.

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 then $70 \%$ 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 212, 221, 231, 331, 341, and 404 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.
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 350 Transition to Professional Nursing in place of Nursing 321.
4. take the remainder of required nursing courses. Students may request to challenge Nursing 201, 202, 411 and 431 . Three years of clinical experience within the last five years will be required to challenge either Nursing 411 or 431.
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. White 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 - $\$ 38.00$ per year.
4. Kaplan Integrated Testing Program fees - $\$ 75$ per semester.
5. Supply pack - $\$ 70.00$ per year.
6. Background check/drug screen per year — $\$ 75.00$ per year.

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

Microbiology 251 ........................................................................... 4
Zoology 352 .................................................................................. 4
Biological and Physical Systems (Note 1) ........................................ 8
Chemistry 121, Zoology 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 313
Humanities ................................................................................... 9
Selected from approved general education listing
Mathematics ..........................................................................................
Mathematics 140 or 185 or 251, and 210
Social and Behavioral Sciences ...............................................................
Psychology 101; one additional course from Health 111,
Social Work 220, Sociology 201, or Sociology 202
Total hours General Education ............................................. 52
Note 1: Highly recommend both 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 201................................................................................... 2
Nursing 202................................................................................... 2
Nursing 212.................................................................................. 6
Nursing 221.................................................................................. 2
Nursing 231.................................................................................. 6
Nursing 241 or 312 ....................................................................... 5
Nursing Level II:
Nursing 321 or 350 ..................................................................... $7 / 8$
Nursing 331.................................................................................. 7
Nursing 341.................................................................................. 6
Nursing 362.................................................................................. 1
Nursing Level III:
Nursing 404. ..... 8
Nursing 411 ..... 6
Nursing 431 ..... 6
Nursing 442 ..... 5
Nursing 451 ..... 2
Total Hours Major Field ..... 71
Minimum hours required for a B.S.N. degree ..... 123

## Facilities

Lectures 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. Numerous audio-visuals are available for student instruction-learning resources.
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 demonination, 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. A

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, the honor society for nursing. 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 201 Pharmacology I (F, Su)

Nursing 202 Pharmacology II (Sp, Su)
Nursing 212 Foundations in Nursing I (F)
Nursing 221 Concepts and Theories in Nursing (F)
Nursing 231 Foundations in Nursing II (Sp)
Nursing 241 Health Assessment (Sp)
Nursing 280-289 Topics in Health Care [topic title] (F, Sp)
Nursing 312 Health Assessment (Su)
Nursing 321 Acute and Chronic Health Care Nursing I (F)
Nursing 331 Acute and Chronic Health Care Nursing II (Sp)
Nursing 341 Mental Health Nursing (F)
Nursing 350 Transition to Professional Nursing (F)
Nursing 362 Trends and Issues in Nursing (F, Sp)
Nursing 380-389 Topics in Health Care [topic title] (F, Sp)
Nursing 404 Maternal-Child Nursing (F)
Nursing 411 Advanced Health Care Nursing (Sp)
Nursing 431 Community Health Nursing (F)
Nursing 442 Leadership and Management in Nursing (Sp)
Nursing 451 Research in Nursing (Sp)
Nursing 480-489 Topics in Health Care [topic title] (F, Sp)

Complete course descriptions can be found in the Course Description section of the catalog.

# Office of Interdisciplinary Studies 

Dr. R. Mark Kelley, Dean<br>208 Gooch Hall<br>731-881-7589<br>fax 731-881-1044

## 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.

## Expected Outcomes

The student will:

1. complete the General Education Core requirements.
2. create a plan of courses in an Area of Emphasis to complete the bachelor's degree with the assistance of an adviser.
3. seek approval for the Area of Emphasis from the department/college in which the courses are located.
4. complete all requirements for the Bachelor of Interdisciplinary Studies degree in a timely manner.

## 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 Dean of the College of Education, Health, and Behavioral Sciences and copies filed with the university registrar and the adviser prior to the semester in which the student will have earned 90 hours toward the degree. 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 University Studies Council.

If a student is a first-time transfer or is readmitted after one academic year and has already earned 90 hours, the requirement to submit a degree plan prior to the semester in which the student will have earned 90 hours is waived but the student must file a degree plan their first semester at UT Martin.

## 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)
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. Electives (28-40)

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. Richard J. Helgeson, 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 and methods of natural science, engineering, computer science, and mathematics; second, to provide programs of professional education 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 schools of their choice.

## Organization

The College of Engineering and Natural Sciences is composed of five departments: Biological Sciences; Chemistry and Physics; Computer Science; Engineering; and Mathematics and Statistics. The pre-professional curricula in the health sciences are also supported within this college.

## 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, Health 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 and Mechanical 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<br>Occupational Therapy<br>Optometry<br>Pharmacy<br>Physical Therapy<br>Physician Assistant

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 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 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 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 health science pre-professional plans is available in the pre-professional program coordinator's office. Students interested in any of the health science pre-professional 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 professional school. 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 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 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.

For most D.C. programs:

- Applicants must earn a minimum of 90 semester hours prior to admission.
- Applicants must earn a cumulative grade point average (GPA) of at least 3.0.
- Applicants must demonstrate that all required coursework 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 expected to have some knowledge of the field from direct observations as part of their pre-professional experiences.

The minimum requirements listed by the Council on Chiropractic Education for admission to chiropractic school are as follows:

- 6 hours of English communication and/or English language skills
- 3 hours of psychology
- 6 hours of biological sciences with lab
- 3 hours of general/inorganic chemistry with lab
- 6 hours of organic and/or biochemistry with lab
- 3 hours of physics with lab
- 3 hours of physics electives
- 3 hours of chemistry electives--Chemistry 122 General Chemistry is strongly recommended as the
chemistry elective because it is a prerequisite for Chemistry 341 Organic Chemistry.
- 15 hours of social sciences or humanities electives --Recommended humanities/social science electives include: political sciences, economics, anthropology, geography, social work, history, government, creative arts, music, theatre, language, philosophy, culture, literature, religion, sociology, and foreign language

In addition to the courses listed above, most D.C. programs require enough elective hours to total 90 hours of prerequisites. While not an exhaustive list, the following courses are strongly recommended for students considering applying to chiropractic 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 Cell and Comparative Biochemistry
- Biochemistry 419 Biochemistry Laboratory
- Biology 130 Foundations of Biology: Ecology, Evolution, and Diversity
- Biology 140 Foundations of Biology: Cell and Molecular
- Chemistry 121, 122 General Chemistry
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Microbiology 310 General Molecular Microbiology
- Microbiology 311 Public Health Microbiology
- Physics 211 College Physics
- Physics 212 College Physics OR Exercise Science 430 Exercise Physiology OR Human Performance 440 Evaluation in Human Performance OR Mathematics 210 Elementary Statistics and Probability OR Psychology 315 Experimental Psychology I
- Psychology 101 Introduction to Psychology
- Zoology 251, 352 Human Anatomy and Physiology I, II


## 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
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 210 Elementary Statistics and Probability
- 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 professional 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, students who have earned a baccalaureate degree are often given preference over those who have not. 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 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, preference is given to applicants who have earned a bachelor's degree.
- 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 directly to each dental school or through the American Dental Education Association Associated American Dental Schools Application Service (ADEA AADSAS) in the summer or fall 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

- Art 245 Sculpture
- Biochemistry 411, 412 Cell 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 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
- Zoology 462 Neuroscience


## 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 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
- Child and Family Studies 100 Lifespan Human Development
- Communication 230 Public Speaking
- Computer Science 201 Introduction to Computer Applications
- English 111, 112 English Composition
- Health 111 Principles and Concepts in Personal Health
- Health 220 Advanced First Aid and CPR
- History 201, 202 History of the United States I, II
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 251 General Bacteriology
- Nutrition 100 Introductory Nutrition
- Nutrition 322 Principles of Nutrition
- Psychology 101 Introduction to Psychology
- Sociology 101 Introduction to Anthropology
- 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 $\mathrm{MHI} / \mathrm{MHIM}$ 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, 52 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 meet the minimum requirements for admission to medical school as outlined by the American Association of Medical Colleges (AAMC). 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.O. 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. 0 programs:

- Students are eligible to apply after completing a minimum of 90 semester hours of course work; however, preference is 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.
- 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 listed by the AAMC for admission to medical school are as follows:

- One year of biology
- One year of physics
- One year of English
- One year of chemistry
- One year of organic chemistry

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 220, 221 University Physics
- 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

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

- Biochemistry 411 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
- Chemistry 121,122 General Chemistry
- Chemistry 320 Quantitative Analysis
- Chemistry 341, 342 Organic Chemistry
- Chemistry 420 Analytical Methods
- English 111, 112 English Composition
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 185 Precalculus
- 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 UT Martin Pre-Occupational Therapy (OT) Plan is designed to prepare students for application to professional school. 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 (D.O.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-0T 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.
While most M.0.T. and D.0.T. programs require applicants to earn a baccalaureate degree before matriculation into the professional program, some do not. However, for programs that do not require a baccalaureate degree, students who have earned a 4-year degree are often viewed as more competitive than those who have not. Students may choose to major in any subject area they wish as long as they also complete the courses required by their chosen M.O.T. or D.0.T. program(s). The Biology-Organismal Biology Concentration and Health and Human Performance: Exercise Science and Wellness majors include many of the courses listed below. 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.O.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

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 professional 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 0.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 given preference over those who have not. 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 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, preference is 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 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, 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 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 Human Performance 440 Evaluation in Human Performance OR Psychology 318 Experimental Psychology II
- Microbiology 310 General Molecular Microbiology
- Physics 220, 221 University Physics
- 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 professional 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).

For most Pharm.D. programs:

- Students are eligible to apply after completing a minimum number of semester hours (varying from 60 hours to 90 hours) of course work; however, preference is 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 complete the Pharmacy College Admission Test (PCAT) 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.
- 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
- 3 hours of communications
- 6 hours of English
- 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

- 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 Laboratory
- Biology 432 Developmental Biology
- Biology 436 Molecular Biology
- Biology 437 Molecular Biology Lab
- 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
- Communication 230 Public Speaking
- Economics 201 Principles of Macroeconomics
- Economics 202 Principles of Microeconomics
- English 111, 112 English Composition
- Mathematics 210 Elementary Statistics and Probability
- Mathematics 251 Calculus I
- Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Physics 220, 221 University Physics
- Zoology 251, 352 Human Anatomy and Physiology I, II


## Pre-Physical Therapy Plan

The UT Martin Pre-Physical Therapy Plan is designed to prepare students for application to professional school. 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
- 6 hours of humanities--Recommended electives: fine arts, English, history, foreign language, philosophy

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
- Economics 201 Principles of Macroeconomics
- Economics 202 Principles of Microeconomics
- English 111, 112 English Composition
- 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
- Psychology 310 Human Relations and Personal Adjustment
- Psychology 313 Developmental Psychology
- Psychology 350 Abnormal Psychology
- Psychology 450 Theories of Personality
- Sociology 101 Introduction to Anthropology
- 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 professional school. 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 should submit their application directly to each physician assistant school or through the Central Application Service for Physician Assistants (CASPA) in the spring or summeof 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 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 300 Medical and Scientific Terminology
- Biology 336 Introductory Genetics
- Biology 337 Cell Biology
- Biology 338 Cell Biology Laboratory
- Chemistry 121,122 General Chemistry
- Chemistry 320 Quantitative Analysis
- Chemistry 341, 342 Organic Chemistry
- English 111, 112 English Composition
- Health 330 Introduction to Epidemiology
- Health 353 Human Sexuality
- Mathematics 140 College Algebra and Elementary Functions
- Mathematics 210 Elementary Statistics and Probability
- Microbiology 310 General Molecular Microbiology
- Microbiology 401 Immunology
- Physics 211, 212 College Physics
- Psychology 101 Introduction to Psychology
- Psychology 313 Developmental Psychology
- Psychology 350 Abnormal Psychology
- Zoology 251, 352 Human Anatomy and Physiology I, II
- Zoology 440 General Parasitology
- Zoology 461 Histology


# 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:

- have a working knowledge of the diversity of life,
- have a working knowledge of cell biology, genetics, ecology and evolutionary processes,
- have a basic understanding of the history and future of the discipline,
- have a good understanding of ethical and moral issues associated with the discipline,
- be knowledgeable on how to access and study original biological literature,
- have a basic knowledge on how to write a scientific paper on a biological subject using acceptable standards of style, formatting and proper literature citations,
- have an understanding that biology is a discipline that requires "life-long" learning,
- undertake intellectually challenging tasks and use knowledge and technology to solve problems and score at or above the national mean on the Biology Major Field Examination.


## Admission Requirements

A student must complete the following courses with a grade of C or better in each course in order to declare a Major in Biology; Biology 130, Biology 140, Chemistry 121, and one of the following three courses-Biology 331 or Biology 336 or Biology 391.

Upon successful completion of these requirements, students may formally declare a Major in Biology with one of the three Concentrations listed below. Change of Major forms are available in the departmental main office.

## Biology Major

B.S. Curriculum. The Department of Biological Sciences offers three 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.

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
Biology 130; 140; 331 or 391; 336; 337; 338; 410, 411, 412 or 413; 436; 437
Microbiology
Electives:
Chemistry $121,122,341$ and 342
Mathematics 210 and either Mathematics 160 or 251
Physics 211 and 212
Biology Requirements:

## .

 Microbiology 310Sixteen additional hours selected from upper-division courses offered by the Department of Biological Sciences.

Note: Four hours of 200-level courses may be used to satisfy the elective requirement, excluding Microbiology 251 and Zoology (ZOOL) 201. 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 or 47 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.)

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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 Biology 130; 140; 331; 336; 391; 410, 411, 412 or 413
    Cell Biology or
            Microbiology Biology 337 (and 338) or Microbiology 310
    Botany Select one course from Botany 301, 302, 303, or 305
    Invertebrate Zoology Select one course from Zoology 315, 325, 326, or 440
    Vertebrate Zoology Select one course from Zoology 251, 319, 320, 321, 322, 323, 328, or 352
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Electives: $\quad$ Thirteen to 15 additional hours selected from upper-division courses offered by the
Department of Biological Sciences.
Note: Four hours of 200 level courses except Zoology 201 may be used to satisfy the
elective requirement, provided that Zoology 251 is not selected to satisfy the Verte-
brate Zoology requirement. Microbiology 251 may not be used for elective credit if
Microbiology 310 is used to satisfy the Cell Biology and Microbiology requirement. 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 | Chemistry 121, 122, and either 310 (and 319) or 341 |
| Mathematics | Mathematics 210 and either Mathematics 160 or 251 |
| Professional Skills: | In addition to the basic skills provided by successful completion of the required <br> supporting courses in Chemistry and Mathematics, students in the Ecology and |
|  | Environmental Biology concentration are required to complete two of the following <br> courses and earn a grade of C or better in each of the selected courses: Agricultural |
|  | Engineering Technology 482, Chemistry 320, Geography 310, 364 |

Biology Requirements:

Biology
Botany
Ecology
Electives:

Biology 130, 140, 336, 391, and either 410, 411, 412 or 413
Botany 303
Biology 331; 443; and either Botany 431 (and 432) or Zoology 441 (and 442) Seventeen additional hours selected from upper-division courses offered by the Department of Biological Sciences. Eight or nine of the hours must be selected from the following Environmental Electives: Biology 418, 444, 475; Botany 302, 305, 431, 432; Plant Science 341; Soil Science 430; Zoology 315, 319, 320, 321, 322, 325, 326, $440,441,442,443$. The remaining hours may be selected from any of the courses offered by the department. Credit may not be received for both Microbiology 251 and Microbiology 310.
Note: Four hours of 200-level courses except Zoology 201 may be used to satisfy the elective requirement. No more than four hours of courses taught by other departments may be used to satisfy the elective hours. 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.

## 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.

## Description of Courses Available 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 the on-campus coordinator, Department of Biological Sciences, UT Martin. Application forms must be completed as early as possible and not later than April 30 of the year of intended attendance.

Additional information may be obtained from the Gulf Coast Research Laboratory On-Campus Coordinator, Department of Biological Sciences, The University of Tennessee at Martin.

Biology 405 Marine Ecology (5) A consideration of the relationship of marine organisms to their environment. The effects of temperature, salinity, light, nutrient concentration, currents, food, predation and competition on the abundance and distribution of marine organisms are considered. Prereq: Sixteen bours of biological sciences, including general zoology, general botany and invertebrate zoology.

Biology $\mathbf{4 0 7}$ Principles of Marine Aquaculture (6) An introduction to principles and technologies applied to the culture of commercially important marine organisms. Prereq: Sixteen bours of biological science.

## Biology 459 Coastal Ecology for Teachers

 (4) Course provides teachers with background in basic coastal ecology, enhancing awareness and understanding of marine and aquatic environments. Prereq: Consent of instructors.Botany $\mathbf{4 2 0}$ Marine Phycology (4) A survey, based upon local examples of the principal groups of marine algae and marine flowering plants, treating structure, reproduction, distribution, identification and ecology. Prereq: Ten bours of biology, including botany.

Botany 422 Coastal Vegetation (3) A study of general and specific aspects of coastal vegetation, with emphasis on local examples. Prereq: Ten hours of biology, including general botany.
Botany 423 Salt Marsh Plant Ecology (4) Species composition of tidal marshes, vegetational structure and distribution of salt marshes, with emphasis
on flowering plants of local marshes, salt tolerance, adaptation, reproduction, primary production, water filtering capacity and the effect of physical factors on plant growth and life cycles are considered. Techniques used to establish new marshes are also explored. Prereq: General botany (plant taxonomy, plant physiology, plant morphology and general ecology helpful) or consent of instructor:

## Marine Science 300 Marine Science I;

Oceanography (5) An introduction to oceanography which integrates physical, geological, chemical and biological oceanography to provide students a multidisciplinary foundation in the fundamentals of oceanography. Prereq: College algebra, one semester of chemistry, geology and physics courses helpful, but not required.

## Marine Science 301 Marine Science II: Marine

 Biology (5) General introduction to marine biology with emphasis on local fauna and flora; their habitats, life cycles and survival strategies. Prereq: Eight semester hours of biological sciences.
## Marine Science $\mathbf{4 5 7}$ Marine Science for

 Teachers (3) A course designed to introduce students, particularly in-service teachers, to the study of marine science and to promote the teaching of marine biology at all grade levels. Prereq: Biology background or consent of instructor:Marine Science $\mathbf{4 5 8}$ Marine Science for Elementary Teachers (3) A course designed to prepare teachers of elementary grade children to conduct classes using marine-related materials. Prereq: Six hours in biological sciences.

Marine Science 482 Coastal Marine Geology (3) A study of inshore and nearshore geological processes, sedimentation patterns and land form development. Prereq: Six hours of geology.
Marine Science 492 Applications of Biotechnology in Marine Biology (6) Introduction to basic biochemical and molecular techniques used in research in the fields of systematics, fisheries science, aquaculture and aquatic toxicology. Prereq: Eight semester hours of zoology, general and organic chemistry, biochemistry recommended or permission of course coordinator.
Microbiology $\mathbf{4 0 9}$ Marine Microbiology (5)
The role of microorganisms in the overall ecology of the oceans and estuaries. Prereq: General microbiology and environmental microbiology or consent of instructor.
Zoology $\mathbf{4 0 3}$ Marine Invertebrate Zoology (5) A concentrated study of the important free-living, marine and estuarine invertebrates of the Mississippi Sound and adjacent continental shelf of the northeastern Gulf of Mexico, with emphasis on structure, classification, phylogenetic relationships, larval developmental and functional processes. Prereq: Sixteen bours of zoology, including at least an introductory course in invertebrate zoology.

## Zoology 404 Parasites of Marine Animals

(6) A study of the parasites of marine estuarine animals, with emphasis on morphology, taxonomy, life histories and adaptations of animals commonly found associated with tidal marshes, seagrasses and sand beaches, with emphasis on those occurring
in the northern Gulf of Mexico. Abiotic and biotic factors controlling or limiting the occurrence and distribution of fauna in these three habitat types will be compared and contrasted. Prereq: Sixteen hours of biological sciences and junior standing or consent of instructor.

Zoology $\mathbf{4 0 8}$ Marine Ichthyology (6) Major piscine taxa occurring in the Mississippi Sound and adjacent habitats, principles involved in their classification and taxonomy, their morphological, physiological and ecological adaptations and the evolutionary relationships of these organisms. Prereq: Sixteen bours of zoology, including comparative anatomy or consent of instructor:

## Zoology $\mathbf{4 1 0}$ Marine Fisheries Management

(4) An overview of practical marine fishery management problems. Prereq: Consent of instructor:

Zoology $\mathbf{4 2 0}$ Marine Mammals (5) An examination of the natural history and population ecology of cetaceans, including life history, distribution, population dynamics, diet and feeding, social structure, evolution and zoogeography. Pinnipeds, sirenians, sea otters and the polar bear will also be included. Prereq: Twelve semester hours of biology including Marine Science II or Marine Ichthyology.
Zoology 406 Fauna and Faunistic Ecology of Tidal Marshes, Seagrasses and Sand Beaches (5) A survey course dealing with the taxonomy, distribution, trophic relationships, reproductive strategies and host-parasite relationships. Prereq: General parasitology or consent of instructor.

## Facilities

The Biology Department and faculty offices are located in Brehm Hall. The department directs teaching and research activities on campus and at the teaching and research facility located on Reelfoot Lake. The Department of Biological Sciences is affiliated with the Gulf Coast Research Laboratory at Ocean Springs, Mississippi, where a full summer program of courses is offered.

## 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)
Biology 331 (531) General Ecology (F, Sp)
Biology 336 (536) Introductory Genetics (F, Sp)
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)
Biology 410 Seminar in Biological Sciences [topic title] (F, Sp)
Biology 411 Seminar in Biological Sciences [topic title] (F, Sp)
Biology 412 Wildlife Biology Seminar (F)
Biology 413 Wildlife Biology Seminar (Sp)
Biology 418 (618) Limnology (F-odd)
Biology 420 (620) Human Virology (F)
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 (F-odd)
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 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 (as needed) |
| Botany 421 (621) Plant Physiology (Sp-even) |
| Botany 431 (631) Plant Ecology (F) |
| Botany 432 (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 (610) Applications in Food Microbiology (F) |
| Zoology 201 Human Anatomy and Physiology (F, Sp, Su) |
| Zoology 251 Human Anatomy and Physiology I (F, Sp) |
| Zoology 304 (504) Comparative Vertebrate Anatomy (as needed) |
| Zoology 315 (515) Invertebrate Zoology (Sp-even) |
| Zoology 319 (519) Mammalogy (F) |
| Zoology 320 (520) Ichthyology (Sp) |
| Zoology 321 (521) Ornithology (Sp) |
| Zoology 322 (522) Herpetology (F-even) |
| Zoology 323 (523) Field Ornithology (as needed) |
| Zoology 325 (525) General Entomology (F) |
| Zoology 326 (526) Aquatic Macroinvertebrates (Su) |
| 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) |
| Zoology 440 (640) General Parasitology (Sp-odd) |
| Zoology 441 (641) Animal Ecology (F) |
| Zoology 442 (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) |

# Department of Chemistry and Physics 

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## Faculty

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## 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.

## Expected Outcomes

Upon completion of the B.S. in Chemistry or the B.S. with a major in Chemistry, the student is expected to have:

- obtained a comprehensive understanding of the fundamental principles of chemistry and the primary subfields of chemistry: analytical, biochemical, inorganic, organic, and physical chemistry, appropriate to the degree;
-acquired knowledge of mathematics sufficient to understand and derive fundamental relationships and to analyze and manipulate experimental data;
- acquired knowledge of the fundamental principles of physics;
- learned safe laboratory practices;
- demonstrated ability to solve problems and reason scientifically;
- acquired the ability to read, evaluate, and interpret information on a numerical, chemical, and general scientific level in preparation for a lifetime of learning and contribution;
- acquired the ability to assemble experimental chemical apparatus and to design experiments;
- acquired the ability to effectively use modern instrumentation in acquisition of information on chemical substances;
- demonstrated the ability to effectively communicate results of scientific inquiries orally and in writing.


## Chemistry Major

B.S. (6310) Curriculum. Chemistry 121-122 and Chemistry 320 are prerequisites to a major which consists of the following courses: Chemistry $341,342,351$ or 352,359 , and eight additional hours of upperdivision chemistry or biochemistry. Mathematics 251-252 and Physics 211-212 or Physics 220-221 are also required. Majors in chemistry must complete a minor or a second major and all general education requirements for the B.S. degree. (See Undergraduate Degrees and Specialized Programs section of catalog.)

## 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 110 or 111 and 112, Communications 230 .................................................................. 9-10
Complete two courses representing two areas chosen from Economics 201, 202; Political Science
210; Psychology 101; Sociolo....................................................................................................... 201
Complete three courses representing at least two different areas chosen from English 250,
251, 260, 261, 270, 271; Geography 151, 152, 202; History 121, 122, 201, 202; Philosophy $110,120,160$. ..... 9
Complete 122 or a higher-numbered course in any foreign language excluding culture courses taught in English ..... 3-8
Complete one course chosen from Art 110; Art History 210, 211; Music 111, 112 ..... 3
II. Chemistry (45-46 hours)Chemistry $121,122,320,341,342,351,359,410,470,490$; Biochemistry 411 and 419 and threeadditional courses selected from Chemistry 350, 352, 420, 422, 430, 440, 460, and Biochemistry412.
In order for the ACS-certified degree to indicate one of the following specializations, thecoresponding listed courses are required. The listed chemistry and biochemistry courses may beused in meeting the above requirement for thee additional courses.Biochemistry: Biochemistry 412, Microbiology 310, Biology 337 and 338Organic Chemistry: two courses selected from Chemistry 350, 430, and 460Analytical Chemistry: Chemistry 420 and one course selected from Chemistry 422, 430, andBiochemistry 412
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.


#### Abstract

A minimum of 120 hours, at least 42 of which must be at the 300 or 400 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 offers students a varied program of projects, seminars, plant tours, films and other activities. In each year since 1977 the UT Martin SMACS chapter has been designated an "Outstanding Chapter" by the American Chemical Society, a record unmatched by any other chapter among the over 900 nationwide.
## Departmental Awards/Scholarships

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.

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.

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.

Outstanding Chemistry Major Award is a cash amount given to an outstanding senior(s) chemistry major. The selection is made by the chemistry faculty.

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 Handbook of Chemistry and Physics. 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 (F)
Biochemistry 412 (612) Cellular and Comparative Biochemistry (Sp)
Biochemistry 419 (619) Biochemistry Laboratory (Sp)
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)
Chemistry 122 H Honors General Chemistry II (Sp)
Chemistry 201 Introduction ot Forensic Science (F)
Chemistry 202 Introduction ot 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)
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 410 (610) Physical Inorganic Chemistry (F)
Chemistry 420 (620) Analytical Methods (Sp)
Chemistry 422 Forensic Chemistry (Sp)
Chemistry 430 (630) Spectrometric Methods (Sp-odd)
Chemistry 440 (640) 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)
Physics 212H Honors College Physics (Sp)
Physics 220-221 University Physics (F, Sp)
Physics 322 University Physics (F)
Physics 323 University Physics (Sp)
Physics 331-332 (531-532) Mechanics (as needed)
Physics 343 Methods in Physics Research (as needed)
Physics 441-442 (641-642) Electricity and Magnetism (as needed)
Physics 471-472 (671-672) Modern Physics (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. Edward W. Wheeler, Chair<br>101 Johnson EPS Building<br>731-881-7571<br>fax 731-881-7375

Faculty
James R. (Bob) Bradley, Alton B. Coalter, Yi Gu, Joshua T. Guerin.

## Mission

The mission of the Computer Science program is to prepare students for employment or graduate study in computer science. With a primary focus on teaching, the department emphasizes quality undergraduate instruction. The educational program is delivered in an environment that promotes the development of programming, theoretical and technical skills. The faculty performs scholarly activities and services consistent with the teaching emphasis of the discipline and the mission of the College of Engineering and Natural Sciences.

## Program Educational Objectives

The following program educational objectives have been adopted by the faculty of the Department of Computer Science. After completion of our program, graduates will be able to:

1. design and implement solutions to a wide array of complex computer science, software and technology problems which meet the diverse needs of a broad spectrum of employers and graduate schools, while at the same time appreciating the social, economic and ethical issues in a modern global society.
2. work effectively on individual projects and on team based projects, demonstrating clear communication and presentation skills.
3. serve the computer science, software, and technology needs of West Tennessee and the broader regional, state, national and global market through professional employment in the computer science field and by 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. Computer Science majors are required to have a grade of C or better in Computer Science 221 and Computer Science 222 and must have an overall 2.00 average in courses offered for the major. Majors 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, he/she may be required to take college algebra and/or pre-calculus.

Computer Science majors are required to select biology, chemistry, or physics as one of the lab sciences. 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.
Course Requirements for Major Hours
Computer Science 221-222 Program Concepts and Problem Solving I, II ..... 6
Computer Science 301 Foundations of Computer Science I ..... 3
Computer Science 302 Foundations of Computer Science II ..... 3
Computer Science 320 Assembler Language and Computer System Organization ..... 3
Computer Science 335 Object-Oriented Programming. ..... 3
Computer Science 325 Data Structures ..... 3
Computer Science 360 Introduction to Computer Networks ..... 3
Computer Science 420 Computer Organization and Architecture. ..... 3
Computer Science 445 Computer Graphics OR Computer Science 475 Compilers, Interpreters and Language Translators ..... 3
Computer Science 470 Organization of Programming Languages. ..... 3
Computer Science 485 Computer Operating Systems ..... 3
Computer Science 495 Senior Seminar. ..... 3
Upper-division computer science electives, not including cooperative education ..... 6
The upper-division electives are usually chosen fromComputer Science 340, 380, 385, 410, 445 and 475.
English 325 Technical Communications ORInformation Systems 351 Business Communications3
Mathematics 210 Elementary Statistics and Probability ..... 3
Mathematics 251 Calculus I ..... 4
Mathematics 310 Linear Algebra ..... 3
Total Hours ..... 58

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 two of the following courses: Computer Science $211,221,222,226,250$ and 260 ; and 12 additional hours of computer science courses, at least 9 of which are upper-division.

## 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 201 Introduction to Computer Applications (F, Sp, Su)
Computer Science 211 Introduction to Computer Programming (F, Sp)
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 (F)
Computer Science 260 RPG Programming (Sp)
Computer Science 290 Topics in Computer Science [Topic title] (as needed)
Computer Science 301 Foundations of Computer Science I (F)
Computer Science 302 Foundations of Computer Science II (Sp)
Computer Science 320 Assembler Language and Computer Science Organization (F)
Computer Science 325 Data Structures (Sp)
Computer Science 335 Object-Oriented Programming (Sp)
Computer Science 340 (540) Numerical Analysis (as needed)
Computer Science 350 Advanced COBOL (Sp)
Computer Science 351 Object-Oriented System Analysis and Design (F)
Computer Science 352 Object-Oriented Systems Development (Sp)
Computer Science 360 Introduction to Computer Networks (F)
Computer Science 380 Artificial Intelligence (as needed)
Computer Science 385 Parallel Computing (as needed)
Computer Science 410 (610) Data Base Management Systems (F)
Computer Science 415 Web-Based Client-Server Programming (as needed)
Computer Science 420 (620) Computer Organization and Architecture (F)
Computer Science 435 Theory of Computation (as needed)
Computer Science 445 (645) Computer Graphics (F-odd)
Computer Science 458 Decision Support and Expert Systems (as needed)
Computer Science 470 (670) Organization of Programming Languages (Sp)
Computer Science 475 Compilers, Interpreters and Language Translators (F-even)
Computer Science 480 Internship in Computer Science (as needed) Economics 100 American Enterprise System (F)
Computer Science 485 (685) Computer Operating Systems (Sp)
Computer Science 490 (690) Advanced Topics in Computer Science [Topic title] (as needed)
Computer Science 495 Senior Seminar: [Title] (F)
Complete course descriptions can be found in the Course Description section of the catalog.

## Department of Engineering

Dr. Edward W. Wheeler, Chair<br>101 Johnson EPS Building<br>731-881-7571<br>fax 731-881-7375

## Faculty

RichardJ. Helgeson, Robert A. LeMaster, Jeffrey S. McCullough, Gregory H. Nail, Mohammad A. Obadat, J. Douglas Sterrett, Somsak Sukitannon, 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 (EAC) of the Accreditation Board for Engineering and Technology (ABET). After graduation from our program, engineers will be able to:

1. solve broad-based, complex practical engineering problems which meet the diverse needs of a broad spectrum of employers, while at the same time appreciating the social, economic and ethical issues in a modern global society.
2. work effectively on multidisciplinary engineering teams, demonstrating clear written and oral presentation skills.
3. serve the engineering needs of West Tennessee and the broader regional, state, national and global market, by being professionally employed.
4. continue to grow professionally through life-long learning with activities such as becoming a licensed professional engineer, pursuing graduate study, participating in continuing professional education and having active membership in professional engineering societies.

## Bachelor of Science in Engineering

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, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, telephone 410-347-7700) with a concentration in one of the following:
civil engineering (6511)
electrical engineering (6512)
industrial engineering (6513)
mechanical engineering (6514)

Engineering majors learn the common fundamentals of civil, electrical, industrial and mechanical engineering with 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 also may be used to satisfy engineering degree requirements, provided that the courses would be a part of 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 the major leading to the Bachelor of Science in Engineering (BSE) degree:

1. obtain an ACT math sub-score of 25 or higher or;
2. place into Mathematics 170 Trigonometry as determined by the math placement test administered by the Department of Mathematics and Statistics or;
3. 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 into the BSE degree program.
In order to be fully admitted to the Bachelor of Science in Engineering degree program, a student must complete with a grade of C or better and obtain a minimum GPA of 2.00 , computed using all attempts in a course, in the following courses: Engineering 121 Statics, Engineering 220 Strength of Materials, Engineering 241 Dynamics, Mathematics 251-252 Calculus I and II, Mathematics 320 Multivariate Calculus and Physics 220-221 University Physics I and II.

Prior to qualifying for full admission to the B.S.E. degree program, a student majoring in engineering receives academic advisement from an engineering faculty member and is allowed to take any lower-division (numbered 100-299) engineering course if the student meets the course prerequisites and corequisites and meets the department's prerequisite grade rule. Students who have not gained full admission to the B.S.E. degree program cannot take upper-division (numbered 300-499) engineering or industrial engineering courses, with the exception of Engineering 301 Computer aided Engineering/Design tools, Engineering 315 Engineering Analysis, 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.

To graduate with a Bachelor of Science in Engineering degree, the student must, in addition to meeting the university's graduation requirements and the curricula requirements specified in the following section, pass the National Council of Examiners for Engineering and Surveying (NCEES), Fundamentals of Engineering (FE) examination. Engineering students will be required to take the NCEES FE exam at the earliest possible date allowed by the Tennessee State Board of Architectural and Engineering Examiners. Currently this will mean the first semester of the student's senior year. The NCEES FE exam is offered twice each year, in April and October, and may be taken more than once.
I. General Education Requirements (51 Hours)
Communications 230 Public Speaking ..... 3
Chemistry 121 General Chemistry I ..... 4
English 110 or 111, 112 Composition I, II. ..... 6/7
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
Economics 201 Macroeconomics and one course from approved list
*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.
II. Major Field Requirements (50 Hours)
Engineering 101 Engineering Graphics ..... 3
Engineering 121 Statics ..... 3
Engineering 201 Engineering Methods ..... 2
Engineering 220 Strength of Materials ..... 3
Engineering 231 Digital Logic ..... 3
Engineering 232 Linear Circuits I ..... 3
Engineering 233 Electrical Laboratory I ..... 1
Engineering 241 Dynamics ..... 3
Engineering 301 Computer Aided Engineering/Design Tools. ..... 1
Engineering 310 Engineering Materials. ..... 3
Engineering 311 Engineering Applications of Probability \& Statistics ..... 3
Engineering 313 Industrial Internship ..... 1
Engineering 315 Engineering Analysis. ..... 3
Engineering 317 Instrumentation and Experimental Methods ..... 3
Engineering 340 Thermodynamics. ..... 3
Engineering 341 Fluid Mechanics ..... 3
Engineering 380 Engineering Economy. ..... 3
Engineering 409 Engineering Design and Project Management ..... 2
Engineering 410-411 Senior Design I, II ..... 4
III. Concentration Requirements (27 Hours)
Civil Engineering
Engineering 350 Elementary Surveying ..... 3
Engineering 351 Basic Structural Analysis ..... 4
Engineering 352 Transportation Engineering ..... 3
Engineering 450 Reinforced Concrete Design ..... 4
Engineering 451 Geotechnical Engineering. ..... 4
And approved concentration electives ..... 9*
Electrical Engineering
Computer Science 221 Programming Concepts and Problem Solving I ..... 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 461 Communication Systems. ..... 3
Engineering 462 Linear Control Systems Design ..... 3
And approved concentration electives ..... 8*
Industrial Engineering
Engineering 413 Engineering Management ..... 3
Engineering 462 Linear Control Systems Design ..... 3
Engineering 474 Manufacturing Processes ..... 3
Engineering 475 Automated Production Systems ..... 3
Industrial Engineering 310 Production Management ..... 3
Industrial Engineering 330 Process Control and Improvement ..... 3
And approved concentration electives. ..... 9*
Mechanical Engineering
Engineering 370 Vibrations ..... 4
Engineering 371 Advanced Strength of Materials ..... 3
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*
*Concentration electives must be approved by Department of Engineering Curriculum and DegreesCommittees.
Minimum hours required for a B.S. in Engineering degree ..... 128

## Minors

Electrical Engineering [Concentration Area] A minor in the Electrical Engineering concentration area requires Engineering 231, 232, 233, 331, 332, 333, 460, and Computer Science 221.

## 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 educaiton. 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 Co-op 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 willb e 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 engineering 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 111 Engineering Methods I (F)
Engineering 112 Engineering Methods II (Sp)
Engineering 121 Statics (F, Sp)
Engineering 201 Engineering Methods (F, Sp)
Engineering 210 Engineering Design (F)
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 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 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 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 430 Transformers and Rotating Machines (as needed)
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 460 Microprocessors and Computer Organization (Sp)
Engineering 461 Communication Systems (Sp)
Engineering 462 Linear Control Systems Design (F)
Engineering 463 Electrical Power Systems (as needed)
Engineering 464 Engineering Electromagnetics (Sp)
Engineering 471 Heat Transfer (Sp)
Engineering 472 Kinematics/Dynamics of Machines (F)
Engineering 473 Machine Design (Sp)
Engineering 474 Manufacturing Processes (Sp-even)
Engineering 475 Automated Production Systems (F-odd)
Engineering 476 Applied Finite Element Analysis Lab (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 402 Industrial Safety (as needed)
Industrial Engineering 412 Service Operations Management (Sp)

# Department of Mathematics and Statistics 

Thomas E. Eskew, Interim Chair<br>424 Andy Holt Humanities Building<br>731-881-7360<br>fax 731-881-1407

## Faculty

John P. Bush, Chris K. Caldwell, Victor A. Cates, Jobn Cochran, Mickey P. Dunlap, E. Steve Elliott, Thomas E. Eskew, Judith A. Gathers, Louis W. Kolitsch, Stephanie M. Kolitsch, Curtis J. Kunkel, Desireé A. McCullough, Karoline Null, David L. Ray, Theresa L. Rushing, John J. Schommer, 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.

## Expected Outcomes

The program of the Department of Mathematics and Statistics:

1. introduces all students to the mathematical method, mathematical problem solving and the mathematical world-view.
2. provides service courses to equip students from diverse disciplines with the mathematical and statistical background needed for their majors.
3. provides a solid foundation in the relevant terms, methodology and applications of mathematics and statistics.
4. strengthens the ability of students to solve problems and to present their solutions both orally and through written reports.
5. provides students with opportunities to use appropriate technology productively.
6. enables graduates in mathematics and statistics to understand the past, present and future of these disciplines within our society.
7. prepares graduates in mathematics and statistics for graduate study in the mathematical sciences or to enter professions that utilize their education in mathematics and statistics.
8. produces graduates in mathematics and statistics who are able to formulate, model and solve mathematically oriented problems, to learn new mathematical concepts on their own and to undertake intellectually challenging tasks with confidence.

## Mathematics Major

The Department of Mathematics and Statistics offers four 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 are required for both the B.A. and the B.S.

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 the following concentration.

## Mathematics Concentration ( 6911 BA or 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 ..... 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
and
Nine additional hours from: Mathematics 340 or 451; Mathematics 350; Mathematics 410; Mathematics 430; Mathematics 498; Mathematics 499; Statistics 461
Students interested in pursuing a graduate degree in statistics, actuarial science, or a career as a statisticianshould pursue the following concentration.
Statistics Concentration (6912 BA or 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 461 Probability and Statistics I ..... 3
Statistics 462 Probability and Statistics II ..... 3
and
Twelve additional hours from: Statistics 365; Statistics 375; Statistics 385; Statistics 435; Statistics 455;
Statistics 465; Statistics 498; Statistics 499; Mathematics 451Students interested in pursuing a career in secondary mathematics teaching should pursue the followingconcentration.
Secondary Mathematics Concentration (6913 BA or 6913 BS):Students in the College of Engineering and Natural Sciences who are seeking the necessary professional-educa-tion courses to qualify for licensure as a secondary mathematics teacher must be admitted to the teacher-edu-cation program in the College of Education, Health, and Behavioral Sciences. They should consult the Collegeof Education, Health, and Behavioral Sciences about admission and licensure requirements. The necessarymathematics courses are listed below. This option will usually require at least four-and-one-half years (ninesemesters).
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 410 Geometry ..... 3
Mathematics 420 History of Mathematics ..... 3
Mathematics 451 Applications and Modeling. ..... 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. ..... 3
andSix additional hours of upper-division mathematics or statistics courses not including cooperative-educa-tion courses.
Students interested in a broad general background in mathematics and statistics should pursue the followingconcentration.
General Mathematics and Statistics Concentration (6914 BA or 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
and
Fifteen additional hours of upper-division mathematics and statistics courses not including coopera-tive-education courses.

## Minors

## Mathematics (M-6910)

Mathematics 251-252, Calculus I-II, are prerequisites to the mathematics minor which consists of 310 Linear Algebra, 314 Foundations of Mathematics and nine 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 labs in the Paul Meek Library are open 24 hours per day and include Maple and Minitab software for mathematics and statistics students.

The department 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.

## Cooperative Education Program

The Cooperative Education Program in Mathematics offers the participant an opportunity to gain valuable professional experience while preparing for a career or for further study in graduate school. In addition, the participant earns money to help finance college expenses. Application for admission should be made during the fall semester of the sophomore year. Further information is available from Student Success Center, UT Martin (731) 881-7740.

## Courses Offered by Department of Mathematics and Statistics

Mathematics 100-110 Essentials of Algebra I, II (F, Sp)
Mathematics 130 The Nature of Mathematics (F, Sp)
Mathematics 140 College Algebra and Elementary Functions (F, Sp)
Mathematics 160 Calculus for Business and Life Sciences (F, Sp)
Mathematics 170 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 251 H Honors Calculus I (F)

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## 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

## Mission

The College of Humanities and Fine Arts' mission is to provide high quality academic and professional programs consistent with the university's commitment to excellence in undergraduate education, developing independent and creative thinking that enriches the lives of its graduates and enables them to become responsible, skilled and participating members of their communities. The college offers degrees designed to acquaint majors with broad and representative knowledge, develop skill in thought and expression and instill the capacity to use that knowledge constructively and responsibly. Through its courses and the activities of its faculty and students, the college also contributes to the cultural life of the area, provides service to the region and encourages the exploration of knowledge and enhancement of personal satisfaction and enjoyment. In addition, by seeking to increase the intellectual, creative and civic competence of all university students, the college fosters a climate of curiosity within which scholarly activities and research can extend the 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 AREA BA BS MINOR
African-American Studies. ..... X
Canadian 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

Teresa Y. Collard, Rodney L. Freed, Stacy A. Freed, Jeffrey L. Hoyer, Arthur W. Hunt, III, Robert Nanney, E. Jerald Ogg, Tomi M. Parrish, Richard C. Robinson, Tracy M. Rutledge, Gary L. Steinke, Cbara K. Van Horn

## Mission

The Department of Communications' mission is to provide students with a broadly based, hands-on education that gives them the opportunity to strengthen the skills fundamental to succeeding in a communications career or graduate study: writing, speaking and producing. These skills, combined with instruction in ethics, theory, law and modern professional practices, comprise a well-balanced preparation that will advance students in careers as professional communicators and enhance lifelong learning in the areas of News-Editorial, Broadcasting (Radio and Television), Public Relations and Media Design. To buttress that preparation, the faculty engage in professional scholarly and creative activities in order to stay current in this fast-changing field and to explore more effective ways to communicate to the masses. The department also stresses the value and responsibility of student and faculty service to the campus, community and profession.

## 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/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.

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/chfa/comm.

## Communications Major

## Communications

B.A. or B.S. Curriculum (2410). Each communications major must complete the department's lower-division 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 ( 12 hours)

Required Courses: Communications 100, 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) $460,365,340,419$, and 325.
Total Communications Hours Required:

## 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) 356, 322, 321, and 325.
Total Communications Hours Required: ..... 48
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: 325, 356, 323, 341, and 322.
PR Campaign Support: 322, 323, 341, 336, 305, and 325.
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: 325, 356
Media Production: 305, 336, 340, and 360.
Total Communications Hours Required: 48

## Communications Minor

The Communications minor consists of Communications 100, 210, 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.

## An Accredited Program

The Department of Communications is one of only 110 programs in the USA accredited by the Accrediting Council on Education in Journalism and Mass Communications (1435 Jayhawk Boulevard, Lawrence, KS 660457575, telephone 785-864-3973). UT Martin's Department of Communications follows the Association for Education in Journalism and Mass Communications standard: "The curriculum must provide students with a solid opportunity to learn not only why and how to communicate but also what to communicate. This requirement calls for a reasonable balance between journalism and mass communications courses and courses in other disciplines, primarily in the liberal arts and sciences. Balance also should be provided between instruction in practical skills and in the more philosophical aspects of journalism and mass communications." To this end, UT Martin Communications majors "... must take a minimum of 72 semester hours in courses outside the major area of journalism and mass communications."

## 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 Banquet, 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 Broadcasting Guild, 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 Media Design Society.

## Courses Offered by Department of Communications

Communications 100 Survey of Mass Media (F, Sp)
Communications 200 Introduction to News Writing (F, Sp)
Communications 210 Introduction to Journalism (F, Sp)
Communications 220 Voice and Diction (F, Sp)
Communications 230 Public Speaking (F, Sp)
Communications 230H Honors Public Speaking (F, Sp)
Communications 231 Interpersonal Communication (F, Sp)
Communications 240 Introduction to Media Design and Public Relations (F, Sp)
Communications 250 Introduction to Broadcasting (F, Sp)
Communications 300 Advanced News Writing (F)
Communications 305 Copy Editing and Design (Sp)
Communications 310 History of Mass Media (as needed)
Communications 315 Writing for Broadcast Media (F, Sp)
Communications 320 Writing Features and Editorials (Sp-even)
Communications 321 Principles of Media Design (Sp)
Communications 322 Desktop Publishing ( $\mathrm{F}, \mathrm{Sp}$ )

Communications 323 Basic Web Design (F, Sp)
Communications 325 Strategic Communication Campaigns (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 International Public Relations (Sp-odd)
Communications 336 Advanced Web and Multimedia Design (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 365 Electronic Field Production (as needed)
Communications 370 Broadcast News (F)
Communications 381 Practicum in Radio ( $\mathrm{F}, \mathrm{Sp}$ )
Communications 382 Practicum in Television (F, Sp)
Communications 383 Practicum in Journalism (F, Sp)
Communications 390 Newspaper Organization and Management (as needed)
Communications 399 Special Topics in Communications (as needed)
Communications 410 Advanced Media Design (Sp)
Communications 419 Broadcast Programming and Audience Measurement (as needed)
Communications 420 Broadcast Management and Sales (Sp)
Communications 460 Broadcast Producing and Directing (as needed)
Communications 471 Independent Study (F, Sp)
Communications 475 Internship in Communications (F, Sp)
Communications 491 (691) Communication Law and Ethics (F, Sp)
Communications 492 Senior Seminar in Communication Theory (F, Sp)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of English and Modern Foreign Languages 

Jenna L. Wright, Chair<br>131 Andy Holt Humanities Building<br>731-881-7281<br>fax 731-881-7276

## Faculty

Lynn M. Alexander, Charles C. Bradshaw, Sally G. Brannen, Trisha K. Capansky, David R. Carithers, Anna H. Clark, Mary Ellen Cowser, Lúcia Flórido, Anton Garcia-Fernandez, Erin E. Garcia-Fernandez, Randal P. Garza, John V. Glass, Roy Neil Graves, Timothy J. Hacker, Charles Hammond, Jr., Kyoko A. Hammond, Christopher A. Hill, Melvin G. Hill, Heidi A. Huse, Leslie M. LaChance, Jeffrey S. Longacre, Carmen D. López, Silvia V. Morin, Daniel J. Nappo, Daniel F. Pigg, Carolyn A. Turner, David M. Williams, Jenna L. Wright

## 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.

## Expected Outcomes

Today's world offers a wide range of career possibilities for English and Modern Foreign Language majorsnot only in secondary and university teaching, but also in business, law, medicine and all the other fields
where excellent communication ability, including interpretive and writing skills, is requisite. Students who complete our programs should be able to:

1. read, write and think critically and creatively;
2. respect and appreciate cultural differences and be able to relate to other cultures and values;
3. be effective communicators;
4. display high degrees of proficiency in written and oral expression in languages and literatures at the appropriate levels;
5. demonstrate increased aesthetic appreciation for literary and artistic works.

## 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. $\quad 12$ hours in British literature (English 360, 365, 370, 375, 401, 460, 465, 470, 480, 485, 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. six additional hours (English 305, 310, 311, 315, 325, 330, 335, 350, 355, 380, 385, 390, 395, 475, 494, 495, 496, 497, 498);
e. one hour in capstone course (English 499).
3. A major may use English $350,380,385,395,475$, 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. six hours in British literature (English 360, 365, 370, 375, 401, 460, 465, 470, 480, 485, 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. 12 hours in writing (English 305, 310, 311, 315, 325, 390, 494, 498);
e. one hour in capstone course (English 499).
3. A major may use English $350,380,385,395,475$, 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.

## Spanish

B.A. Curriculum. A major in Spanish (2620) consists of at least 21 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 prerequisites to the major are History 121-122, International Studies 200, and Geography 152 or 381 . 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 adviser. 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 French or 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 Certificates 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.
A Certificate of Proficiency in French, German, or Spanish language and culture entails at least 15 hours of upper-division coursework, with the following specific requirements:

1. Advanced Conversation (341) and Advanced Composition (342);
2. one course in civilization and culture;
3. The Language of Business and the Professions (451);
4. any additional upper-division course in language, literature, film, or civilization or an approved internship;
5. in the semester prior to graduation, students will be required to demonstrate their competency in the target language by taking an Oral Proficiency Interview and an examination in advanced grammar. (Foreign-language majors are not eligible for this Certificate.)

Minors and Certificates 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 Freshman 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 100, 110, 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 100 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 100 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 paper, short story and body of poems.

## Student Organizations

The English Society is an organized group of majors, minors and other interested students who meet regularly to discuss literature, share writings and get to know faculty members and peers.
The French, German, Japanese and Spanish sections all sponsor clubs which provide students with extracurricular, cultural activities to enrich their academic programs.

Pi Delta Phi, the national French honoraries, recognizes outstanding achievement in the discipline.
Sigma Delta Pi, the national Spanish honoraries, 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 Guanajuato (Mexico), the University of Quebec at Chicoutimi, the University of Orleans, the Technical University of Braunschweig, Hirosaki University, and Hiroshima Jogakuin University. 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 100 English Studies: Critical Thinking and Writing (F, Sp)
English 110 English Composition: Critical Thinking and Writing (F, Sp)
English 111-112 English Composition (F, Sp, Su)
English 111H-112H Honors English Composition (F, Sp)
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 270-271 World Literature (F, 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 English 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 (Sp-odd)
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) Advanced Grammar (F, Sp)
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 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 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)

Complete course descriptions can be found in the Course Description section of the catalog.

# Department of History and Philosophy 

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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, Donna Cooper Graves, Nathan D. Howard, Renee LaFleur, Daniel J. McDonough, Henry H. Parker, Timothy B. Smith, Adam P. Wilson

## Mission

The Department of History and Philosophy mission is to provide a total educational experience by offering students opportunities to exercise leadership skills, enhance their understanding of human behavior, embrace tolerance and clarify their own values. The history and philosophy curricula lie at the heart of a liberal arts education by providing students with the political, social, cultural, interdisciplinary and international foundation necessary for responsible citizenship. Lower-division course offerings provide students with the basic knowledge and critical thinking skills needed for success in life. Advanced courses provide quality training to students seeking to make their mark in a wide array of service professions such as teaching, public advocacy, public history, library science, law, journalism and civil service as well as community, religious, business and international leadership. Faculty are committed to mentoring students and to advancing the disciplines of History and Philosophy through a full range of scholarly activities and service to the campus, community and the profession.

## Expected Outcomes

The History curricular mission at UT Martin places considerable emphasis upon the following skills, which are considered most necessary to prepare students for the tasks defined above:

1. an understanding of the major events, personalities, social categories and cultures which have shaped the United States and the world at large;
2. an understanding of how current events are connected with, and proceed from, the events of the past;
3. the research skills which not only provide the student with knowledge, but provide her/him with the ability to seek new knowledge and interpretations;
4. the development of critical analysis and independent thought, allowing students to consider competing interpretation, and through the use of reason, develop their own conclusions on society, past and present;
5. communications skills, written and oral, which will allow students to communicate their ideas effectively to others.

The graduating Philosophy major is expected:

1. to be familiar with major figures in the history of philosophy and the principal historical positions in metaphysics, ethics and epistemology;
2. to have some familiarity with the most important developments in recent philosophy (20th century and beyond);
3. to develop capacities for disciplined, logical thinking and related capacities for reading comprehension, coherent writing and speaking skills;
4. to develop and improve capacities for serving and leading in an enlightened way in matters of citizenship and the building of the human community;
5. to acquire familiarity with possible careers and advanced (graduate and professional) studies.

## 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) and History 201-202 are prerequisites to the major which totals 27 hours, consisting of History 299, History 499 and 24 additional hours of upperdivision (300-400) courses divided between two areas of study: a) American History and b) World History, to include Ancient, European, Asian, African, Latin American, Middle Eastern, or Mexican History. Twelve hours must be taken in each area. At least three European history hours must come from History 340, 341, $342,343,420$, or 421 . 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, Independent Study and Undergraduate Research courses. All requirements for the B.A. or B.S. degree must be met, including completion of a minor or second major.

## Philosophy (2940)

B.A. 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. Majors must also assemble a portfolio, under the supervision of a philosophy faculty member. The portfolio should include one paper on the history of philosophy, one on ethics and a third paper on an elected area or topic. Papers must indicate an ability to anticipate objections to a position or thesis and demonstrate other features of the capacity for philosophical argument, as well as a familiarity with relevant literature, and they must be properly formatted. Normally each paper should be ca. 3000 words, although several shorter papers may be permitted with adviser approval. Other indications of philosophical competence may be included in the portfolio, such as evidence of outstanding performance on essay exams. The philosophy electives are to be selected in terms of the student's educational and career goals and with the approval of an adviser in philosophy. Philosophy 110-120 are prerequisites to the major and may be used to meet general education requirements for the B.A.

Philosophy Major and Religious Studies Concentration. Through their curricular and extracurricular programs, the Philosophy and Religious Studies faculty introduce students to both Western and non-Western philosophical and religious thinking and traditions.

The habits of mind developed through philosophical and religious studies prove useful in many fields and careers, including law, public and governmental service, ministry, psychology, education and journalism. Persons educated in philosophy have been employed as technical consultants by computer firms, as consultants in business ethics by corporations and as experts on biomedical ethics by hospitals and medical schools. A large variety of employment is available within religious communities for those with expertise in religious studies and philosophy.

In addition, persons educated in philosophy and religious studies are well prepared for graduate training in philosophy and religion and for other types of graduate and professional studies. Impressive statistical data indicate that students with undergraduate majors in philosophy or their equivalents score higher in both the verbal and quantitative parts of the Graduate Record Exam (GRE) and in Law School (LSAT), Business School (GMAT), and Medical School Admissions tests than do students with other undergraduate majors (Economist; Medical School Admission Requirements; American Philosophical Association proceedings).
Studies in philosophy and religion are also essential for seminary education in many cases. A Pre-Theological Advising Program is available for those persons who wish to pursue religious vocations and advanced seminary and theological education.

## Minors

## African-American Studies (M-2030)

The 18 credit-hour minor consists of required courses: Philosophy 130, History 434, and History 435, plus nine hours to be selected from the following menu: English 345; History 303, 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 121H-122H) 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.

## Pre-Theological Curriculum

The Pre-Theological curriculum is a recommended cluster of courses which provide a foundation for future theological studies and professions. The Association of Theological Schools (the accrediting agency for Schools of Theology) recommends that a pre-theology student develop some in-depth understanding of
human selfhood and existence, modern social institutions and problems, culture and religion, science and technology, the processes of understanding, the content and interpretation of Scripture, the history of the religious tradition, constructive theological methodology and interpretation and language. The Pre-Theological Program develops such understanding by coordinating four areas of study:

1. Value Studies: philosophy, religious studies, English and art;
2. Contemporary Life Studies: psychology, sociology, social work, anthropology, geography and political science;
3. Historical Studies: history; and
4. Language and Communication Studies: speech, English, journalism, broadcasting, theatre, French, German, Spanish and Portuguese.

## The Pre-Theological Program has four requirements:

1. the fulfillment of the basic requirements for a B.A. or B.S.,
2. the fulfillment of the general education requirements for a major, which is to be selected from the disciplines listed in the four areas of study,
3. the fulfillment of the requirements for a minor, which is to be selected from the four areas of study and
4. the completion of a minimum of 18 hours of approved electives, of which 12 must be upper-division.

All four areas of study must be represented in the selection of a major, a minor and electives. A minimum of six elective hours is required in each area of study not covered by the major and the minor. A list of approved electives is available from the adviser. The major, the minor and the electives will be specified on the basis of the recommendations by the Association of Theological Schools and the academic and professional needs of the student as determined by consultation with an adviser in the Department of History and Philosophy.

## 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 $\$ 250$. 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.

## 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.
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.

Tennessee Historical Commission Award. Cash and book award to graduating senior selected by the department as the outstanding history student.

## Courses Offered by Department of History and Philosophy

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 299 History and Historians (F, Sp)
History 302 (502) Introduction to Public History (Sp-odd)
History 303 (503) Women in American History (F-even)
History 304 (504) Women in World History (Sp-even)
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-even)
History 324 (524) The Modern Middle East (Sp-odd)
History 331 History of Tennessee (as needed)
History 340 (540) The Age of Enlightenment and Revolution, 1715-1815 (as needed)
History 341 (541) Restoration, Revolution and Colonialism, 1815-1914 (Sp-even)
History 342 (542) From War to War, 1914-1945 (F-even)
History 343 (543) Contemporary Europe, 1945-Present (Sp-odd)
History 401 Independent Study in American History (F, Sp)
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 (F-even)
History 420 (620) Late Antiquity and Medieval History (Sp-odd)
History 421 (621) Renaissance and Reformation (Sp-even)
History 422 (622) Modern Germany, 1815 to the Present (F-even)
History 434-435 (634-635) African-American History I, II (F, Sp)
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 (as needed)
History 447 (647) History of Russia (F-odd)
History 448 (648) Russia Since 1917 (Sp-even)
History 450 (650) Public History Internship (F, Sp)
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-odd)
History 464 (664) U.S. Foreign Relations since 1920 (Sp-even)
History 465 (665) History of American Thought to 1877 (F-even)
History 466 (666) History of American Thought since 1877 (Sp-odd)
History 467-468 (667-668) Travel Study [Selected Topics] (Sp)
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 (F-even)
History 490 (690) Topics in Non-U.S. 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) Recent History of the U.S., 1900-1945 (F-odd)
History 497 (697) Recent History of the U.S. 1945 to the 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 110-120 The Adventure of Ideas (F, Sp)
Philosophy 130 Ethics and Race (F, Sp)
Philosophy 160 Introduction to Ethics ( $\mathrm{F}, \mathrm{Sp}$ )
Philosophy 210 Elementary Logic (Sp)
Philosophy 300 Questions of Right and Wrong (as needed)
Philosophy 301 Major Religions of the World (F)
Philosophy 310 Aesthetics (Sp)
Philosophy 314 History of Ancient and Medieval Philosophy (F-even)
Philosophy 315 History of Modern Philosophy (Sp-odd)
Philosophy 316 History of Late Modern and Contemporary Philosophy (as needed)
Philosophy 320 Traces of God (F-even)
Philosophy 330 Love, Sexuality and Living (as needed)
Philosophy 340 Death, Suffering and Evil (as needed)
Philosophy 350 Principles of Bioethics (F-odd)
Philosophy 360 Symbolic Logic (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] (Sp)
Philosophy 395 Philosophy and Film (as needed)
Philosophy 410 Political and Legal Philosophy (Sp-even)
Philosophy 430 (630) Science and Human Values (Sp-even)
Philosophy 440 Topics in African-American and Feminist Studies (as needed)
Philosophy 450 Existentialism and Phenomenology (as needed)
Philosophy 460 Contemporary Metaphysics and Epistemology (F-even)
Philosophy 470 Internship in Race Relations (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 306 Religion and Society (as needed)
Religious Studies 320 Traces of God (F-even)
Religious Studies 340 Death, Suffering and Evil (Sp)
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. Elaine A. Harriss, Chair<br>314 Clement Hall<br>731-881-7402<br>fax 731-881-7415

## Faculty

Delana M. Easley, Joseph W. Frye, Kurt Gorman, Elaine A. Harriss, Julie Hill, Roberto Mancusi, John Oelrich, Douglas A. Owens, D. Scott Roberts, Mark Simmons, Matthew C. Stratton, Jessica K. Thoman, Johnathan R. Vest, Amy Yeung

## Mission

The mission of the Department of Music is to pursue excellence in musical education and artistry, with a primary focus for the department being undergraduate music education. The department and its faculty serve as model performers, educators and researchers, as well as resources for music educators and professionals throughout the region. The performances and educational events presented by the department enrich the educational experience of all UT Martin students. These events enhance the cultural life of the university, the Martin community and the region. Faculty maintain a strong commitment to the teaching mission of the department and the university, while engaging in service, performance and research activities around the state, region and world.

## Goals

1. Produce Music Education graduates who will, in turn, build strong programs in their schools and studios.
2. Attract and retain high-quality students to major in music and participate in ensembles as non-majors.
3. Maintain positive relationships with K-12 music programs and regional arts organizations.
4. Serve as a resource for regional educators and musicians.
5. Maintain a sequential curriculum that is sensitive to the needs of a changing future for art music.
6. Present musical performances on campus by students, faculty and guest artists.
7. Perform, present and research in the music discipline.
8. Educate and inform audiences.
9. Represent UT Martin in a professional way to the community and the world.
10. Maintain contact with 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.

## 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 121-122 Music Theory I, II
Music 123-124 Aural Skills I, II
Music, Applied 101-102 Piano Class or 103 Voice Class (whichever is required)
Music, Applied 310 Recital, two semesters
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
Instrumental Music Education Majors must also complete:
Music, Applied 103 Voice Class
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)

## 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.

## 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 OptionBand/Orchestral 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

Music Ensembles 156, 356 Percussion EnsembleMusic Ensembles 168, 368 Chamber Ensemble
Supportive Courses in Music (34 semester hours)
Music 108 Introduction to Technology in Music .....  1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 337, 338 Instrumental Literature .....  2
Music 341, 342 Music History and Literature I, II. ..... 6
Music 354 Instrumental Conducting and Literature I ..... 3
Music 420 Form and Analysis ..... 3
Electives (17 semester hours)
Free Electives. ..... 17
Minimum semester hours ..... 128-129
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 (39 semester hours)
Applied Music 114 Piano ..... 8
Applied Music 314 Piano ..... 4
Applied Music 395 Junior Recital ..... 2
Applied Music 495 Senior Recital ..... 2
Applied Music 310 Recital Class ..... 8
(minimum 8 semesters at 1 credit hour each)
Students must register for Recital Class during each semester in which the student isregistered for private applied lessons in the major instrument, up to and includingthe semester of the senior recital, subject to a minimum of eight semesters. If astudent registers for private applied lessons in a semester subsequent to the suc-cessful completion of the senior recital, then the student is not required to registerfor Recital Class in that semester. Students must perform twice during each semesterin which they are registered for Recital Class. The performance requirement may bewaived by the applied music teacher for the first semester of study.
1
Music 363 Piano Pedagogy
4
Music Ensembles 361 Accompanying
Large Ensemble (any combination from the following) ..... 8
Music Ensembles 152, 352 Wind Ensemble
Music Ensembles 158, 358 Concert Band
Music Ensembles 162, 362 University SingersMusic Ensembles 169, 369 Marching Band/Wind EnsembleMusic Ensembles 170, 370 Marching Band/Concert BandMusic Ensembles 160, 360 Piano Ensemble 2
Supportive Courses in Music (35 semester hours)
Music 108 Introduction to Technology in Music .....  1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 161 Diction for Singers I ..... 1
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 333, 334 Piano Literature ..... 2
Music 341, 342 Music History and Literature I, II. ..... 6
Music 353 Beginning Choral Ensemble Techniques or Music 354 Instrumental Conducting and Literature I ..... 3
Music 420 Form and Analysis ..... 3
Required Electives (16 semester hours)
French 111 or 115, 122 Elementary French ..... 8
German 111, 122 Elementary German ..... 8
Minimum semester hours ..... 128-129
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 ( 40 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
Applied Music 310 Recital Class ..... 8(minimum 8 semesters at 1 credit hour each)Students must register for Recital Class during each semester in which the studentis registered for private applied lessons in the major instrument, up to and includ-ing the semester of the senior recital, subject to a minimum of eight semesters. If astudent registers for private applied lessons in a semester subsequent to the suc-cessful completion of the senior recital, then the student is not required to register
for Recital Class in that semester. Students must perform three (3) times during each semester in which they are registered for Recital Class. The performance requirement may be waived by the applied music teacher for the first semester of study.
Music 365 Voice Science and Pedagogy .......................................... 2
Music Ensembles 162, 362 University Singers.................................. 8
Small Ensemble (any combination from the following) ..................... 2
Music Ensembles 165, 365 New Pacer Singers Music Ensembles 167, 367 Lyric Opera Theatre
Supportive Courses in Music (36 semester hours)
Music 108 Introduction to Technology in Music .1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 161, 162 Diction for Singers I, II. ..... 2
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 335, 336 Vocal Literature ..... 2
Music 341, 342 Music History and Literature I, II. ..... 6
Music 353 Beginning Choral Ensemble Techniques ..... 3
Music 420 Form and Analysis ..... 3
Required Electives (16 semester hours)
French 111 or 115, 122 Elementary French ..... 8
German 111, 122 Elementary German ..... 8
Minimum semester hours ..... 130-131
Bachelor of Music - Performance Option Band/Orchestral 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 (42 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 Trumpet
Applied Music 224 Baritone HornApplied Music 234 TubaApplied Music 254 PercussionUpper-division study6
Three (3) semesters of one of the following:
Applied Music 343 Flute
Applied Music 353 Double ReedApplied Music 363 Clarinet
Applied Music 373 Saxophone
Applied Music 383 Trumpet
Applied Music 393 French Horn
Applied Music 413 Trombone
Applied Music 423 Baritone Horn
Applied Music 433 Tuba
Applied Music 453 Percussion
Applied Music 495 Senior Recital ..... 2
Applied Music 101, 102, 201, 202 Piano Class ..... 4
Applied Music 310 Recital Class ..... 8
(minimum 8 semesters at 1 credit hour each)
Students must register for Recital Class during each semester in which the studentis registered for private applied lessons in the major instrument, up to and includ-ing the semester of the senior recital, subject to a minimum of eight semesters.If a student registers for private applied lessons in a semester subsequent to thesuccessful completion of the senior recital, then the student is not required toregister for Recital Class in that semester. Students must perform twice during eachsemester in which they are registered for Recital Class. The performance require-ment may be waived by the applied music teacher for the first semester of study.
Music 366, 367 Instrumental Pedagogy ..... 2
Music 466 Practicum in Instrumental Pedagogy ..... 2
Large Ensemble (any combination from the following) ..... 8Music Ensembles 152, 352 Wind EnsembleMusic Ensembles 158, 358 Concert BandMusic Ensembles 169, 369 Marching Band/Wind EnsembleMusic Ensembles 170, 370 Marching Band/Concert Band
Small Ensemble (any combination from the following) ..... 2
Music Ensembles 153, 353 Concert Jazz BandMusic Ensembles 154, 354 Brass EnsembleMusic Ensembles 155, 355 Woodwind EnsembleMusic Ensembles 156, 356 Percussion EnsembleMusic Ensembles 168, 368 Chamber Ensemble
Supportive Courses in Music (34 semester hours)
Music 108 Introduction to Technology in Music .....  1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 337, 338 Instrumental Literature. .....  2
Music 341, 342 Music History and Literature I, II. ..... 6
Music 354 Instrumental Conducting and Literature I ..... 3
Music 420 Form and Analysis ..... 3
Electives (14 semester hours)
Free Electives. ..... 14
Minimum semester hours ..... 128-129
Bachelor of Music - Performance Option
Piano 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 (42 semester hours)
Applied Music 114 Piano ..... 8
Applied Music 313 Piano ..... 6
Applied Music 495 Senior Recital ..... 2
Applied Music 310 Recital Class ..... 8(minimum 8 semesters at 1 credit hour each)Students must register for Recital Class during each semester in which the student isregistered for private applied lessons in the major instrument, up to and includingthe semester of the senior recital, subject to a minimum of eight semesters. If a stu-dent registers for private applied lessons in a semester subsequent to the successfulcompletion of the senior recital, then the student is not required to register forRecital Class in that semester. Students must perform twice during each semester inwhich they are registered for Recital Class. The performance requirement may bewaived by the applied music teacher for the first semester of study.
Music 363, 364 Piano Pedagogy ..... 2
Music 463 Practicum in Piano Teaching ..... 2
( 2 semesters at 1 credit hour each)
Music Ensembles 361 Accompanying ..... 4
Large Ensemble (any combination from the following) ..... 8
Music Ensembles 152, 352 Wind Ensemble
Music Ensembles 158, 358 Concert Band
Music Ensembles 162, 362 University Singers
Music Ensembles 169, 369 Marching Band/Wind EnsembleMusic Ensembles 170, 370 Marching Band/Concert BandMusic Ensembles 160, 360 Piano Ensemble2
Supportive Courses in Music (35 semester hours)
Music 108 Introduction to Technology in Music ..... 1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 161 Diction for Singers I ..... 1
Music 320 Orchestration and Arranging or
Music 427 Analysis of Post-Tonal Music. ..... 3
Music 333, 334 Piano Literature ..... 2
Music 341, 342 Music History and Literature I, II. ..... 6
Music 353 Beginning Choral Ensemble Techniques or Music 354 Instrumental Conducting and Literature I ..... 3
Music 420 Form and Analysis ..... 3
Required Electives (16 semester hours)
French 111 or 115, 122 Elementary French ..... 8
German 111, 122 Elementary German ..... 8
Minimum semester hours ..... 131-132
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 (70 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 Baritone Horn
Applied Music 232 Tuba
Applied Music 252 Percussion
Upper-division study2
Two (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 422 Baritone Horn
Applied Music 432 Tuba
Applied Music 452 Percussion
Applied Music 495 Senior Recital . 1
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
Applied Music 310 Recital Class ...................................................... 7
(minimum 7 semesters at 1 credit hour each)
Students must register for Recital Class during each semester in which the student is registered for private applied lessons in the major instrument, up to and including the semester of the senior recital, subject to a minimum of seven semesters. If a student registers for private applied lessons in a semester subsequent to the successful completion of the senior recital, then the student is not required to register for Recital Class in that semester. Students must perform once during each semester in which they are registered for Recital Class. The performance requirement may be waived by the applied music teacher for the first semester of study.
Music 108 Introduction to Technology in Music .1
Music 121, 122, 221, 222 Music Theory I, II, III, IV. ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III, IV ..... 4
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 341, 342 Music History and Literature I, II. ..... 6
Music 354 Instrumental Conducting and Literature I. ..... 3
Music 405 Secondary Instrumental Methods ..... 3
Music 420 Form and Analysis ..... 3
Music 454 Instrumental Conducting and Literature II ..... 3
Large Ensemble (any combination from the following) ..... 7
Music Ensembles 152, 352 Wind Ensemble
Music Ensembles 158, 358 Concert BandMusic Ensembles 169, 369 Marching Band/Wind EnsembleMusic Ensembles 170, 370 Marching Band/Concert Band
Small Ensemble (any combination from the following) ..... 2
Music Ensembles 153, 353 Concert Jazz BandMusic Ensembles 154, 354 Brass EnsembleMusic Ensembles 155, 355 Woodwind Ensemble
Music Ensembles 156, 356 Percussion EnsembleMusic Ensembles 168, 368 Chamber Ensemble
Professional Education (27 semester hours)
Human Learning 325 Educational Psychology. ..... 3
Special Education 300 Exceptional Child ..... 3
Music Education 260 Introduction to Music Education ..... 3
Music Education 310 General Music ..... 3
Music Education 400 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 ..... 135-136
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 (70-71 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
Applied Music 310 Recital Class ..... 7
(minimum 7 semesters at 1 credit hour each)
Students must register for Recital Class during each semester in which the studentis registered for private applied lessons in the major instrument, up to and includ-ing the semester of the senior recital, subject to a minimum of seven semesters. Ifa student registers for private applied lessons in a semester subsequent to the suc-cessful completion of the senior recital, then the student is not required to registerfor Recital Class in that semester. Piano principals must perform once during eachsemester in which they are registered for Recital Class. Voice principals must performtwice during each semester in which they are registered for Recital Class. The perfor-mance requirement may be waived by the applied music teacher for the first semesterof study.
Music 108 Introduction to Technology in Music .....  1
Music 121, 122, 221, 222 Music Theory I, II, III, IV. ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III, IV ..... 4
Music 161, 162 Diction for Singers I, II ..... 2
Music 320 Orchestration and Arranging or Music 427 Analysis of Post-Tonal Music. ..... 3
Music 341, 342 Music History and Literature I, II. ..... 6
Music 353 Beginning Choral Ensemble Techniques ..... 3
Music 365 Voice Science and Pedagogy ..... 2
Music 420 Form and Analysis ..... 3
Music 431 Larger Choral Works and Rehearsal Strategies ..... 3
Music 432 Laboratory in Rehearsing Choral Works .....  1
Music 453 Advanced Choral Ensemble Techniques ..... 3
Music Ensembles 162, 362 University Singers ..... 7
Small Ensemble (any combination from the following) ..... 2
Music Ensembles 165, 365 New Pacer SingersMusic Ensembles 167, 367 Lyric Opera Theatre
Professional Education ( 27 semester hours)
Human Learning 325 Educational Psychology ..... 3
Special Education 300 Exceptional Child ..... 3
Music Education 260 Introduction to Music Education ..... 3
Music Education 310 General Music ..... 3
Music Education 400 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 ..... 135-137

## 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 (24 semester hours)
Music 108 Introduction to Technology in Music .....  1
Music 121, 122, 221, 222 Music Theory I, II, III and IV ..... 12
Music 123, 124, 223, 224 Aural Skills I, II, III and IV ..... 4
Music 341, 342 Music History and Literature I, II. ..... 6
Music 440 Senior Project in Music ..... 1
Performance and Music Electives (24 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 Baritone Horn
Applied Music 232, 432 Tuba
Applied Music 252, 452 Percussion
Applied Music 101, 102 Piano Class . 2
Applied Music 310 Recital Class ...................................................... 6
(minimum 6 semesters at 1 credit hour each)
Students must register for Recital Class during each semester in which the student is registered for private applied lessons in the major instrument, subject to a minimum of six semesters. Students must perform once during each semester in which they are registered for Recital Class. The performance requirement may be waived by the applied music teacher for the first semester of study.
Ensemble.
Band/Orchestral Instrument principal:
Large Ensemble (any combination from the following) ............... 8
Music Ensembles 152, 352 Wind Ensemble
Music Ensembles 158, 358 Concert Band
Music Ensembles 169, 369 Marching Band/Wind Ensemble
Music Ensembles 170, 370 Marching Band/Concert Band
Small Ensemble (any combination from the following) ............... 2
Music Ensembles 153, 353 Concert Jazz Band
Music Ensembles 154, 354 Brass Ensemble
Music Ensembles 155, 355 Woodwind Ensemble
Music Ensembles 156, 356 Percussion Ensemble
Music Ensembles 168, 368 Chamber Ensemble
Piano principal:
Large Ensemble (any combination from the following) .8
Music Ensembles 152, 352 Wind Ensemble
Music Ensembles 158, 358 Concert Band
Music Ensembles 162, 362 University Singers
Music Ensembles 169, 369 Marching Band/Wind Ensemble
Music Ensembles 170, 370 Marching Band/Concert Band
Music Ensembles 160, 360 Piano Ensemble

## Voice principal:

Music Ensembles 162, 362 University Singers. .8
Small Ensemble (any combination from the following) ............... 2
Music Ensembles 165, 365 New Pacer Singers
Music Ensembles 167, 367 Lyric Opera Theatre
General Studies (40 semesters hours)
Supporting Elective Plan ..... 40The Supporting Elective Plan must be developed in consultation with the academic adviser.The Department of Music Curriculum Committee must approve the Supporting ElectivePlan and any subsequent changes to it. The Plan must be submitted and approved duringthe second semester of the freshman year; transfer students must submit and receiveapproval for their Plan in their first semester. The Plan must include at least 15 hoursof upper-division courses. No more than 6 hours may be in courses from the followingdisciplines: Applied Music (MUAP), Music (MUS) and/or Music Education (MUED). MusicEnsembles (MUEN) may not be used as part of the Plan.
Minimum semester hours ..... 126-127
Music Minor

Acceptance into the Minor in Music program is by audition.
The Minor in Music (M-2730) consists of the following:
Core Classes (16 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................. 3Music 121 Music Theory I, 122 Music Theory II, 123 Aural Skills I,124 Aural Skills II8
Lower-division applied lessons ( 2 semesters of same instrument) ..... 2
Ensemble (in applied lesson area) ..... 2
Electives (8 hours selected from the following)Maximum of two semesters total additional credit in core applied lesson or ensemble.Courses with an MUAP, MUS, or MUED prefix other than private applied lessons.
Total hours required: 24.
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).

## Audition to the Program

Admission to the Bachelor of Music degree, the Bachelor of Arts in Music degree, and the minor in Music is granted only after the completion of a successful performance audition. Contact the department chair for information about auditions to the program.

## 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 Music Educators National Conference 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 100 Topics in Music Theory (Sp)
Music 108 Introduction to Technology in Music (F, Sp)
Music 111 Masterpieces of Music (F, Sp, Su)
Music 111H Honors Masterpieces of Music (F)
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 Music for the Masses: A Study of Popular Music (as needed)
Music 120 Fundamentals of Music Theory (F)
Music 121 Music Theory I (F)
Music 122 Music Theory II (Sp)
Music 123 Aural Skills I (F, Sp)
Music 124 Aural Skills II (F, Sp)
Music 161 Diction for Singers I (F)

Music 162 Diction for Singers II (Sp)
Music 191, 192, 193 Topics in Music (as needed)
Music 221 Music Theory III (F)
Music 222 Music Theory IV (Sp)
Music 223 Aural Skills III (F, Sp)
Music 224 Aural Skills IV (F, Sp)
Music 225 Composition (as needed)
Music 320 Orchestration and Arranging (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 341 Music History and Literature I (F)
Music 342 Music History and Literature II (Sp)
Music 343 History of Church Music and Liturgical Practices (as needed)
Music 344 Hymnody, Sacred Repertoire and Church Music Techniques (as needed)
Music 353 Beginning Choral Techniques, Literature and Conducting (F)
Music 354 Beginning Instrumental Ensemble Techniques, Literature and Conducting (F)
Music 363-364 Piano Pedagogy (as needed)
Music 365 Voice Science and Pedagogy (as needed)
Music 366-367 Instrumental Pedagogy (as needed)
Music 391, 392, 393 Topics in Music (as needed)
Music 401 Independent Study (as needed)
Music 405 Secondary Instrumental Methods (F)
Music 420 Form and Analysis (F)
Music 425 (625) Composition (as needed)
Music 427 Analysis of Post-Tonal Music (F)
Music 430 Internship in Church Music (as needed)
Music 431 Larger Choral Works and Rehearsal Strategies (F)
Music 432 Laboratory in Rehearsing Choral Works (F)
Music 440 Senior Project in Music (F, Sp, Su)
Music 453 Advanced Choral Techniques, Literature and Conducting (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 701-702 Independent Study in Music (as needed)
Music 791-793 Topics in Music (as needed)
Music, Applied 101, 201 Piano Class (F, Sp)
Music, Applied 102, 202 Piano Class (F, Sp)
Music, Applied 103 Voice Class (as needed)
Music, Applied 104, 203-204 Voice Class (as needed)
Music, Applied 110, 310 Recital (F, Sp)
Music, Applied 111, 112, 114, 312, 314 Piano (F, Sp)
Music, Applied 121, 122, 124, 322, 324 Voice (F, Sp)
Music, Applied 141, 142, 144, 342, 344 Flute (F, Sp)
Music, Applied 151, 152, 154, 352, 354 Double Reed (F, Sp)

Music, Applied 161, 162, 164, 362, 364 Clarinet (F, Sp)
Music, Applied 171, 172, 174, 372, 374 Saxophone (F, Sp)
Music, Applied 181, 182, 184, 382, 384 Trumpet (F, Sp)
Music, Applied 191, 192, 194, 392, 394 French Horn (F, Sp)
Music, Applied 211, 212, 214, 412, 414 Trombone (F, Sp)
Music, Applied 221, 222, 224, 422, 424 Baritone Horn (F, Sp)
Music, Applied 231, 232, 234, 432,434 Tuba (F, Sp)
Music, Applied 251, 252, 254, 452, 454 Percussion (F, Sp)
Music, Applied 261, 461 Harpsichord (as needed)
Music, Applied 271, 471 Organ (as needed)
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 311, 313, 314 Piano (as needed)
Music, Applied 321, 323 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 Baritone Horn (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 400 Senior Seminar in Music Education (Sp)
Music Education 401 Independent Study (as needed)
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 Education 701-702 Independent Study in Music Education (as needed)
Music Education 791-793 Topics in Music Education (as needed)
Music Ensembles 151, 351 Marching Band (F)
Music Ensembles 152, 352 Wind Ensemble (Sp)
Music Ensembles 153, 353 Concert Jazz Band (F, Sp)
Music Ensembles 154, 354 Brass Ensemble (F, Sp)

Music Ensembles 155, 355 Woodwind Ensemble (F, Sp)
Music Ensembles 156, 356 Percussion Ensemble (F, Sp)
Music Ensembles 158, 358 Concert Band (Sp)
Music Ensembles 160, 360 Piano Ensemble (F, Sp)
Music Ensembles 161 Accompanying (as needed)
Music Ensembles 162, 362 University Singers (F, Sp)
Music Ensembles 163, 363 Choral Society (F, Sp)
Music Ensembles 164, 364 Collegiates (F, Sp)
Music Ensembles 165, 365 New Pacer Singers (F, Sp)
Music Ensembles 166, 366 Treble Choir (F, Sp)
Music Ensembles 167, 367 Lyric Opera Theatre (Sp)
Music Ensembles 168, 368 Chamber Ensemble (F, Sp)
Music Ensembles 169, 369 Marching Band/Wind Ensemble (F)
Music Ensembles 170, 370 Marching Band/Concert Bank (F)
Music Ensembles 361 Accompanying (as needed)
Complete course descriptions can be found in the Course Description section of the catalog.

# Department of Visual and Theatre Arts 

Douglas J. Cook, Chair<br>217 Gooch Hall<br>731-881-7400<br>fax 731-881-3400

Faculty
Tim Barrington, Douglas J. Cook, Carol A. Eckert, A. Melanie Hollis, Lane E. Last, David L. McBeth, Sarah V. McCormick, Diane S. Shaw, J. Kenneth Zimmerman

## 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.

## Expected 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 have:

1. primary skill and depth in visual art, graphic design, art education, dance education, or theatre;
2. secondary skill in arts disciplines other than the primary area;
3. a general education appropriate to a professional arts degree that includes communication skills, scientific analysis, humanistic expression, problem solving, an understanding of the diversity of our human experience in relation to the complexities of our global culture and society and the ability and desire to seek new knowledge and interpretations;
4. a practical understanding of critical and analytical methodologies of the arts;
5. a broad understanding of the scope of the arts and their contribution to modern society;
6. a developed 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 (39-45 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
(must meet university-wide general education requirements)
Foreign Language: completion of 111 or 115 or above ..... 4
(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 ArtsVisual Art and Graphic Design emphasis6
Theatre emphasis ..... 5
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 ..... 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
Fine Arts 310 Aesthetics or Fine Arts 410 Art Theory \& Criticism . 3
Area of Emphasis (27-39 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
Art 450 Professional Practices in Visual Art (Studio Option students only) ..... 2
Art 460 Senior Thesis Exhibition ..... 1
Nine hours selected from any upper-division art course ..... 9
(Studio Option students only)
Dance: (required for Dance Education: Teaching Option)
Dance 120, 320, 420 Contemporary Dance ..... 8
Dance 130, 330 Ballet I, II ..... 8
Dance 150, 350 Dance Ensemble ..... 8
Dance 240, 440 Choreography I, II ..... 4
Dance 310 Jazz Dance ..... 2
Dance 460 Senior Project ..... 1
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
Twelve hours selected from the following:
Art History 320, Graphic Design 345, 391, 425, 435, or 450 ..... 12
Theatre:
Theatre 150 Theatre Workshop ..... 3
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 Elective ..... 6
Theatre 460 Senior Project .....  1
Professional Enhancement (18-22 hours)Studio Option:
Secondary Emphasis/Arts Electives 18 hours
Electives selected from arts disciplines outside the area of emphasis includingArt; Art Education; Art History; Dance; English 310, 311, and 315; Fine Arts; GraphicDesign; Interior Design; Music and Theatre. Theatre emphasis must include four hoursof Dance 120 .
Teaching Option: ..... 21 hours
Art Education:
Teacher Education 302 Integrated Teaching Strategies ..... 3
Special Education 300 Exceptional Child ..... 3
Art Education 400 Senior Seminar in Art Education ..... 3
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 ..... 3
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 present a porffolio 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 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 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 as well as the fine and performing arts series presentations.

## 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, 111, 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.

## Facilities

The Fine Arts Building is an attractive facility which provides teaching and rehearsal spaces for the theatre and music programs. Facilities for theatre include a rehearsal hall, lab theatre, dressing rooms, costume lab and scene shop as well as faculty offices. The 500-seat Harriet Fulton Performing Arts Theatre is the setting for concerts, recitals, theatrical productions and dance performances as well as events in the visiting artists series.

The Art program is housed in three spacious studios and a lecture auditorium in Gooch Hall. The Fine Arts Gallery is the location for exhibits of works by faculty, students and guest artists.

The spacious dance studio is located in the Kathleen and Tom Elam Center and features a floating wood floor along with mirrored walls and a performance stage. It is the site of student recitals as well as dance workshops and informal ensemble presentations.

## Scholarships

There are five 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 Snyder Scholarship is a $\$ 500$ award and the Joan Metheny McGraw Scholarship is a \$3,000 award given annually to an outstanding major in theatre.

## Student Organizations

Opportunities for membership in associated student organizations are an important part of student development. The Visual Arts Society (Art, Art Education and Graphic Design), Alpha Psi Omega (National Honor

Fraternity for Theatre), and the Collegiate Dance Association 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)
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 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 430 Advanced Mixed Media (Sp)
Art 435 Advanced Ceramics (F, Sp)
Art 441 Weaving (Sp)
Art 445 Glaze Calculations for the Potter (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 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 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 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 310 Aesthetics (Sp-even)
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 345 Digital Photography (Sp)
Graphic Design 350 Typography and Page Layout (F)
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)
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)<br>Theatre 330 Costuming and Stage Makeup (Sp-even)<br>Theatre 360 (560) Stagecraft (F-odd)<br>Theatre 380 Play Interpretation and Direction (Sp-odd)<br>Theatre 390 (590) Playwriting (F-even)<br>Theatre 391 Special Topics in Theatre (as needed)<br>Theatre 401 Independent Study (as needed)<br>Theatre 410 Lighting and Sound Design (F-even)<br>Theatre 420 Advanced Acting (F, Sp)<br>Theatre 430 (630) Scene Design (Sp-odd)<br>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.

ACCT Accounting
AGEC Agricultural Economics
AGED Agricultural Education
AGET Agricultural Engineering Technology
AGRI Agriculture
ANSC Animal Science
ART Art
ARTE Art Education
ARTH Art History
ASTR Astronomy
ATRN Athletic Training
BADM Business Administration
BCHE Biochemistry
BIOL Biology
BLAW Business Law
BOT Botany
BUED Business Education
CFS Child and Family Studies
CHEM Chemistry
CIEG Civil Engineering
CJ Criminal Justice
COMM Communications
COUN Counseling
CRMG Consumer Resource Management
CSCI Computer Science
CTE Career and Technical Education
DANC Dance
DNED Dance Education
DSED Driver Safety Education

ECED Early Childhood Education
ECON Economics
EDEV Educational Evaluation
EDFN Educational Foundations
EDLD Educational Leadership
EDST Educational Studies
ELED Elementary Education
ENGL English
ENGR Engineering
EXSC Exercise Science
FASH Fashion Merchandising
FA Fine Arts
FCS Family and Consumer Sciences
FCSE Family and Consumer Sciences Education
FIN Finance
FREN French
FRP Fellows Research Program
FSCI Food Science
FSMG Food Systems Management
GDES Graphic Design
GEDU Geoscience Education
GENS General Studies
GEOG Geography
GEOL Geology
GERM German
GREK Greek
HIST History
HLRN Human Learning
HLTH Health

| HONR | Honors | PHIL | Philosophy |
| :--- | :--- | :--- | :--- |
| HPED | Health and Physical Education | PHYS | Physics |
| HPER | Human Performance | PLSC | Plant Science |
| HSEM | Honors Seminar | PORT | Portuguese |
| IDT | Instructional Design and Technology | POSC | Political Science |
| IDST | Interdisciplinary Studies | PRAD | Park and Recreation Administration |
| INST | International Studies | PSYC | Psychology |
| INEG | Industrial Engineering | READ | Reading |
| INFS | Information Systems | RLST | Religious Studies |
| INTD | Interior Design | SEDU | Secondary Education |
| JAPN | Japanese | SOC | Sociology |
| LDSP | Leadership | SOIL | Soil Science |
| LIBS | Library Service | SPAN | Spanish |
| MATH | Mathematics | SPED | Special Education |
| MBIO | Microbiology | SPMG | Sport Management |
| MGT | Management | STAT | Statistics |
| MKTG | Marketing | SWRK | Social Work |
| MSL | Military Science and Leadership | TCED | Teacher Education |
| MUAP | Applied Music | TESL | Teaching English as a Second Language |
| MUED | Music Education | THEA | Theatre |
| MUEN | Music Ensembles | UNSC | University Scholars |
| MUS | Music | VET | Veterinary Health Technology |
| NRM | Natural Resources Management | WBIO | Wildlife Biology |
| NURS | Nursing | WMST | Women's Studies |
| NUTR | Nutrition | ZOOL | Zoology |
| PACT | Physical Activity |  |  |

## 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 Making 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 Making 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 and CSCI 201.

302 Intermediate Accounting II (3) Continuation of ACCT 301. Prereq: Grade of B 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 FIN 301 or 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.

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 321.

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 Statements (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, includ-
ing 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 Accounting (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.

## 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.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.

## 350 Agricultural Marketing in North America

(3) Theory and practice of marketing agricultural commodities in North America. Specific emphasis will be placed on the domestic and trade policies of Canada, Mexico and the United States as well as the economic impact of NAFTA 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.

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.

## 410 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, and MATH 140 or 160.

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 and 364.
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: 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 recreation, aesthetics and other non-market considerations associated with resource development. Students are required to write reports and give oral presentations. Prereq: 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 or ECON 202.

471 (671) Agricultural 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 or ECON 202.

475 Managerial 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: AGEC 471.

## 480 Agriculture and Applied Project Manage-

 ment (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.
## 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 Agriculture (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 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 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 Integrated Agricultural and Agriscience

 Education Studies (3) Planning and supervision of agricultural experience programs, agricultural mechanics methods, agriscience methods, classroom observations and the FFA organization. Prereq: Admission to Teacher Education.404 Student Teaching Grades 7-8 (6) Student teaching in grades 7-8 for a minimum of 7.5 weeks. Must be taken with TCED 401 and AGED 405. Prereq: Admission to Teacher Education, TCED 301-302 and AGED 310.

405 Student Teaching in Grades 9-12 (6) Supervised student teaching in grades 9-12 for a minimum of 7.5 weeks. Must be taken with TCED 401 and AGED 404. Prereq: Admission to Teacher Education, TCED 301-302 and AGED 310.

430-440 (630-640) Problems in Improvement of Instruction (3, 3) A course designed to assist agricultural educators with professional development, teacher certification, curriculum development and planning agricultural education and agriscience 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.

450-460 (650-660) Problems in Agribusiness 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 designed to deal with teaching agriscience education and/or related agricultural research problems. An elective course for seniors and graduate students. May be repeated for a maximum of 9 hours credit.

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.

## 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 Engineer-

ing (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.

301-302 Special Problems [topic title] $(1,1)$ Independent study project in the areas of soil and water, power and machinery, structures, or electric power and processing. 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: MATH 210.

## 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 one-hour lecture and two two-hour labs.

## 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 studednts 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, MATH 140.
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: MATH 210.

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: AGET 354 or CIEG 354. (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: AGET 354 or CIEG 354. (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: AGET 354 or CIEG 354 (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: MATH 160 and BIOL 120.

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; MATH 160 or MATH 251; and PHYS 212.

## 482 (682) Principles of GIS and GPS for

 Agricultural and Natural Resource Management (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. GIS software techniques are developed using an interactive/inductive learning process. Development of a GIS-based mapprovides 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.

## 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), field data 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 Conserva-

 tion 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 Agricultural 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 and Natural Resources Management 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 Natural Resources Management and crucial issues affecting agriculture and natural resources. Students are required to write reports and present professional oral presentations. Prereq: Junior standing. (Same as NRM 390)

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)

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)
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.
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 animal laboratory 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 representingthe university in the Spring Intercollegiate Livestock Judging Contests will be chosen from this course. Two one-hour lectures and one two-hour lab.

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. Prereq: CHEM 111 or 121, and BIOL 120 or 140.
330 Basic Meat Science (3) Principles of the science of muscle tissue and its conversion to fresh meat. Study of the anatomy and biochemistry of muscle tissue. Physiological function of muscle in the animal. Properties of fresh and processed meats. Preservation of meat and meat products and the fabrication of beef, pork and lamb carcasses into retail cuts and selected processed cuts. Prereq: BIOL 120 or 140, and CHEM 111 or 121 or concurrent enrollment.

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 120 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 Breeding and Improvement of Farm

 Animals and Poultry (3) Application of genetic principles to breeding and improvement of farm animals and poultry. Role of selection, inbreeding, outbreeding and crossbreeding as related to development of breeding plans for each major species of farm animals and poultry. Prereq: BIOL 110 or 130 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. Two one-hour lectures and one two-hour lab. Prereq: BIOL 110 and 120, or BIOL 130 and 140, or permission of instructor.
380 (580) Livestock Merchandising (3)
Principles and activities involved in promoting and merchandising seedstock, including advertising, photography and ad copy layout, animal selection and preparation and utilization of performance records. Presentations by industry and breed association leaders. Includes field trips to seedstock operations and auctions. Two one-hour lectures and one two-hour lab. Prereq: Junior standing and permission of instructor:
400 International Studies in Animal Agriculture (3) A study of the relationship of American animal agriculture to similar enterprises in Great Britain and other members of the European Common Market. 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 meat animals. Investigations into the influence of European attitudes toward animal welfare practices and diet-health issues. Requires five-week summer study session in

Great Britain 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 2.75.410 (610) Beef Sciences (3) Feeding, management and health of the beef herd. Emphasis on production records, marketing technology and consumer affairs. Two one-hour lectures and one three-hour lab. Prereq: Junior standing in Animal Science or Pre-Vet options or permission of instructor:

420 (620) Swine and Poultry Science (3) Programs in breeding, feeding, management, marketing and methods of production for pigs and poultry. Trends in production, processing and consumption. Research results. Trips to swine and poultry farms, feeding operations and markets. Progressive look at the swine and poultry industries focusing on management programs in areas of production, including selection, breeding, feeding, health, facilities, and environmental management, and strategies utilized in contracting, marketing and the value-added processing of pork, chicken, and turkey. Information on consumer food preferences, current swine and poultry research, societal concerns and industry practices will be used along with trips to swineand poultry farms and related industries to reinforce best management practices in the swine and poultry industries. Three one-hour lectures. Prereq: ANSC 350; junior standing in Animal Science or Pre-Vet options 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. Students will participate in management of the UT Martin teaching farm stable. Two one-hour 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 three-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.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.

## 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 threedimensional 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.
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.

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.

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 Glaze Calculations for the Potter (3) Glaze chemistry, theory and calculation. Formulating, mix-
ing and testing a variety of glaze formulas on various clays. 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.
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 (3) 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 and limited participation in classroom settings.

Prereq: ARTE 360 and admission to Teacher Education.

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 Teaching Education, TCED 301-302, and all other required courses in the Professional Education core.

472 Student Teaching in Art - Grades 7-12 (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 Teacher Education, TCED 301-302, and all other required courses in the Professional Education core.

## Art History (ARTH)

210-211 The History of 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 provides a basic understanding of athletic training principles to include conditioning techniques, environmental considerations, protective equipment, wound care, monitoring vital signs and general medical conditions. The student will gain a basic knowledge of common injuries that may occur and apply appropriate taping, wrapping, and splinting techniques to deal with these injuries.

## 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 Athletic Training Education Program; ZOOL 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.
419 (619) Biochemistry Laboratory (1) Lab exercises related to topics covered in BCHE 411. Prereq or Coreq: CHEM 320 and 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 requires field 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, compartmentalization, protein processing, cell energetics, cell signaling, cytoskeleton and transport, cell cycle regulation, and apoptosis. Three one-hour lectures. Prereq: BIOL 130-140 with grades of C or better, and either CHEM 341 or CHEM 310 (and 319) with grade of C or better.

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: BIOL 130-140, CHEM 121-122.

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, major in Biology or major in Secondary Education with endorsement in biological sciences, or instructor's approval.

412 Wildlife Biology Seminar (1) Presentation of selected topics in Wildlife Biology with emphasis on waterfowl management. 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, major in Biology or major in Wildlife biology, or instructor's approval.

413 Wildlife Biology Seminar (1) Presentation of selected topics in Wildlife Biology with emphasis on fisheries management. 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, major in Biology or major in Wildlife biology, or instructor's approval.

418 (618) Limnology (3) An introduction to the study of inland waters and factors and processes that affect the nature of water. This course requires field work involving physical activity. Two one-hour lectures and one two-hour lab. Prereq: BIOL 130140 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: BIOL 130-140 with grades of C or better, and CHEM 121-122.
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, purifi-
cation 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 one course 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.

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: BIOL 130-140 with grades of C or better; CHEM 111-112 or CHEM 121-122.
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) hours internship credit. A maximum of six (6) hours may be used to fulfill degree requirements.
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.

## 722 Leadership, Group Dynamics and Team-

 work (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.
## 723 Creativity, Innovation and Design (1)

This course introduces the student to the view that creativity, innovation, and enhanced design result from effective interaction between the individual and the gatekeepers of the domain of interest. The primary goal will be practical application of current
philosophical and scientific knowledge of creativity, innovation, and design.

## 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 Admin-

 istration [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 301 and 302 and admission to Teacher Education. Prereq for 630: TCED 705 and 780 and admission to Teacher Education.

## 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.

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.
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 Workshop in Education: Effective Instructional Strategies and Managing the Environment (3) Workshop on selected topics. 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 required additional coursework.

300 Students with Exceptionalities (3) An introductory course designed to provide an overview of the field of special edcuation. Principles, characteristics, programs, special needs, legal requirements and instructional strategies, related to the education of students with exceptionalities. Course fulfills three credit hours towards an Occupational Licensure certification. Course may not be substituted for education degree program credit without permis-
sion 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. 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) 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, learing theory and motivaton. 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 (3) Introduction to chemical principles and extensive practice working with fundamental concepts in chemistry. Three 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 upper-division 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 bave 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. 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 122.

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 122.

350 Medicinal Chemistry (3) Fundamental principles of structure/activity relationships, design considerations, physiochemical properties of drugs, drug metabolism and disposition. Prereq: CHEM 342.

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.
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 and credit for, or registration in, CHEM 351 or СНЕМ 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-the-job supervisor. Prereq: CHEM 342 and CHEM 320. Cannot be counted toward upper-division hours required for a chemistry minor.

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.

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.
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 and two laboratory periods per week. Prereq: CHEM 320 and 420.
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 labs. Prereq: CHEM 320 and 342.

440 (640) Polymer Chemistry (3) Chemistry of synthetic polymers including mechanisms of polymerization and relations of molecular structure to bulk properties of polymers. Prereq: CHEM 320 and 342.
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 including consideration of symmetry and group theory, introduction to statistical mechanics. Prereq: CHEM 352 and MATH 320.

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.

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 labs. Prereq: CHEM 320 and 342.
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 (3) Laboratory course in conducting laboratory research. Students will be expected to devote at least nine hours per week to laboratory work. Students are required to submit a formal written research report in order to receive credit. 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 well-being using a systems perspective. (Same as WMST 100)

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.

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. (Same as WMST 303)

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.

## 311 Developmentally Appropriate Activities

(3) Planning, implementing and evaluating activities for selected developmental stages in the human life cycle. Emphasis on physical, cognitive, social, emotional and creative activities for young children.

## 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.

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. (Same as SOC 314.)

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..

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 100 or 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 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) bours in child development. (Same as SPED 490/690 when title is the same)
443 (643) Community Care and Curriculum 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 Children
(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.

200 Introduction to News Writing (3) The evaluation of news, news gathering methods, discussions and exercises in writing leads, organizing stories, overcoming grammatical and spelling deficiencies, avoiding libel and writing a variety of news stories in preparation for work in converged news media outlets. Structured primarily for communications majors and minors. This course is a prerequisite to all other journalism courses. Prereq: Minimum grade of C in ENGL 111 and ability to type.
210 Introduction to Journalism (3) An examination of the nature of news, criteria for determining news, newsroom organization, interviewing and copy preparation. Instruction and practice in writing news stories, primarily in newspaper style. For non-communications majors only. 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: Commиnications majors/minors or permission of instructor.
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.
231 Interpersonal Communication (3) Study and practical application of principles of communi-
cation in face-to-face human interactions. General communication, self-awareness, perception, conflict, listening and interviewing. (Same as WMST 231)

## 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 News Writing (3) Practicing lessons learned in COMM 200 Introduction to News 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.
310 History of Mass Media (3) Introduction to the history and development of media from the earliest records of information distribution to the technological opportunities of the 21st century.

315 Writing for Broadcast Media (3) Theory and techniques of writing for radio and TV. Emphasis on news, special events, commercials and promotional material. Prereq: COMM lower-division core.
320 Writing Features and Editorials (3) Techniques for writing feature articles for newspapers and magazines. Study of freelance markets and submission of students' articles for publication. Practice in writing editorials and analysis of editorials and editorial pages. 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 Desktop Publishing (3) Basic pre-professional, hands-on experience in desktop publishing. Major emphasis is on desktop publishing, including producing fliers, brochures, newsletters and other publications used by public relations practitioners and persons involved in newspaper and magazine production. 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.

## 325 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.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 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.

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 black and white photo-
graphic 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.
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.

## 390 Newspaper Organization and Management

(3) Study of newspaper advertising obligations, budgets, circulation, cost-cutting, equipment, financial and legal questions, production, promotion, public/ internal relations, purchasing and other aspects of newspaper ownership and management. Prereq: Junior standing or instructor's approval.
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.

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.

419 Broadcast Programming and Audience Measurement (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. Prereq: COMM 250.

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.

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.

471 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 broadcasting and/or journalism skills in a supervised assignment with a broadcast, print, public relations, or corporate communications organization. Student may or may not be paid. Prereq: Senior standing and B average in communications.

491 (691) 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. Undergraduate Prereq: Senior standing.

492 Senior Seminar in Communication Theory
(3) Examination of communication issues, theories, models and world communications systems through research, discussion, writing and speaking. Each student will prepare a senior porfolio. Prereq: Communications majors only. This capstone course must be taken during senior's final semester.

## Computer Science (CSCI)

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.

220 Introduction to Computer Science (3) An introduction to the field of computer science. This is a breadth course, providing a survey of a broad range of computing topics intended for prospective Computer Science majors, related engineering fields, and other scientific and technical disciplines. Topics include programming in a modern high-level language, lower level languages, program execution (how a computer carries out the program's instructions), digital logic, computer architecture, operating systems, and software applications. This course is intended both for new computer science majors and for those interested in learning about computer programming. The course is recommended for students who have had no programming experience or who are not ready for calculus.
221 Programming Concepts and Problem
Solving I (3) Computer history, problem solving al-
gorithms, control structures, representation of data. Introductory programming in the $\mathrm{C}++$ language. Intended for computer science majors.

## 222 Programming Concepts and Problem

Solving II (3) A programming intensive continuation of CSCI 221 For computer science majors. Non-computer science majors may be admitted with departmental approval. May be used as one of the programming language requirements for a minor in computer science. 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 Topics in Computer Science [Topic title] (1-3) Lectures and/or special projects related to specialized 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: 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 including mathematical induction, sequences, recursion, set theory, and Boolean algebra. Prereq: CSCI 221 and either MATH 185 or placement in 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.

## 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 Structures and Algorithms (3) Detailed study of data structures and their implementations. Strings, lists, queues, stacks, graphs, trees, B-trees, AVL trees, sparse arrays, and file structures. Algorithms involving iteration, recursion, sorting, searching, hashing and complexity analysis. Prereq: CSCI 222.

## 335 Object-Oriented Programming (3)

Advanced programming using an object-oriented language, classes, packages, software reusability, data abstraction and data hiding, inheritance, polymorphism, exception handling, graphics objects, graphical user interfaces and multimedia. Prereq: CSCI 222.

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 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 221 or 250. (Same as INFS 371.)

352 Object-Oriented Systems Development (3)
Practical applications involving an in-depth study of technical issues and design methodologies used in the design of decision support systems. Prereq: CSCI 351.

360 Introduction to Computer Networks (3) Fundamentals of microcomputer connectivity and communications. Local and wide area network basics, networking architecture and standards. Network protocols including TCP/IP. Comparison, installation and maintenance of Network Operating System. Prereq: CSCI 222.
380 Artificial Intelligence (3) Introduction to artificial intelligence, pattern recognition and classification, fuzzy set logic, natural language user interfaces, learning machines and adaptive systems, object oriented programming inference and rule based systems, arity, expert systems, associative systems, forward and backward chaining backtracking depth first and breadth first searching. Programming in languages appropriate to A.I. Prereq: CSCI 222 and 301.

385 Parallel Computing (3) Introduction to Fundamentals of Parallelism, Parallel computation models which include parallel algorithms and parallel architectures, performance and scalability of parallel systems, parallel algorithms and programming for well known numerical problems. Prereq: CSCI 222 or 226.

410 (610) 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 222 or 250. (Same as INFS 410.)

415 Web-Based Client-Server Programming
(3) Design and implementation of interactive clientserver web-based applications and systems. Coverage will include client technologies (web and native) web server technologies, storage technologies and
communication protocols. Topics include: multitier architecture, HTML 5, JavaScript, XML, JSON, TCP/IP sockets, SQL, ORM, model-view-controller and other design patterns, scripting languages and security. Special attention is given to Internet security issues and accessing databases via a network. Recommend additional prereq INFS 315 or equivalent. Prereq: CSCI 222. Coreq: CSCI 410.

## 420 (620) Computer Organization and

Architecture (3) A study of the organization of modern computer systems, memory organization and management features, virtual memory systems interrupt service, multiprogramming, hardware and software equivalency, RISC and large instruction set machines, logic emulation, variable architectures, multilevel machines, stack and pipeline architectures. Concurrency in computation. The organization of microcomputers, medium and large computer systems. Special architectures. Prereq: CSCI 320 and 325.

435 Theory of Computation (3) An examination of topics related to classical models of computation. Topics include finite automata, regular expressions, context-free grammars, pushdown automata, Turing machines, computability, and an introduction to complexity classes such as P, NP, and NP-Complete.
Prereq: CSCI 302 and 325.
445 (645) 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 222, CSCI 301 or MATH 341.
458 Decision Support and Expert Systems (3)
Introduction to principles of DSS and Expert Systems. Examine different expert systems and expert shells. Development of knowledge bases and expansion of expert shells. Prereq: CSCI 221 or 250.
470 (670) Organization of Programming Languages (3) Syntax and basic characteristics of grammars, Backus-Naur form, language constructs, dynamic and static storage allocation, binding time, interpreted versus compiled languages, lexical analysis, parsing, special purpose languages. Prereq: CSCI 320.

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 320 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 (685) 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 320 and 325.

490 (690) 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: Departmental approval required.

495 Senior Seminar: [Title] (3) Selected topics in computer science including trends, ethics, employment and graduate school opportunities. Selected readings from various contemporary and historical sources. Written and oral reports individually or with a team. Individual and team projects as determined by the instructor. Prereq: computer science major, senior standing.

## Consumer Resource Management (CRMG)

202 Consumers and the Market (3) Consumers 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. For nondepartmental majors only.
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 Counseling (3) An intensive exploration of research design and implementation specific to Counseling; addresses developing a research idea, literature review, design/methodology, data collection, writing, clinical evidence related to best practice, and other supplementary topics, providing skills necessary to critique and conduct research. Cannot receive credit for both EDFN 710 and COUN 710. Prereq: EDEV 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.

715 Advanced Educational Psychology (3) An in-depth research based survey of recent developments in educational psychology, with particular emphasis upon problems associated with learning.

## 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 educationalsettings. Cannot receive credit for both EDPG/COUN 716 and TCED 716.

## 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.

## 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.

## 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, career-related 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.

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.

## 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: Instructor's permission.
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.
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.

## 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.

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.

## 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.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: Must bave taken or be enrolled in COUN 750 or equivalent graduate level abnormal psychology course.

## 777 Psychopathology: Diagnosis and Treat-

 ment (3) This course reviews interviewing and diagnosing skills and intervention models and techniques applicable to psychological disorders: cognitive, affective and behavioral.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.
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.

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.

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.

## 784 Mental Health Services Management,

 Consultation, and Supervision (3) A study of the organization and administration of clinical mental health services; needs assessment, funding aquisition, 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.785 Counseling Practicum (3) Supervised, clinical experience in beginning counseling skills. 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. Prereq: Admission to Candidacy and instructor's approval.

786 Organization and Administration of
School Counseling Services/Programs (3) Emphasis 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.

## 788 Internship in Clinical Mental Health I

(3) This internship provides opportunity to develop skills in counseling on site. Case experiences are discussed under the supervision of faculty in class meetings. 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. Prereq: 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: 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 experi-
ence 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: 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.

791 Supervised Practicum in Secondary Counseling (3) For students seeking secondary school counselor certification. Prereq: COUN 710, 715, 720, 727, and consent of faculty adviser.

## 792 Internship in Clinical Mental Health II (3)

 This internship provides the opportunity to develop skills in counseling on site. Case experiences are discussed under the supervision of faculty in class meetings. 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. Prereq: 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.
## 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.220 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.

300 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. Prereq: CJ 200 and 220 with a minimum grade of $C$ in both.

## 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. Student may receive credit for either SOC 301 and 302, or 303, not both. Prereq: SOC 201 and 202 with grade of C or above, and MATH 210. (Same as SOC 303)

## 310 (510) Principles of Criminal Investiga-

tion (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 preservice 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 (520) 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. Prereq: CJ 200 and 220 with minimum grade of $C$ in both.
325 (525) Criminology (3) Problems, theory, cause, control and prevention of criminal behavior. Prereq: SOC 201 (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. Prereq: CJ 200 and 220 with minimum grade of C in both.
405 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. Prereq: CJ 300 or instructor's approval.
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 (611) 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.
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. Prereq: $\mathrm{CJ} /$ SOC 364 or approval of instructor.

435 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 (650) 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. Prereq: CJ 200 and 220 with minimum grade of $C$ in both.

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 (660) 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 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 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 department chair. May only be taken once for credit.

## 485 Directed Studies 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. Prereq: Junior or Senior standing with instructor approval.

701 Program Planning and Curriculum Development (3) Research, preparation, and delivery of professional training in the field of criminal justice. This course focuses on foundations of adult education to develop a systematic approach to the setting of instructional objectives, communication skills, the instructional process, and methods of evaluating course effectiveness.

702 Administration of Justice (3) Survey of administration and management patterns in criminal justice, including study of the legal issues in the delivery of operational services and personnel administration within modern criminal justice agencies. Emphasis is placed upon the development of sound legal policy, procedures, and practices to avoid agency and personal liability.

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 Qualitative Research Methods (3) This course is designed to provide students with a working knowledge of conducting qualitative research through field observations, interviews, case studies, historical/life histories, and content analysis. 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 Seminar in the Juvenile Justice System (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 Seminar in 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.

## 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.
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 his-
torical 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 (3)
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 and limited participation in classroom settings. Prereq: DNED 390 and admission to Teacher Education.

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 Teacher Education and TCED 302.

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 Teacher Education and TCED 302.

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 Teacher Education and TCED 302 Prereq or Coreq: TCED 303.
409 Student Teaching in Kindergarten (6) Supervised student teaching in kindergarten for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 403 or TCED 412. Prereq: Admission to Teacher Education, TCED 301-302-303, specialized teaching strategies courses, TCED 475, 480, 485 and Reading requirements. See note above.

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 Teacher Education 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 Teacher Education 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, teacherstudent 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 Teacher Education and TCED 302 or permission of instructor.

## 475 (675) Learning and the Kindergarten

Child (4) A four-hour credit course in a state-approved kindergarten placement. It includes a weekly one hour seminar with a faculty member. Prereq: for 475-Admission to Teacher Education and TCED 302; TCED 340 or TCED 350 ( $K-6$ majors); ECED 341 or ECED 351 (PreK-3 majors) or permission of instructor; for 675-Admission to Teacher Education. (Same as TCED 475/675.)

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 Teacher Education and TCED 302 or permission of instructor.
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 investi-
gated. Criteria for book selection, creative links for enhancing literature, techniques in storytelling and literacy data are included. Prereq: Admission to Teacher Education and TCED 302 or permission of instructor.
485 (685) 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 Teacher Education and TCED 302 or permission of instructor.
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 Teacher Education.

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. Requires directed experiences in licensed or accredited early childhood settings.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 Tests and Measurement (3) Construction, use and interpretation of teacher-made and standardized instruments for measuring pupil development. Emphasis on the determination of different estimates of reliability and validity and an introduction to questionnaire and test construction. Credit cannot be given for both EDEV 661 and EDEV
761. Prereq: Admission to Teacher Education.

## Educational Foundations (EDFN)

## 700 Educational Studies: Historical and

 Philosophical Dimensions (3) An integrated analysis and synthesis of how historical and philosophical ideas, policies and practices impinge on the nature of educational discourse and decision making, with particular attention to relating historical-philosophical dialogue to current educational topics and controversies.710 Research in Education (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. The major emphasis of the course is composition of the beginning chapters of the master's research proposal and submission of the proposal to the Institutional Review Board. Prereq: EDEV 710.

## 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.
## 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.

## Educational Leadership (EDLD)

## 710 Introduction to Supervising and Leading

 Educational Change (3)Processes, organization, and functional context of educational administration. Exploration of the diversity issues and their effect on the dimensions and dynamics of leader/follower relationships. Includes examination of current and relevant educational research, ethical practices related to supervising and leading educational change with consideration given to issues of diversity and school culture. Emphasis on the responsibilities of the principal, supervisor and superintendent.715 Personnel Management and Professional Development (3) An examination of problems and issues in supervision including the significance of diverse school populations and ethical behavior. Emphasis involving concepts of supervision and strategies and practices to promote instructional change with an emphasis on effective professional development as it relates to the organization and design of individual professional growth plans and student achievement. Examination of ethical practices related to personnel management and professional development with consideration given to issues of diversity and school culture.

730 Public Relations and Resource Allocation in the School Setting (3) The course explores and develops models for developing appropriate positive public/community involvement in the allocation of resources. Topics of study include: planning and budgeting, public relations, bond issues, management of school affairs, personnel issues and management and all support service components (transportation, food services, record keeping, payroll, purchasing, auditing and school/community partnerships). Examination of ethical practices related to public relations and resource allocation with consideration given to issues of diversity and school culture.

## 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).

## 745 Measurement and Decision Making (3)

Knowledge of measurement and evaluation of school outcomes; reflective evaluation of curriculum as related to student achievement; use of student outcomes to plan differentiated instruction; examination of ethical practices related to decision making with consideration given to issues of diversity and school culture.

## 750 Facility Management for a Safe, Efficient

 and Effective Learning Environment (3) A study of the relationship between educational facilities and educational programs. A safe and nurturing environment is essential for maximum learning outcomes. This course explores and develops facility management models, crisis planning and issues related to diversity and school culture to maximize effective and safe utilization of the school facility.760 Law and Policy in the Educational Setting (3) A study of law, policies and governance issues as related to public education; further, a study of the dynamics of policy development and advocacy under our democratic system which includes the principles
of representation governance that undergird the system of American public schools.
755 Topics in Special Education for School Leaders (3) Review of approaches, legal bases, critical issues and administrative practices required for effective supervision and administration of special education and related personnel and programs. Emphasis on ethical practices related to implementation of special education programs with consideration given to issues of diversity and school culture. Primary emphasis on developing and maintaining effective working relationships with all stakeholders.

## 775 Classroom and School-wide Behavior

 Management (3) Investigation of the importance of classroom management, techniques for assisting teachers in developing positive and proactive classroom management techniques and the process of developing a school-wide discipline plan. Emphasis on ethical practices, issues of diversity, at-risk students, and school culture as they relate to the development and implementation of classroom and school-wide behavior management.780 Clinical Supervision (3) Investigation of the importance of instructional supervision; techniques for supervising the delivery of effective and differentiated instruction; methods of assisting teachers in making curriculum delivery modifications to provide effective differentiated instruction including techniques to address diverse student population; and an examination of ethical practices related to implementation of programs with consideration given is issues of diversity and school culture. 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 Teacher Education or Instructor's approval.

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.

## 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.
## 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 Learning and Foundations (3) An examination of leadership styles and organizational theories applicable to the postsecondary learner.

## 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.
## 730 Legal and Policy Challenges in an Online

Setting (3) A study of the federal and state laws that affect online education, including copyright, libel, freedom of expression, freedom of religion, FERPA, ADA, and IDEA.

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.
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.
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 eduation. 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 Teacher Education.

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 Teacher Education.

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, and Admission to Teacher Education.
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, and Admission to Teacher Education.
760 Supervision of Student Teaching and Field Experiences (3) A study of objectives and general techniques of supervising student teachers and students participating in field experiences in public schools.

790 Seminar: [Selected Topics] (3) Can be taken in multiples of three semester hours. Twelve semester hours can be counted toward a degree. Prereq: Permission of instructor: Certain workshops may be offered on a pass/fail basis.
792 Master Research Project, K-8 (2) The culminating professional research project for the Master of Science in Education with a major in Teaching Program. Seminar topics to include but not limited to educational reform, curriculum design, student achievement, parent involvement, cultural diversity, education technology, assessments and educators as collaborative leaders and mentors (in a K-8 setting). Prereq: ELED 791. May repeat enrollment. P/N only.
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 or instructor's approval.
111 Engineering Methods I (2) Problem solving and engineering design. Introduction to technical drawing. Use of the computer for word processing,
e-mail, Internet, engineering calculations, graphical presentations and data analysis. Professional ethics. Two two-hour labs. Coreq: MATH 185 or above.

112 Engineering Methods II (2) Continuation of problem solving and engineering design. Introduction to the computer for use in computer assisted drawings. Two two-hour labs. Prereq: ENGR 111. 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. 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.

210 Engineering Design (2) Teams conduct a design project that includes development of requirements and objectives, project planning, information research, concept development and assessment, detailed design, preparation of assembly and part drawings, technical report writing and a technical presentation. Ethics, safety and team building are included. Project requires use of 3D CAD technology. One hour lecture and one three-hour lab. Prereq: ENGR 112 and MATH 251 or instructor's approval.

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. Students cannot receive credit for both ENGR 330 and ENGR 231. Three lecture hours. Prereq: Sophomore standing.

232 Linear Circuits I (3) Basic principles of resistors, operational amplifiers, capacitors, inductors and transformers. DC and AC circuit analysis techniques (Ohm's law, Kirchhoff's laws, mesh analysis,
nodal analysis and circuit theorems). Steadystate AC phasor analysis, including 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.
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. Coreq: 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 Chair:

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.

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 and 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 device concepts including diodes, field transistors, bipolar junction transistors; design and analysis of diode switching and rectifier circuits; single and multistage transistor amplifiers biasing; frequency response, output stage and power amplifiers; operational amplifier applications; electronic simulation using software. Three lecture hours.
Prereq: ENGR 231, 232, and 233.
332 Linear Circuits II (3) Transient analysis, two-port networks, AC power analysis, three-phase circuits, magnetically coupled circuits, frequency response and active filters, Laplace and Fourier transform analysis of circuits. Three lecture hours. Prereq: ENGR 232 and 233.
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 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. Prereq: ENGR 241 and 340.
350 Principles of Land Surveying and Geomatics (3) Engineering surveying measurements, methods and computations. Mensuration, leveling, traversing, topographic mapping. Construction surveys. Two lecture hours and one three-hour lab. Prereq: AGET 220 or instructor's approval. Coreq: MATH 160 or 251.

351 Basic Structural Analysis (4) Analysis of statically determinate and indeterminate structural systems for loads and deformations. Analysis of continuous beams, trusses, floor systems and frames. Gravity, live, wind and earthquake loads. Deformations by the elastic curve and by energy methods. Indeterminate analysis using force, displacement and approximate methods. Introduction to computer analysis. 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. Highway design including intersections, horizontal and vertical alignment, earthwork and pavement design. Three lecture hours. 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. Coreq: ENGR 341.

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. Finite word length effects on digital signal processing elements. 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. Fourier transform analysis. Modal analysis of multi-degreeof freedom systems. Experimental verification of analytical results, with report writing. Three lecture hours and one three-hour lab. Prereq: ENGR 241 and 315.

## 371 Advanced Strength of Materials (3)

Development and application of the equations of equilibrium, strain-displacement equations, stressstrain relationships and ductile and brittle failure theories to plane stress, plane strain and axisymmetric problems. Solution of problems involving thick walled cylinders, interference fits, rotation disks, torsion of non-circular cross sections, contact and stress concentrations. 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: 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.

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 presentation to faculty, students and industry representatives is 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 to faculty, students and industry representatives are required. Prereq: ENGR 410.

413 Engineering Management (3) Human, quality, organizational, legal and ethical aspects of the engineering profession. Three lecture hours. Prereq: instructor's approval.
430 Transformers and Rotating Machines (3)
Introduction to magnetic circuits. Ideal and practical transformers. Efficiency and regulation. Three-phase transformers. DC motors and generators. Single and polyphase motors, generators and alternators. Applications of large and small motors and generators. Two lecture hours and one three-hour lab. Prereq: ENGR 232.

440 Energy Systems (3) A continuation of ENGR 340. Applications involving entropy as a property and The Second Law of Thermodynamics. Thermodynamic 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) Rein-
forced concrete as a modern construction material. Aggregate and Portland cement properties and mix design. Structural analysis and design of beams, deep beams, columns and shear walls using ACI code. Quality assurance, quality control. Standard lab tests and design project with test verification. 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: GEOL 121 and ENGR 351.
452 Steel Design (3) Structural analysis and design of beams, columns, axial members, frames and connections. Use of load and resistance factor design (LRFD) code. Design of typical steel structure including connections. Use of computer analysis. Three lecture hours. Prereq: ENGR 351.
453 Pavement Design and Analysis (4) 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. Three lecture hours and one three-hour lab. Prereq: ENGR 220.
460 Microprocessors and Computer Organization (4) Computer organization, assembly language programming, memory hierarchy, digital interfacing, use of microprocessors in common consumer
applications, study of contemporary general and special purpose architectures. Three lecture hours and one three-hour lab. Prereq: ENGR 231, and CSCI 221 or 231.

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) Transmission line parameters and models, power flow studies, fault analysis. Electrical power control methods including voltage regulation, generator allocation and protection schemes. Three lecture hours. Prereq: ENGR 315 and 332.

464 Engineering Electromagnetics (3) Application of physical laws of electricity and magnetism to the design of electrical components, including resistors, capacitors, inductors, antennas and transmission lines. Transient and steady-state behavior of electromagnetic waves. Three lecture hours. Prereq: ENGR 332, PHYS 221, and MATH 320.

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, weldments, springs, bearings, gears, clutches, brakes and miscellaneous elements used in mechanical systems. Three lecture hours. Prereq: ENGR 371 and 472.

474 Manufacturing Processes (3) An introduction to the processes used in manufacturing to convert raw materials into finished products. Processes covered include casting, molding, forming and shaping, material removal and joining. The mechanical and metallurgical fundamentals of material deformation processes will also be covered. Two lecture hours and one three-hour lab. Prereq: ENGR 220. Coreq: ENGR 310.

475 Automated Production Systems (3) A study of production automation and related systems including CAD/CAM, numerical control, industrial robotics, flexible manufacturing systems and programmable logic controllers. Two lecture hours and one three-hour lab. Prereq: Junior standing.
476 Applied Finite Element Analysis Lab (1) Introduction to the application of the finite element method to the solution of stress, vibration and heat transfer problems using commercial finite element software. One three-hour lab. Prereq: ENGR 371 and 472. Coreq: ENGR 473.

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: CIEG 354 or AGET 354. (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: CIEG 354 or AGET 354. (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: CIEG 354 or AGET 354. (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 MGT 301, or ENGR 210. (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)

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)

## 100 English Studies: Critical Thinking and

 Writing (4) Provides intensive practice in the college-level treatment of texts. Predominantly a skills course that requires students to think critically, to respond in writing to a variety of readings and to generate, revise and edit texts of their own. Three classroom hours and one hour of lab. ENGL 100 must precede and may not be substituted for ENGL 110. In order to advance to ENGL 110, students must complete ENGL 100 with a grade of C or higher.
## 110 English Composition: Critical Thinking

 and Writing (4) Continued work with the fundamentals of written discourse. Study of rhetoric, grammar and style as a means to effective prose. Readings and concomitant writing assignments. Predominantly a skills course. Three classroom hours and one hour of lab. Prereq: successful completion of ENGL 100. In order to proceed to ENGL 112, students must complete ENGL 110 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 higher.

112 English Composition (3) (TBR: ENGL 1020) Further study of written English and practice in composition. Readings and research writing with docu-
mentation. 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.

111H-112H Honors English Composition (3, 3) An introduction to written discourse for students with Enhanced ACT scores in English of 28 or above.

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 111-112.

250 British Literary Tradition (3) (TBR: ENGL 2210) English literature from Beowulf through the Neoclassic period. Prereq: ENGL 111-112.
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 111-112 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 111-112.

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 111-112 and department approval.

260 American Literary Tradition (3) (TBR: ENGL 2110) American literature from the preColonial period through the Romantic period. Prereq: ENGL 111-112.
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 111-112 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 111-112.

## 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 111-112 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 111-112.
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 111-112.

305 (505) The Art of the Essay (3) Advanced study in the theory and practice of expository writing. Prereq: ENGL 111-112.
310 (510) Fiction Workshop (3) Principles of and practice in writing fiction. Prereq: ENGL 111-112.

## 311 (511) Creative Nonfiction Workshop (3)

Principles of and practice in writing creative nonfiction. Prereq: ENGL 111-112.

315 (515) Poetry Workshop (3) Principles of and practice in writing poetry. Prereq: ENGL 111-112.

## 320 (520) Introduction to English Linguistics

(3) A linguistic study of the sound system, word structure and syntax of English. 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 111-112 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. (Same as WMST 351)

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 1798 to 1832.

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 111-112 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 among literary genres, scenarios and the film form. Assignments include reading the literature as well as viewing films. 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) Advanced Grammar (3) Study of system and pattern implicit in the English language. Basic sentence patterns, inflections, determiners, parts of speech, expansions, complementation and usage.
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. (Same as WMST 496 when topic offered is on women's literature and issues.)

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 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 (629) Applications in Exercise Physiology (1) Application of exercise physiology knowledge and skills as it relates to health and fitness of all ages in the general population. Coreq: EXSC 430 for Exercise Science/Wellness and Athletic Training student ONLY. May be repeated and/or taken alone with instructor's permission.
430 (630) Exercise Physiology (3) This course examines the basic principles of exercise physiology. The goal of this course is to enhance the foundation of knowledge attained through basic work in anatomy and physiology. This course examines the body's initial and long term responses to physical activity and exercise to maintain homeostasis. It is assumed that all students already have basic knowledge of human anatomy and physiology. 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 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 Exercise Testing and Prescription for the Athletic Population (3) This course encompasses
the theories and principles of strength training and conditioning and techniques that are used to become a strength and conditioning specialist or personal fitness trainer from the National Strength and Conditioning Association (NSCA), The course will include concepts and applications of the exercise sciences, concepts of testing and evaluation, exercise techniques, program design, and organization and administration. Prereq: HPER 207 and 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. In addition, the course will cover the anatomy and electrical conduction of the heart, the medical disease processes, and the role as health care provider. Students will be required to complete 40 hours of ECG practicum experience and complete ten interpretations of an ECG test (i.e., axis, rate, rhythm, hypertrophy, and infarction). Upon completion of the course students will receive a certificate acknowledging their training. The certificate in NOT a certification but can meet the requirements for most certification processes.

710 Advanced Exercise Physiology (3) Comprehensive examination of theoretical principles and their practical application to the fields of sport, health/fitness and rehabilitation. Major issues and up-to-date research findings in training, testing and clinical applications will be discussed.
750 Workshop in Selected Topics [Title of Topic] (3) Workshop on selected topic in exercise science. May be repeated with variation in topic but no more than six hours of workshop credit may be applied to a graduate degree in Education. Prereq: 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.
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 mater area is indicated by the third digit: 0 for Family and Consumer Sciences, 1 for Child and Family Studies, 2 for Food Science and Nutrition, 3 for Consumer Resource Management, 4 for Interior Design, 5 for Textiles and Clothing, 6 for Family and Consumer Sciences Education, and 7 for Dietetics. 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] (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 Science and Nutrition, 3 for Consumer Resource Management, 4 for Interior Design, 5 for Textiles and Clothing, 6 for Family and Consumer Sciences Education and 7 for Dietetics. 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: Senior standing and minimum of 2.50 cumulative grade point average.
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. $\mathrm{P} / \mathrm{N}$ only.
701-702 Master's Thesis $(3,3)$ Thesis proposal and research; thesis writing and presentation. May repeat enrollment. P/N only.

## 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 Sciences (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 hours.

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 teacher education. 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 teacher education portfolio. Field experience required.

330 Introduction to Vocational Family \& Consumer Sciences Education (2) Program planning in Consumer and Homemaking and Occupational Family \& Consumer Sciences. Implications of TIM and other models of teaching for curriculum plan-
ning. Leadership and supervision for Family, Career and Community Leaders of America programs and activities. Measurement and assessment. Prereq: Admission to Teacher Education.

340 Methods of Teaching Family \& Consumer Sciences (3) Learning and teaching styles. Examination of various instructional strategies, equipment and resources. Computer aided instruction. Student, parent and teacher relationship and counseling. Prereq: Admission to Teacher Education.

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 Teacher Education.

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 Teacher Education.

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. (Same as WMST 300)

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.

## 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 porffolio 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 common 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.

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 Science (FSCI)

200 Food Principles (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. Two one-hour
lectures 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 procurement, preparation, service, personnel management and sanitation. One one-hour lecture and two two-hour 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-hundred-eighty 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 (4) (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 one-hour lectures and two one-hour labs.

115 Transitional French (4) 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 one-hour lectures and two one-hour labs.

122 Elementary French (4) (TBR: FREN 1020) An introductory course emphasizing listening, speaking, reading and writing. Three one-hour lectures and two one-hour labs. Prereq: FREN 111 or 115 or the equivalent as determined by the department.
222 Intermediate French (4) Grammar review, reading, writing and conversation. Three one-hour lectures and two one-hour labs. 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 Certificate 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 Certificate 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 Certificate 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 Certificate 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 Language, 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 Certificate 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.

## 111-499 General Studies, Minicourses (1

 credit hour for each course with a limit of three courses) Topics of mutual interest to students and faculty designed to provide a quick response to interests and needs of students and faculty. Proposed courses should be submitted to either the Division of Academic Affairs or the Division of Student Affairs for approval and scheduling. The following requirements are suggested for establishment of minicourses.1. At least one faculty member must endorse each course proposal submitted by students. Endorsement implies that one will teach the course or arrange for one's colleagues to teach it as visiting professors. Faculty may also propose courses.
2. The grading system would be Pass/Fail or letter grade by departmental request.
3. Students are required to meet the academic standards established by the teacher at the onset of the course. These may include a syllabus of readings, an examination, an essay or term paper, research project, field project, or creative work. Discussion and informality, however, will be stressed and every effort made to avoid the pressures associated with the regular curriculum.
4. Students taking 12 hours or more are eligible to enroll. No more than three such courses may be taken by undergraduates. Courses will count as electives.

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.

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. Meets two times per week.

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.

201 Introduction to Physical Geography (3)
An introduction to patterns and processes that shape earth's natural environments.

202 Introduction to Cultural Geography (3) An introduction to patterns and processes of the world's cultural systems, landscapes and built environments. GEOG 201 and 202 do not have to be taken in sequence.
210 Methods in Geoscience (2) Survey of the field and lab methods and associated technology commonly used by geologists and geographers. Topics include: nature of spatial data, map interpretation, basic GPS and GIS, remote sensing, microscope analyses, research design, field study design and implementation, conducting literature searches, scientific and technical writing, preparation of oral presentations, geostatistics. Prereq: GEOL 110-120 or GEOG 151-152 or GEOG 201-202. (Same as GEOL 210)

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.

320 Boundary Layer Meteorology (3) The planetary boundary layer is the layer of the atmosphere that humans live in, that fills up with atmospheric pollutants, and that is heated through solar radiation on a daily basis. This class focuses on the physical processes that occur within the boundary layer by applying physical principals to describe exchanges of mass and energy at the surface. Students will be exposed to the structure and physics of the boundary layer and the current approaches used to observe and model it. Prereq: GEOG 305 and either MATH 140 and 170, or MATH 185 or higher.
340 Synoptic Analysis and Forecasting (3)
This course examines the analysis of synoptic-scale weather events and provides an overview of weather forecasting techniques. Analyses of upper-air charts, upper air soundings, surface weather features and identification of the structure of synoptic and mesoscale systems is examined. Prereq: GEOG 305

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 GEOG 355 (555) and GEOL 451 (651). Prereq: GEOL 110 and either GEOL 120 or instructor's approval. (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; GEOG 201 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: GEOL 110-120 or GEOG 201-202. (Same as GEOL 365/565)

375 (575) Earth Systems Science (3) Investigations in Earth Systems Science using inquiry-based exploration of Earth's processes and environments including the lithosphere, atmosphere, biosphere, hydrosphere and astrosphere. The course will focus on Problem-Based and Student-Centered learning techniques, so it will be especially applicable to anyone intending to or currently engaged in teaching science courses. The course is taught completely online, with the participant doing a combination of individual and group coursework via an asynchronous discussion board. An optional field trip for hands-on learning will be made available. Prerequisites for graduate credit: Bachelor's degree or Senior standing and permission of the instructor. Prereq for undergraduate credit: Minimum of eight (8) bours of undergraduate lab-based science and permission of the instructor: (Same as GEOL 375/575)

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 peoject 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.

420 Applied Meteorology and Climatology (3) This course surveys the applications of meteorology and climatology to societal and environmental issues. Topics covered in this course include the application of climate and meteorology to agriculture, forestry, urban environments, architecture, transportation, energy, and human health. Prereq: GEOG 305, MATH 170 or 185 or 251, and MATH 210.

430 Statistical Climatology (3) A survey of statistical techniques in climatology and meteorology including time series analysis. An emphasis of this course is to examine weather events in the context of multi-year climate variations. This course will examine natural cycles in the Earth-climate systems such as El Niño and sunspot cycles. Prereq: GEOG 201 or 305, MATH 170 or 185, and MATH 210.

440 Atmospheric Thermodynamics (4) Thermodynamics deals with the processes that transfer energy and help to create and change atmospheric systems. Knowledge of the basic principles of thermodynamics and their interactions will facilitate students' comprehension of meteorological processes that determine the weather and climate of the Earth. Understanding thermodynamic processes is critical to accurate assessment of the current state of the atmosphere and to accurate evaluation of the output from numerical models of weather and climate. This course will cover these thermodynamic principles. Prereq: GEOG 305 and MATH 252.

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.
460 Atmospheric Dynamics (4) The basic objective of this course is to provide students with knowledge of the fundamentals of atmospheric dynamics, key principles in modern weather forecasting. The knowledge will facilitate students' comprehension of meteorological processes that determine the weather. In this course the processes of atmospheric dynamics are linked to processes at work in the planetary boundary layer and on the synoptic scale of motion, helping tie together material from other courses. The increased comprehension of important physical processes will improve students' ability to analyze and to forecast the state of the atmosphere and apply fluid dynamics to atmospheric issues. Prereq: GEOG 305, GEOG 440, and either MATH 330 or ENGR 315.
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. First part of course deals with basic physical laws affecting the elements of weather. The second part of the course examines the distribution of climates and the impact of climates on human activity. Prereq: Junior standing.
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 Geog-

 raphy (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)

110 Introduction to Physical Geology (4) An examination of the composition and structure of the earth and its internal and surface processes with applications to the environment, natural resources and geologic hazards. Three hours lecture and two hours lab. Students cannot receive credit for both GEOL 110 and GEOL 111. GEOL 110 is a prerequisite to GEOL 120.

## 110H Honors Introduction to Physical Geology

 (4) See GEOL 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 GEOL 110 but for Honors credit and may not be taken in addition to GEOL 110.)120 Environmental Geology (4) The application of the principles of physical geology to environmental problems, including pollution, natural hazards and resource production. Topics include: volcanic, earthquake, flood and landslide hazards; surface and ground water pollution, economic resources and reserves including transportation, production and use; and broader issues such as global warming. Three hours lecture and two hours lab. Prereq: GEOL 110.

120H Honors Environmental Geology (4) See GEOL 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 GEOL 120 but for Honors credit and may not be taken in addition to GEOL 120.)

121 Engineering Geology (3) The elements of physical and historical geology as they relate to engineering practice. Not to be taken by Geology majors or minors. Two hours lecture and two hours lab.

210 Methods in Geoscience (2) Survey of the field and lab methods and associated technology commonly used by geologists and geographers. Topics include: nature of spatial data, map interpretation, basic GPS and GIS, remote sensing, microscope analyses, research design, field study design and implementation, literature searches, scientific and technical writing, preparation of oral presentations, geostatistics. Prereq: GEOL 110-120 or GEOG 151152 or GEOG 201-202. (Same as GEOG 210)

## 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. Students cannot receive credit for both GEOL 315 and GEOL 310. 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. Students cannot receive credit for GEOL 320 (520) and GEOL 318 (518). Prereq: GEOL 110, CHEM 121, and MATH 140 or equivalent.
325 (525) Fossils: Life Through Time (3)
Hands-on approach using fossils to explore the 4.6 billion year history of life on Earth. Topics include: origin of life; rise of multicellularity and Eukaryotes; advent of shell, bone and teeth; Vendian-Cambrian explosion of life; marine invertebrate ecosystems through time; origin and evolution of primary plant groups; origin and evolution of the major vertebrate groups (fish, amphibians, reptiles, birds, mammals, humans); colonization of land by plants and animals; evolution of flight in insects and vertebrates; mass extinction events and the demise of Earth's biodiversity. Prereq: GEOL 110 or BIOL 120 or permission of instructor. GEOL 350 recommended.

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. Students cannot receive credit for both GEOL 330 (530) and GEOL 331 (531). Prereq: GEOL 320 or instructor's approval.

340 (540) History of the Earth (4) Physical and biological evolution of Earth - past, present and future, with emphasis on scientific methods used to study the geologic record. Topics include: geologic time, rocks and fossils as historical archives, reconstructing ancient environments, global sea level and atmosphere change, plate tectonics and mountain building, mechanisms and evidences of organic evolution and a survey of Earth's past and present biodiversity. Three hours lecture and two hours lab. Prereq: GEOL 110.
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: GEOL 110 and 120.

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. Students cannot receive credit for GEOL 350(550) and GEOL 351(551). Three hours lecture and two hours lab. Prereq: GEOL 110 or instructor's approval.
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) and GEOL 451(651). Prereq: GEOL 110 and either GEOL 120 or instructor's approval. (Same as GEOG 355/555)

360 (560) Sedimentology (3) A study of principles of sedimentology, sedimentary petrology,
depositional processes and environments. Two hours of lecture and two hours of lab per week. Students cannot receive credit for both GEOL 360(560) and GEOL 411(611). Prereq: GEOL 110 and 120. Recommended: GEOL 320.

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: GEOL 110-120 or GEOG 201-202. (Same as GEOG 365/565)

370 (570) Principles of Stratigraphy (2) Methods of correlating rock strata according to North American Stratigraphic Code including lithostratigraphy, chronostratigraphy and biostratigraphy. Two hours lecture per week. Prereq: GEOL 360.

375 (575) Earth Systems Science (3) Investigations in Earth Systems Science using inquiry-based exploration of Earth's processes and environments including the lithosphere, atmosphere, biosphere, hydrosphere and astrosphere. The course will focus on problem-based and student-centered learning techniques, so it will be especially applicable to anyone intending to or currently engaged in teaching science courses. The course is taught completely online, with the participant doing a combination of individual and group coursework via an asynchronous discussion board. An optional field trip for hands-on learning will be made available. Prerequisites for graduate credit: Bachelor's degree or Senior standing and permission of the instructor. Prereq for undergraduate credit: Minimum of eight (8) bours of undergraduate lab-based science and permission of the instructor. (Same as GEOG 375/575)

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 inter-
pretation, depth and thickness problems, construction of structure sections, structure contour maps, stereonets. Three hours lecture and two hours lab. Prereq: GEOL 330, 370.

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: GEOL 110; for graduate credit, a student must already possess an undergraduate degree in geology or an allied marine science discipline.

445 (645) Geohydrology (3) A study of the water cycle, especially those parts dealing with streams, ground water and water quality. Two hours lecture and two hours lab. Prereq: MATH 140, GEOL 110, CHEM 121.

450 Methods in Field Geology (3) Students will participate in field projects during their senior year. Methods include measurement, description and interpretation of rock sections; use of instruments in the collection and the analysis of data; construction and interpretation of geologic maps and crosssections; writing technical reports and the delivery of oral reports. This course is designated as the Writing and Speaking Across the Curriculum course in geology. Prereq/Coreq: Senior standing and instructor's approval.

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, 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.

## 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 work-
shops 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 remnants and 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 (4) (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 one-hour lectures and two one-hour labs.

122 Elementary German (4) (TBR: GERM 1020) An introductory course emphasizing listening, speaking, reading and writing. Three one-hour lectures and two one-hour labs. Prereq: GERM 111 or equivalent as determined by the department.
222 Intermediate German (4) Grammar review, reading, writing and conversation. Three one-hour lectures and two one-hour labs. Prereq: GERM 122 or equivalent as determined by the department.
250 Germany Today: The German People and
Their Culture (3) An interdisciplinary study of con-
temporary 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 Certificate 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 Certificate 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 Certificate of Proficiency. Not regularly offered.
381-382 (581-582) Survey of German Litera-
ture (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-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 Certificate 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 Certificate 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.

## Graphic Design (GDES)

210 Graphic Design (3) Computer-based design, tools and practices through actual use in the design lab. A brief history of graphic design placing issues of the new media in context with the aesthetics of visual art. Prereq: ART 120-130 and ART 140-150, or permission of instructor.
220 Graphic Design II (3) Course will continue to explore fundamental graphic design concepts and strategies as well as photo-based image editing, discussion of contemporary trends in digital media and technical standards in the field. Prereq: GDES 210 or permission of instructor.
345 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 220.

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.

## 391 Special Topics in Graphic Design (3)

Selected software applications, media, and/or genres for intensive study. May be repeated for credit. Prereq: GDES 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 220 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.

## 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.

220 Advanced First Aid and CPR (3) Procedures for emergency care and accident prevention. American Red Cross certification in Advanced First Aid and CPR available.

303 (503) 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.

325 (525) 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 (530) 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 (553) 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) Anti-aging is one of the most exciting areas of health and wellness today. Life expectancy has increased substantially over the past century. People are living longer and there are actions that can be taken to help ensure a high quality long life. Many of the leading causes of death are degenerative in nature. We are, in part, a master
of our own fate. 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 Facilitating Behavior Change (3) This course provides Health \& Human Performance students with an understanding of theories and models upon which behavior change is based. Students will have the opportunity to practice skills and strategies that impact health behavior change. Additionally, principles involved in motivation and program adherence and retention will be addressed.

410 Health Education and Promotion (3) As a guide to the field of health education and promotion, this course addresses the theoretical base needed to develop behaviors conducive to well-being or a change in behaviors conducive to health. Prereq: HLTH 111 and 351.

475 Health Methods (3) Introduction to a variety of methods and materials that can be utilized in teaching health content. Also, emphasis on the writing of goals and objectives, the design of unit plans and lesson plans and the construction of evaluation instruments. Prereq: Admission to Teacher Education.
485 (685) 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.
700 Developing, Implementing and Evaluating Health Promotion Programs (3) This course examines the philosophy, rationale and guidelines for developing health promotion programs for the corporate and community sectors. This course addresses planning, developing, implementing and evaluating health promotion programs for a realistic, understandable approach to planning health promotion programs.

## 703 Advanced Pharmacology and Sports (3)

In-depth examination of the therapeutic uses, actions and side effects/adverse reactions of major drugs related to sport participation. Emphasis is
given to, but not limited to, current issues regarding legal concerns, over-the-counter medications and substance abuse.

## 750 Workshop in Selected Topics [Title of

 Topic] (3) Workshop on selected topics in health. May be repeated with variation in topic but no more than six hours of workshop credit may be applied to a graduate degree in Education. Prereq: Instructor's approval.775 School Health Methods (3) Review of methods and materials available for utilization in teaching health. Designed to provide additional strategies for health instruction through examination of current health literature, characteristics of effective teaching and techniques for planning and implementing effective programs in health.

## 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.

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-12. 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 Teacher Education Program Conceptual Framework including entry level portfolio development. Grades K-5. Portfolio checkpoint. Prereq: Admission to Teacher Education, HPED 308, 320 and HLTH 111.

## 310 Developmental Physical Education for Elementary and Middle School Children (3)

 Overview of the purpose, curriculum components and instructional approaches appropriate to the developmental readiness stages of the primary, elementary and middle school child. The purpose of this course is to introduce the pre-service teacher to developmentally and instructionally appropriate physical activity and health teaching practices that can be implemented throughout the school day in primary, elementary, and middle schools. Pre-service teachers will gain valuable physical activity fieldbased teaching experience at selected teaching sites. Prereq: Admission to Teacher Education.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 heath 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.

400 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. Students will be able to apply the concepts of anatomy and their physiological response to physical activity and exercise to appropriately develop and maintain healthy lifestyles. Prereq: BIOL 110 or equivalent; Health and Human Performance Licensure K-12 majors and coaching minor students only or 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 (611) Secondary Instruction Strategies

 and Curriculum Development (3) Field-based experience for health and physical education at the secondary level emphasizing pre-assessment, unit/ lesson planning, implementation and evaluation. Introduction to curriculum design and implementation from a historical and education governance perspective. Prereq for 411: HPED 309; Admission to Teacher Education; prereq for 611: Admission to Teacher Education or instructor's permission.412 (612) 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 (685) 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.
## 730 Theory and Application in Physical Educa-

 tion and Sport Pedagogy (3) Focus on theory and application of research in classroom management and effective teaching practices related to developmental motor and sport skill acquisition. Appropriate planning and assessment techniques will be discussed in relation to maximizing learning opportunities for all children.
## 750 Workshop in Selected Topics [Title of

 Topic] (3) Workshop on selected topics in Health and Physical Education. May be repeated with variation in topic but no more than six hours of workshop credit may be applied to a 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

 Civilization $(3,3)$ 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.

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. (Same as WMST 304)

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.
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.

331 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.

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) Restoration, Revolution and Colo-

 nialism, 1815-1914 (3) A study of the Industrial Revolution, the Congress System, the Revolutions of 1848, Bismarckian diplomacy and balance of power politics. Topics include an examination of artistic and intellectual transformations, the rise of ideologies, including Liberalism, Nationalism, Socialism and Marxism, the impact of imperialism and the causes of World War I.342 (542) From War to War, 1914-1945 (3) A study of the course of World War I and the origins and course of World War II, with a focus on balance of power politics and the nature of total war. Topics include the impact of the Russian Revolution of 1917, Stalinism, Nazism, Fascism, the decline of Western Democracies, the ordeal of total war, the internationalization of diplomacy and the creation of modern mass welfare societies.

343 (543) Contemporary Europe, 1945 to Present (3) A study of the major political, economic, diplomatic, social and cultural developments in western and eastern Europe since 1945. Special attention is given to the European dimension of the Cold War, the demise of communism, the reshaping of the European geography since the fall of the Berlin Wall and the future of the European Union.

## 401 Independent Study in American History

(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 (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.

422 (622) Modern Germany, 1815 to the Present (3) Focuses on the forces leading to the unification of Germany, the age of Bismarck, the rise and fall of the Third Reich. Concludes with a postscript on East and West Germany during the Cold War and the reunification of Germany.

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.
447 (647) History of Russia (3) A survey of Russian history from the origins of Slavic history to 1917, including Kievan Rus', the conversion of Eastern Slavs to Christianity, the Mongol Conquest and Yoke, the Rise of Muscovy, Ivan the Great, Ivan
the Terrible, the Time of Troubles, Peter the Great, the Conquest of Siberia, Catherine the Great, Russian and Enlightenment influences, the War of 1812, the Crimean War, the Great Reforms, the Russian economy in the Nineteenth Century, Russian literary monuments, the revolutionary movement and the growing threat of World War I.
448 (648) Russia Since 1917 (3) A study of the Soviet Union and Post-Soviet Russia from the origins of the revolutions of 1917 to the present. Examines the ideologies and personalities that have shaped political life as a backdrop to analyze Soviet society and culture, Stalin's reign of terror, the economic failure of Communism, Soviet foreign policy, the nationalities' problems and the breakup of the Soviet Union in 1991.

## 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 repubic 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) History of 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) History of 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. (Same as WMST 480 when topic offered is on gender issues in history.)

## 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 Non-U.S. History: [Topic Title] (3) Classes taught with an interdisciplinary and/or comparative approach, or allowing for an in-depth study of specialized topics in European or non-Western 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 acquisition, 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 1850 s, 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) Recent History of the U.S., 19001945 (3) A study of the forces and personalities that shaped American history through Progressivism, WW I, an Age of Excess, Depression and government response and WW II.

497 (697) Recent History of the U.S., 1945 to the Present (3) An assessment of the important activities and changes in American life brought on in large part by WW II and the subsequent competition between the U.S. and the Soviet Union.

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 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.
$\mathbf{S}$ (Satisfactory) Grade—For an explanation of this grade, see Grades section of university catalog.

## Human Learning (HLRN)

311 Technology Integration (3) Overview of methods for integrating technology into the K-12 curriculum. Emphasis is on the application of technolo-gy-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)

206 Tumbling, Fitness and Self-Testing Activities (3) Emphasis on the safe integration of basic tumbling, fitness and self-testing activities into the elementary and secondary school curriculum. Requires performance proficiencies in selected skills.
207 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.

209 Professional Orientation (3) Overviews the physical education and health education professions emphasizing the individual's role as a professional including behavior, values and career opportunities. Addresses attitudes, knowledge and skills as defined by the College of Education, Health, and Behavioral Sciences Conceptual Framework including entry level portfolio development.

## 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.

350 (550) 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 skills and competencies required to succeed in sport and health-related professions. Coverage includes entry level career skills and opportunities, portfolio refinement, fundamentals of leadership and legal and sociological issues. Prereq: Senior standing or instructor approval.
432 (632) 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 (635) 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 (640) Evaluation in Human Performance (3) Overview of the procedures and instrumentation required in the administration of psychomotor skills testing and evaluation. 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.

## 705 Applied Scientific Principles of Human

Performance (3) Application of mechanical and physiological principles governing human movement for the teacher/coach will be examined. Basic training principles for health, fitness, and sport will be addressed for children, adolescents, and young adults. Prereq: ZOOL 251 or exercise physiology or instructor's approval.

## 713 Research in Health and Human Perfor-

 mance (3) This course is an introduction to experimental, descriptive, and survey research as they relate to seeking solutions to problems in the field of Health and Human Performance. Research techniques, the analysis of research results, and the uses of research and explored. Students will complete in-depth library research proposals in American Psychological Associaton (APA) format. The major emphasis of this course is composition of the beginning chapters of the master's research proposal.715 Leadership in Health and Human Performance (3) This course will concentrate on the exploration of leadership theories. Students will spend time developing philosophies as they relate to their individual professions. Throughout the course, emphasis will be placed on the student's leadership opportunities within their chosen career paths in Health and Human Performance. Upon completion of the course, students will have an understanding of their leadership qualities and characteristics which can be applied in a real world setting.

740 Sport and Exercise Nutrition (3) In-depth look at nutrition as the foundation for physical performance. The role of various nutrients in providing energy and regulating physiological processes related to health, fitness and athletic performance will be studied. Critical evaluation of nutritional supplements as performance aids along with other related issues such as eating disorders will also be included. Prereq: NUTR 100 or above; Exercise Physiology, or instructor's approval.

## 750 Workshop on Selected Topics [Title of

 Topic] (3) Workshop on selected topics. May be repeated with variation in topic but no more than six hours of workshop credit may be applied to a graduate degree in Education. Prereq: Instructor's approval.
## 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.
241 Current Productivity Tools (1) Hands-on experience in current computer productivity tools at the introductory level. Pass/Fail option. May be repeated for credit.

251 Office Procedures (3) Review and practical application of modern office procedures. Prereq: INFS 211 and INFS 231 or CSCI 201.

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, image maps, frames, and forms using freely available and commercial web editors. Introduction to JavaScript and Java applets. Prereq: CSCI 201; CSCI 220 or INFS 205.331 Professional Word Processing (3) Advanced word processing application skills. Emphasis on strategies for selection of appropriate tools for advanced word processing techniques. A simulation project is included. Prereq: INFS 233 or instructor's approval.

351 Business Communications (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 221 or 250. (Same as CSCI 351.)

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 222 or 250. (Same as CSCI 410.)
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.
461 End-user Information Systems (3) A survey of the major technologies used to support end users. Emphasis on technology selection and implementation, trends and issues relative to information system analysis and design, productivity measures, information economics and change management.

462 Office Management (3) Theory of planning, organizing and directing in the office environment. Prereq: MGT 300.

## 480 Internship in Management Informa-

 tion 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.
## 481 Current Issues in Office Information

Systems (3) Seminar in current issues in the office information systems environment. Students are required to write research reports and give oral presentations. Prereq: INFS 310.
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: CSCI 351 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 learnercentered 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 Environments (3) This course examines
Web-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.

201 Introduction to Women's 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. (Same as WMST 201)

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.

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).

## Interior Design (INTD)

100 Design Selection (3) Study of interior design profession, design and color theory, design process and space planning techniques using appropriate technology and resources. Overview of aesthetic and functional selection of interior systems and design components with attention to human needs in the built environment.

210 Interior Design Studio (3) A basic interior drafting course emphasizing symbols, tools and techniques necessary for drawing interior house plans. Color coordination within the interior environment. One one-hour lecture and two two-hour labs. Prereq: INTD 100 or instructor's approval.

302 Historic Furniture Design (3) Tracing the development of furniture and interiors from ancient
times to the present including recent adaptations and contemporary developments.

303 Human Needs in Housing (3) The social, psychological, economic and technological factors involved in fulfilling environmental needs of individuals and families.

340 Interior Design Applications (3) Studio problems in Interior Design. Emphasis placed on the development and application of skills for sketching and drafting the interior environment. Study of perspective techniques as means of visual communication. One one-hour lecture and two two-hour labs. Prereq: INTD 210, Art 120 or instructor's approval.
410 Lighting (1) A study of the theories of color and principles of lighting including residential and commercial applications. Lectures and activities provide practical application of the knowledge learned to problem-solving solutions.

411 Materials and Finishes (1) Technical knowledge and design attributes of materials and finishes for interior design. To include lectures, field trips and practical applications. Students will gain the understanding of the appropriate materials and finishes, as well as code requirements for commercial interiors.

412 Professional Procedures (1) A study of the business principles and practices for the interior design profession. To cover ethics, goal setting, legal issues, promoting practice, contract writing and presentations specific to the profession.
442 Residential Interior Design (3) Techniques for rendering presentation boards. Continued development of drafting applications and material selection relative to planning and furnishing the residential environment. One one-hour lecture and two two-hour labs. Prereq: INTD 340 or instructor's approval.

## 443 Commercial Interior Space Planning

(4) A continuation of Residential Interior Design using various techniques for rendering commercial interior spatial designs. Critical assessment of students' collected creative works and development of individualized portfolios. Two three-hour labs and one independent studio lab. Prereq: INTD 340 or instructor's approval.

450 Computer Applications in Interior Design (3) Overview of computer applications in the field of interior design; basic terminologies associated with microcomputer hardware and software; development of projects using the computer as a basis for graphic communication. One one-hour lecture and two two-hour labs. Prereq: INTD 340 or instructor's approval.

## 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.

485 The Changing World Order (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.

## Japanese (JAPN)

111 Elementary Japanese (4) 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 one-hour lectures and two one-hour labs.

122 Elementary Japanese (4) An introductory course emphasizing listening, speaking, reading and writing. Three one-hour lectures and two one-hour labs. Prereq: JAPN 111 or the equivalent as determined by the department.
222 Intermediate Japanese (4) Grammar review, reading, writing and conversation. Three one-hour lectures and two one-hour labs. 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.
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 Certification of Proficiency. Not regularly offered.

## 495-496 Topics in Japanese Language, Lit-

 erature, 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 certificate 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, selfpresentation 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 a competitive global environment. Special focus will be placed upon culture, community, creativity, capitalism, and democracy, as well as the role of traditional and emergent leaders.

## 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.

## 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: ACCT 201 or ACCT 300; ECON 201 or ECON 202.

301 Organization and Management (3) Management processes and functions in manufacturing and service organizations. Analysis of organiza-
tion 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: MGT 300 or 301 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. (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 305.

## 351 Management and White Collar Crime (3)

This course is a study of the relationship between management and the commitment of crimes within business organizations. The course includes study of crimes against consumers, product safety issues, institutional corruption, types of fraud, crime by government entities, medical fraud, and other fraud crimes. Prereq: MGT 300.

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)

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.
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: $M G T$ 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.

490 Business Policy (4) 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. Additionally, professional preparation including; resumé building, interviewing skills and ethics will be included. 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.

## 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.

## 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 (3) Introduction to major concepts, technologies and decision processes used by service and manufacturing firms with an emphasis on value creation through process identification, analysis and improvement. Mathematical techniques and computer-based analysis of integrated production and distribution of products and services will be stressed. Topics covered include: mathematical programming, simulation, operations strategy, operations decision making, forecasting, supply chain management, product/process design and selection, quality management, capacity planning, location/layout analysis, work system design, inventory systems, queuing theory and the lean enterprise. Prereq: $A C C T$ 201 or ACCT 300.

## 740 Management of Innovation and Technol-

 ogy (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 semester. Approval from the Graduate Coordinator is required before registering for this course. Prereq: Students must have a 3.00 graduate cumulative GPA with no I grades while enrolled in MGT 790.

## 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 Mar-

 keting (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: ECON 201 or ECON 202.

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: ${ }^{M K T G}$ 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.

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 I (1) Addresses the application of strategic marketing 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.

373 Sports Marketing II (1) Addresses the application of the traditional "four Ps" of marketing (Product, Place, Promotion, Price) to sports marketing strategy development. Prereq: MKTG 105 and SPMG 305; or MKTG 301.

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 Direct Marketing Management (3) An examination of the concepts, strategies and applications involved in direct marketing, including direct mail, direct response advertising, telemarketing, catalogs, the Internet and infomercials. Measurability, accountability, list and database management and the integration of direct marketing programs into the promotion mix and the marketing mix with an emphasis on marketing strategy. Prereq: 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 using a computer simulation based on group competition. Emphasis on marketing concepts, competitive decision making, the development of marketing strategy and plans and group interactions in a changingenvironment. 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 bas successfully completed a bighernumbered mathematics course. Prereq: One unit of high school geometry, two units of high school algebra, and a satisfactory score on the placement test.

140 College Algebra and Elementary Functions
(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 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 140, or 170, or 185, or 251 or appropriate mathematics placement.
## 210H 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 placement; AND ACT composite score of 28 or above or departmental approval.
251-252 Calculus I, II (4, 4) (TBR: MATH 1910-1920) 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 (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 252.340 (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.
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) Applications and Modeling (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.

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 trans-
formations. 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: MATH 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 Teach-

 ers (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 Statis-

 tics for Teachers (3) Selected topics in probability and statistics through student research, seminars, or workshops. Prereq: Departmental approval.
## 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 Microbiology

(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: BIOL 140 with grade of C or better; CHEM 111-112 or 121-122.

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 enzymelinked 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 Leader's Training Course (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 Leadership Development and Assessment Course (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)

100 Topics in Music Theory (1) A review of basic theory skills, including music notation, scales, key signatures, triads, intervals and rhythms. Prereq: permission of Department Chair.

## 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 designed for the music major and minor 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.

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 Music for the Masses: A Study 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.

121 Music Theory I (3) Sequential study of music fundamentals, harmonic progression, part-writing procedures and stylistic elements. Prereq: Passing score on departmental theory entrance exam. Coreq: MUS 123.
122 Music Theory II (3) Continued sequential study of music fundamentals, harmonic progression, part-writing procedures and stylistic elements. Prereq: MUS 121, MUS 123. Coreq: MUS 124.

123 Aural Skills I (1) The study of ear training and dictation. Coreq: MUS 121.

124 Aural Skills II (1) Continuation of the study of ear training and dictation. Prereq: MUS 121, MUS 123. Coreq: MUS 122.

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.

221 Music Theory III (3) Part writing and analysis in the standard harmonic vocabulary. Prereq: MUS 122, MUS 124. Coreq: MUS 223.

222 Music Theory IV (3) Advanced part writing and analysis in the standard harmonic vocabulary. Prereq: MUS 221, MUS 223. Coreq: MUS 224. sight-singing and aural skills needed by musicians. Prereq: MUS 122, MUS 124. Coreq: MUS 221.

224 Aural Skills IV (1) Continued development of sight-singing and aural skills needed by musicians. Prereq: MUS 221, MUS 223. Coreq: MUS 222.

225 Composition (1) May be repeated for credit. Prereq: instructor's approval.

320 Orchestration and Arranging (3) Scoring for small instrumental combinations, full band and orchestra and vocal-instrumental combinations. Special focus on 20th century practices and techniques. Prereq: MUS 222 or permission of Department Chair.

333-334 Piano Literature $(1,1)$ Standard piano repertoire from early keyboard works customarily played on the piano today to the present.

335-336 Vocal Literature (1, 1) 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 $(1,1)$
Repertoire for brass, woodwind, or percussion from the earliest music currently performed on these instruments to the most recent. Specific instruments designated by section.
341 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 122.
342 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 341.
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 Beginning Choral Techniques, Literature

 and Conducting (3) 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. This course includes a minimum of 10 hours of field experience. Prereq: MUS 221.
## 354 Instrumental Conducting and Literature

I (3) 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 221.
363-364 Piano Pedagogy $(1,1)$ Materials and methods for class piano and studio teaching.

365 Voice Science and 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 $(1,1)$ Materials and methods for teaching brass, woodwind, or percussion. Specific instruments designated by section.

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.
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.
420 Form and Analysis (3) 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 222.
425 (625) Composition (1) May be repeated for credit. Prereq: MUS 222 or instructor's approval.
427 Analysis of Post-Tonal Music (3) A study of analytic techniques and their application in posttonal music. Prereq: MUS 222, MUS 224, MUS 342.
430 Internship in Church Music (3) Supervised experience with a practicing church music director.

## 431 Larger Choral Works and Rehearsal

 Strategies (3) Selection and rehearsal of extended choral forms suitable for school or church settings; understanding the working of instruments; rehearsal strategies for choral literature accompanied by instrumental ensembles. Prereq: MUS 453. Coreq: MUS 432.
## 432 Laboratory in Rehearsing Choral Works

(1) Practical skills in rehearsing and conducting choral works. This course includes a minimum of 10 hours of field experience. Prereq: MUS 453. Coreq: MUS 431.
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 Advanced Choral Techniques, Literature and Conducting (3) 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. This course includes a minimum of 10 hours of field experience. Prereq: MUS 353 and MUED 260.

454 Instrumental Conducting and Literature II
(3) Continued development of baton technique and score study skills learned in MUS 354. Students will develop aural and intepretive 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 354, MUED 260.

463 Practicum in Piano Teaching (1) Supervised teaching in the piano class and private studio. May be repeated for credit.

466 Practicum in Instrumental Teaching (1)
Supervised teaching in brass, woodwind, percussion, or guitar. 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.

701-702 Independent Study in Music (3, 3) Directed reading or research.

791, 792, 793 Topics in Music (1, 2, 3) The study of selected, specific topics in music. Topics and prerequisites to be announced.

## 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.)
101-102, 201-202 Piano Class
( 1 credit per semester)
103-104, 203-204 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)

## 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:

## 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 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. Students from non-music curricula must have permission of the instructor to register for private instruction. May be repeated for credit. Applied music fee required.
## 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 Baritone Horn (1)
231, 431 Tuba (1)
251, 451 Percussion (1)
261, 461 Harpsichord (1)
271, 471 Organ (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 Baritone Horn (1)
232, 432 Tuba (1)
252, 452 Percussion (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 Baritone Horn (2)
234, 434 Tuba (2)
254, 454 Percussion (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 Baritone Horn (2)
234, 433 Tuba (2)
254, 453 Percussion (2)

## Recital

110, 310 Recital $(1,1)$ Exploration of musical repertoire and recital performance practices including those from non-Western cultures. Attendance at all weekly student recitals and twelve or two-thirds (whichever is fewer) of the evening concerts sponsored by the Department of Music each semester. Required of all music majors. Pass-Fail. Music majors and minors only.

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 (3)
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.

400 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.

401 Independent Study (3) Directed reading or research by arrangement. May be repeated for credit. Permission of department chair required.

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 Teacher Education, 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 Teacher Education, 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 Teacher Education, TCED 302 and all other required courses in the Professional Education core.
701-702 Independent Study in Music Education $(3,3)$ Directed reading or research.

791, 792, 793 Topics in Music Education (1, 2, 3) Selected topics in music education. Topics and prerequisites to be announced.

## 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.
151, 351 Marching Band $(1,1)$
152, 352 Wind Ensemble ( 1,1 )
153, 353 Concert Jazz Band (1, 1)
154, 354 Brass Ensemble (1, 1)
155, 355 Woodwind Ensemble (1, 1)
156, 356 Percussion Ensemble (1, 1)
158, 358 Concert Band $(1,1)$
160, 360 Piano Ensemble (1, 1)
161, 361 Accompanying $(1,1)$
162, 362 University Singers (1, 1)
163, 363 Choral Society (1, 1)
164, 364 Collegiates $(1,1)$
165, 365 New Pacer Singers $(1,1)$
166, 366 Treble Choir (1, 1)
167, 367 Lyric Opera Theatre ( 1,1 )
168, 368 Chamber Ensemble (1, 1)
169, 369 Marching Band/Wind Ensemble (1, 1)
170, 370 Marching Band/Concert Band (1, 1)

## Natural Resources Management (NRM)

## 100 Introduction to Natural Resource Manage-

 ment (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 Manage-

 ment [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 Practi-

 cum (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 Mediating Environmental Conflicts (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) In-

 troduction 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 courserequires fieldwork involving physical activity. Two one-hour lectures and one two-hour lab.

## 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 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 (2) Assessment of personal and academic potential for professional careers by the Agriculture and Natural Resources Management 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 Natural Resources Management and crucial issues affecting agriculture and natural resources. Students are required to write reports and present professional oral presentations. Prereq: Junior standing. (Same as AGRI 390)

## 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.

430 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: PRAD 200 or MATH 210 and junior standing.
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)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: Major in Natural Resources Management, or Biology, or have instructor's approval.

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 PRAD 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 of PRAD 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.

## Nursing (NURS)

201 Pharmacology I (2) Examines classifications, uses, actions and side effects of major drug groups and nursing responsibilities for safe drug administration, including client teaching. Focuses on drugs used for acute health care problems. Two hour lecture. Prereq: Admission to clinical nursing program or instructor's approval.

202 Pharmacology II (2) Continues examination of classifications, uses, actions and side effects of major drug groups and nursing responsibilities for safe drug administration, including client teaching. Focuses on drugs used for chronic and mental health care problems. Two hour lecture. Prereq: NURS 201 or instructor's approval.
212 Foundations in Nursing I (6) Beginning course in nursing which emphasizes concepts, principles and basic nursing skills utilized in nursing practice. Three hours lecture and six hours lab. Prereq: Acceptance to clinical nursing courses, First Aid and CPR Provider C certifications and ZOOL 251. Coreq: ZOOL 352, NURS 201 and 221.

221 Concepts and Theories in Nursing (2) Use of concepts and theories of professional nursing practice as the basis for implementing and evaluating health care. Two hours lecture. Prereq: Acceptance to clinical nursing courses or instructor's approval.
231 Foundations in Nursing II (6) Continuation of Foundations in Nursing I emphasizes the use of the nursing process in providing care for client/client systems with basic health care needs. Two hours lecture and eight hours lab. Prereq: NURS 201, 212, 221 and ZOOL 352. Coreq: NURS 202 and 241.

241 Health Assessment (5) Emphasizes concepts and skills of health assessment. Prepares the nurse to assess and analyze the physical and psychosocial status of individuals. Four hours lecture and two hours lab. Prereq: NURS 212 and ZOOL 352 or instructor's approval. Coreq: NURS 202 and 231.
$\mathbf{2 8 0 - 2 8 9}$ 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.

312 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 individuals. Four hours lecture and two hours lab. Prereq: Licensure as a Registered Nurse and instructor's approval. Students cannot use credit for both NURS 241 and 312 toward graduation requirements.

## 321 Acute and Chronic Health Care Nursing I

(7) Emphasizes use of the nursing process in care of client/client systems with acute and chronic health needs. Attention will be given to prevention, health promotion and rehabilitation. Three hours lecture and eight hours lab. Prereq: NURS 202, 231 and 241. Coreq: NURS 341. Students cannot use credit for both NURS 321 and NURS 350 toward graduation requirements.

## 331 Acute and Chronic Health Care Nursing II

(7) Continues emphasis on nursing needs of client/ client systems with acute and chronic health needs. Attention will be given to prevention, health promotion and rehabilitation. Three hours lecture and eight hours lab. Prereq: NURS 321 and 341. Coreq: NURS 362.

341 Mental Health Nursing (6) Emphasizes concepts and principles necessary to understand client/ client systems as they evolve through life experiences, utilizing the nursing process to assist them to meet their mental health needs. Three hours lecture and six hours lab. Prereq: NURS 202, 231 and 241. Coreq: NURS 321.

## 350 Transition to Professional Nursing (8)

A transition course for Registered Nurses taken in place of NURS 321. Expands on nursing content introduced at the technical level to provide the RN with the broader knowledge base required in baccalaureate nursing education. Five hours lecture and six hours lab. Prereq: Licensure as a Registered Nurse and either admission to the clinical nursing program with completion of NURS 202 and 241
or 312; or instructor approval. Students cannot use credit for both NURS 350 and NURS 321 toward graduation requirements.

362 Trends and Issues in Nursing (1) Examines the nurse's role in change through evaluation of current trend and issues impacting upon the nursing profession and health care delivery. Writing and speaking intensive course. Two hours seminar. Prereq: NURS 321 and 341 or instructor's approval. Coreq: NURS 331.
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.
404 Maternal-Child Nursing (8) Maternal-Child Nursing examines, from the nurse's perspective, the normal developmental tasks and related health needs and issues of the childbearing and childrearing families. Emphasis is placed on the pathophysiologic and psychologic changes and stresses during the maternity cycle and neonatal and childhood periods. Normal growth and development theories are applied to provide age appropriate care to the acutely and chronically ill child. Students use scientific rationale to apply the nursing process in providing care to the client/client systems. Five hours lecture and six hours lab. Prereq: NURS 331.
411 Advanced Health Care Nursing (6) Emphasizes use of the nursing process to synthesize complex concepts in providing care for client/client systems with advanced health needs. Three hours lecture and six hours lab. Prereq: NURS 401, 406 and 431 or NURS 350 and 431. Coreq: NURS 442 or instructor's approval.

431 Community Health Nursing (6) Emphasizes care of client/client systems utilizing community health services in a variety of home and agency settings. Three hours lecture and six hours lab. Prereq: NURS 331 and 362 or NURS 350 or instructor approval. Coreq: NURS 401 and 406.
442 Leadership and Management in Nursing (5) Focuses on principles of management and
leadership in delivery of health care. Emphasizes the professional nurse's role as a client advocate and as a collaborative member of the health team. Two hours lecture and six hours lab. Prereq: NURS 401, 406 and 431. Coreq: NURS 411.
451 Research in Nursing (2) Introduces methodology of investigation, including evaluation of existing and on-going research studies in nursing and health care. Writing and speaking intensive course. Two hours lecture. Prereq: MATH 210 and NURS 401, 406 and 431 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, and NUTR 100, or instructor's approval.422 (622) Lifespan Nutrition (3) Nutrition needs of selected developmental stages including preconception, pregnancy, lactation, infancy, childhood, adolescence, and adulthood. Prereq: BIOL 140, CHEM 111, 112, NUTR 100 and 322; or instructor's approval.
433 (633) Nutrition in Disease (3) 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. Observations and field experiences included. Prereq: NUTR 100.

455 (655) Nutrition Assessment and Counseling (3) Components of nutrition assessment, theories and practice in nutrition counseling and basics of nutritional support for hospitalized patients. Also includes exercises in the development of critical thinking skills as they apply to nutrition issues.

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. Exploration of best practices in patient interviewing and education.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.

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-hundred-eighty 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) bours 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 rotations 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 and Recreation Administration (PRAD)

## 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 PRA (3) Application of the microcomputer technology to several course subject areas taught in PRA 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: PRAD 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: PRAD 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: PRAD 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 of 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 The Adventure of Ideas (3) A historical study of the philosophical quest for understanding and wisdom from Socrates to Kant, covering classical Greek, Asian, medieval, and early modern thought.

## 120 The Adventure of Ideas (3) (TBR: PHIL

1030) An introductory study of the philosophical quest for understanding and wisdom in contemporary thought, covering philosophical theories about 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 Introduction to 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.

210 Elementary Logic (3) An analysis of the fundamental logical categories and skills which are needed for academic studies and the ordering of life's experiences: meaning, informal fallacies, tests of truth, rules of evidence, types of language, inference, argument and methodology (scientific and otherwise).

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)
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 History of Ancient and Medieval Philosophy (3) A survey of philosophy from its beginnings through the medieval period; pre-Socratics, sophists, Plato, Aristotle, Hellenistic philosophy, selected major medieval figures (Augustine, Aquinas and some Arabic and/or Jewish figures).

315 History of Modern Philosophy (3) An examination of the leading philosophical ideas of the 16th, 17th and 18th centuries; the scientific revolution, Descartes, Spinoza, Liebniz, Locke, Berkeley, Hume and Kant.

316 History of Late Modern and Contemporary Philosophy (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 analysis of the contemporary question of the existence and nature of God and the relevance to that question of experience, faith, revelation, mysticism, proofs, history, relationships and creativity. Also an exploration of the relation of God and the World in terms of creation/ evolution, time/eternity and culture/values. Position paper required. (Same as RLST 320)
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) A study of the essential limits and boundary situations of life, particularly the dark shadows of death, suffering and evil. Special attention given to an investigation of the possible meaningfulness of these limits and their value for authentic life. Other considerations include: suicide, abortion, war, crime, punishment, illness, insanity, perversion, inequality, waste. Position paper required. (Same as RLST 340)

350 Principles of Bioethics (3) Introduction to the ethical principles of paternalism, utilitarianism, autonomy, nonmaleficence, beneficence and justice and application of those principles to problem areas in the allocation of medical resources, genetic counseling, human experimentation and other areas of medical science.

360 Symbolic Logic (3) A first course in symbolic logic designed to introduce students to the idea of a logistical system, the propositional calculus, the predicate calculus with identity, functions, decideability and completeness. Prereq: PHIL 210 or equivalent, or instructor's approval.
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 non-moral 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] (3) Intensive coverage of individual philosophers or of periods only surveyed or not covered in PHIL 314 and 315, such as 19th and 20th century philosophy. Course may be repeated with total credits not to exceed six hours.

395 Philosophy and Film (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 and Legal Philosophy (3) An examination of classic and recent discussions of the foundations of society and of conceptions of justice and law. Topics may include classical theories of the state, theories of natural law, 20th century discussions of law and liberty, legal idealism, legal realism and positivism, law and the social sciences and critical legal studies. Some focus on court decisions as illustrative of philosophical assumptions in legal reasoning. (Same as POSC 401)

430 (630) Science and Human Values (3) An examination of the philosophical foundations of the scientific enterprise with particular emphasis on the social/value implications of the natural, biological, social and behavioral sciences. (Same as PSYC 430)

## 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 Phenomenology (3)
Studies in selected contemporary existentialist philosophers and phenomenologists: Kierkegaard, Nietzsche, Husserl, Sartre, Heidegger, Marcel and Jaspers. Existentialism's dominant themes, its historical and social origins, its use of the phenomenological method and its current impact on thought and culture are considered.

460 Contemporary Metaphysics and Epistemology (3) Survey of contemporary discussions in metaphysics and epistemology. Issues include idealism, materialism, dualism, realism, theories of knowledge, theories of truth, epistemological 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 PHIL 130 or 440.

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 bours 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. One hour lecture and two one-hour labs. May be repeated for credit.
116 Lifeguard Training (2) Skills and knowledge necessary for American Red Cross Lifeguard Certificate. One hour lecture and two one-hour labs. May be repeated for credit.
117 Water Safety Instructor (2) Skills and knowledge necessary for American Red Cross Water Safety Instructor Certificate. One hour lecture and two one-hour labs. May not be repeated for credit.

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. One hour lecture and two one-hour labs. May not be repeated for credit.

120 Martial Arts II (2) Intermediate and advanced martial arts skill development. May be repeated for credit. One hour lecture and two onehour labs.

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. One hour lecture and two one-hour labs.

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. One hour lecture and two one-hour labs.

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. One hour lecture and two one-hour labs.

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. One hour lecture and two one-hour labs. 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. One hour lecture and two one-hour labs.

128 Badminton (2) Development of the skills and strategies of badminton. Emphasis on rules, safety and sportsmanship necessary to play both competitively and recreationally. One hour lecture and two one-hour labs. 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. One hour and two one-hour labs. 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.

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.

140 Tumbling and Gymnastics (2) Development of skills and safety in tumbling and gymnastics. Instruction for students with no previous background. One hour and two one-hour labs. 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. One hour and two one-hour labs. 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. One hour and two one-hour labs. Prereq: Scholarship recipient or instructor's approval. May not be repeated for credit.
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.
150 PicklebalI 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. One hour and two one-hour labs. May be repeated for credit.

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.

155 RacquetbalI (2) Development of the skills of racquetball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. One hour lecture and two onehour labs. 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. One hour lecture and two one-hour labs. May be repeated for credit.
161 Intermediate Tennis (2) Focus on match play strategy for the intermediate performer in singles and doubles. One hour lecture and two one-hour labs. Prereq: PACT 160 or instructor's approval. May be repeated for credit.
165 Backpacking/Geocaching (2) This course addresses the fundamentals of backpacking and geocaching, including safety and proper use of equipment such as GPS devices. 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. One hour lecture and two onehour labs. May be repeated for credit.

180 Intermediate BasketbalI (2) Development of the intermediate skills of basketball. Emphasis on rules, strategies, safety and sportsmanship necessary to play both competitively and recreationally. One hour lecture and two one-hour labs. 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. One hour lecture and two onehour labs. 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.

## 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: elec-
tricity, magnetism, basic circuits, geometrical optics and physical optics. Three hours of lecture and two hours of lab. Prereq: PHYS 220 and MATH 252.

322 University Physics (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 University 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:
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.

343 Methods in Physics Research (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.
441-442 (641-642) Electricity and Magne-
tism $(3,3) 441$ : a quantitative study of electric and magnetic fields and their interaction with matter; culminates in the formulation of Maxwell's equations. 442: 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 or PHYS 212 and instructor's approval.

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 222 or 212 and instructor's approval.

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. Prereq: Two semesters of biological science.

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 Crop Evaluation (1) Intensive study involving identification and evaluation of agronomically important crops. Includes seed and plant identification along with grain grading. Course culminates in participation in national contest. 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: Eight hours of study suitable to the problem.

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 PRAD 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. Prereq: Two semesters biological science. Coreq: CHEM 112. A term paper and research project will be required of students receiving graduate credit.
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, processing 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 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 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, ANSC 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: BIOL 336.

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: Two semesters of biological science, 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.

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 budgetary process, 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 Manage-

 ment (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 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 and Legal Philosophy (3) An examination of classic and recent discussions of the foundations of society and of conceptions of justice and law. Topics may include classical theories of the sate, theories of natural law, 20th century discussions of law and liberty, legal idealism, legal realism and positivism, law and the social sciences and critical legal studies. Some focus on court decisions as illustrative of philosophical assumptions in legal reasoning. (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 govermental organizations, multilaterial 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.

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 decisionmaking.
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 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-thejob 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] (1-3) 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 Non 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 and (c) 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. Not regularly offered.

## Portuguese (PORT)

111 Elementary Portuguese (4) 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 one-hour lectures and two one-hour labs.
122 Elementary Portuguese (4) An introductory course emphasizing listening, speaking, reading and writing. Three one-hour lectures and two one-hour labs. Prereq: PORT 111 or the equivalent as determined by the department.
222 Intermediate Portuguese (4) Grammar review, reading, writing and conversation. Three one-hour lectures and two one-hour labs. Prereq: PORT 122 or equivalent as determined by the department.

## 230 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 proficiencyin 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.

301 Careers in Psychology (3) This course focuses on career planning and development issues for psychology majors. Using a combination of lecture, readings, and exercises, students will be exposed to information designed to assist in the clarification, selection, and pursuit of a career in psychology or a related field. Topics will include an overview of the undergraduate major in psychology, how to be successful as a psychology major, career options in psychology and related fields, preparation for employment with a bachelors degree, preparing for and succeeding in graduate school, and applying for a job or to a graduate school. For psychology majors only. Prereq: PSYC 101 or 110 or 120.

## 310 Human Relations and Personal Adjust-

ment (3) The psychological study of the principles and practices of human relations skills in organiza-
tions 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 one-hour lectures and one two-hour lab. Prereq: PSYC 101.
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.

320 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 one-hour lectures and two onehour labs. Prereq: PSYC 315 and 318.

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 one-hour lectures and two one-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), theo-
ries, 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.

## 365 (565) Special Topics in Psychology [topic

 title] (3) Selected topics in the area of psychology. The course subject matter will vary by semester; for example, psychology and law, health psychology, human sexuality, psychology and the media, neuropsychology, neuropsychological disorders in children, addictions counseling, psychology of aging, etc. Course may be repeated with total credits not to exceed six hours.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. (Same as WMST 370)

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.

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 Analy-
sis. 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.

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 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 Psychology. Not regularly offered. Prereq: Requires instructor's approval.
460 Fundamentals of Clinical Neuropsychology
(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.

470 Physiological Psychology (4) A systematic study of the nervous system and other physiological correlates of behavior. Three one-hour lectures and two one-hour labs. 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.
111 Effective Reading (2) A small group experience designed for students interested in vocabulary improvement and comprehension in a variety of reading situations.

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. Prereq: Junior standing and a 2.5 cumulative GPA.

## 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 Teacher Education.448 Reading Instruction and Assessment for Upper Elementary Grades (3) This course further develops issues addressed in READ 438, with special attention to upper elementary grades (3-6). Preservice teachers will learn about upper elementary students and their focus on vocabulary, comprehension, and writing. Topics explored in this course include reading comprehension and vocabulary development, instructional strategies to promote development in all language arts (reading, writing, listening, speaking, visually representing), effective methods to integrate language arts across the curriculum, and reading/writing assessment. Prereq: READ 438; admission to Teacher Education.

700 Foundations of Reading (3) An examination of various approaches and techniques in reading. Emphasis will be on advanced methodology and its theoretical basis.

## 710 Advanced Reading Diagnosis and Cor-

 rective Reading (3) Study of advanced diagnostic procedures for children who exhibit severe reading difficulties, followed by instruction in techniques for planning and implementing improvement in identifying problem reading behavior. Prereq: READ 700 or equivalent.720 Research Based Techniques for Teaching Reading and Language Arts (3) A study of research findings in teaching composition, English grammar, handwriting, listening, literature, spelling and application of new research to effective teaching of reading. Prereq: READ 700 or instructor's approval.

## 730 Reading as a Neurolinguistic 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. Prereq: READ 700.

740 Practicum in Reading (3) A field-based experience in a school setting with children who have reading problems, focusing on observation, diagnosis, planning and implementing programs designed to bring about improvement in reading behaviors. Prereq: READ 710.

## 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)

306 Religion and Society (3) Interrelationships of society, culture and religion. Prereq: SOC 201. (Same as SOC 306)

320 Traces of God (3) An analysis of the contemporary question of the existence and nature of God and the relevance to that question of experience, faith, revelation, mysticism, proofs, history, relationships and creativity. Also an exploration of the relation of God and the world in terms of creation/ evolution, time/eternity and culture/values. Position paper required. (Same as PHIL 320)

## 340 Death, Suffering and Evil (3) A study of

 the essential limits and boundary situations of life, particularly the dark shadows of death, suffering and evil. Special attention given to an investigation of the possible meaningfulness of these limits and their value for authentic life. Other considerations include: suicide, abortion, war, crime, punishment, illness, insanity, perversion, inequality, waste. Position paper required. (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 non-moral 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 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 (6) hours. (Same as PHIL 380)

## 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. Prereq for 411: TCED 302 and admission to Teacher Education. Prereq for 611: TCED 705, TCED 780, and admission to Teacher Education.

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. Prereq for 412: TCED 302 and admission to Teacher Education. Prereq for 612: TCED 705, TCED 780 and admission to Teacher Education.

## 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 Teacher Education. Prereq for 613: TCED 705, TCED 780, and admission to Teacher Education.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. Prereq for 414: TCED 302 and admission to Teacher Education. Prereq for 614: TCED 705, TCED 780, and admission to Teacher Education.

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. Prereq for 415: TCED 302 and admission to Teacher Education. Prereq for 615: TCED 705, TCED 780, and admission to Teacher Education.

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.

715 Principles and Practices of Secondary Education: Curriculum and Instruction (3) Current trends, issues and practices in secondary education; strategies for improving curriculum and instruction; development of concepts and skills for curriculum and generic instruction planning.
725 Advanced Education Seminar [Selected
Topics] (3) Course can be taken in multiples of three semester hours for a maximum of nine semester hours. Certain sections may be offered on a pass/ fail basis. Prereq: Permission of instructor.
730 Problems in Teaching in a Secondary
School: [Subject Area] (3) Current issues related to the teaching of the particular area. Topics may include, but not be limited to, individual and/or group investigation of problems involved with teaching in the discipline, the development of higher order reasoning skills, as well as discussion of recent curriculum trends and materials. Certain sections may be offered on a pass/fail basis.
760 Supervision of Student Teaching and Field Experiences (3) A study of objectives and general techniques of supervising student teachers and students participating in field experiences in public schools.

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. (Same as WMST 220)
## 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. Prereq: Instructor's approval.

## 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. Prereq: Instructor's approval.

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. Prereq: Instructor's approval.

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 professionalsand 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.
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. Prereq: Instructor's approval.
400 Social Work Practice II (3) Is the second of three courses providing the framework for evi-denced-based 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: MATH 210 and 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 Ill (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 evidencebased 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 (2) 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 (1) 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 anthropology including the four major subdivisions of the discipline: archaeology, linguistics, physical anthropology and social/cultural anthropology.

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.

300 Cultural Anthropology (3) An examination of various cultures throughout the world via the study and use of cultural anthropology theory and methods. 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.

## 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. Student may receive credit for either SOC 301 and 302, or 303, not both. Prereq: SOC 201 and 202 with grade of C or above, and MATH 210. (Same as CJ 303)

304 (504) Race, Class and Power (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 Deviant Behavior

(3) Theoretical analysis of the relation of deviant behavior to social and cultural standards of value, convention and law. Prereq: SOC 201.
306 (506) Religion and Society (3) Interrelationships of society, culture and religion. Prereq: SOC 201. (Same as RLST 306)

308 Marriage and Family (3) The relationships of the family structure to social organization. Particular emphasis focused on the family historically, mate selection, marital adjustment, marital happiness and divorce in a changing society. (Same as WMST 308)

310 (510) U.S. Health Care and Policy (3) This course will provide an overview of the U.S. Health

Care System including the advent of third party payment system, attempts to reform healthcare, and the current state of health care. Attention will be paid to costs and the role of the current healthcare reforms play in cost reduction.

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)

## 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. (Same as CFS 314.)

## 341 (541) Men and Women: 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. (Same as WMST 341)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)
381 (581) Special Topics [topic title] (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.

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.
404 Who's Got the Money: Income 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; and either SOC 202 or 308.

413 (613) Criminology (3) Problems, theory, cause, control and prevention of criminal behavior. Prereq: SOC 201. (Same as CJ 325/525)

415 Who's in Charge: Social Control and Society (3) Early and contemporary theories, methods, and issues relating to ways people are compelled to conform in human interaction, and a review of theoretical and empirical developments in the sociology of law. Prereq: SOC 201.

## 420 The Sociology of Dilbert: Organizations

 and Society (3) Selected theoretical orientation, methodological procedures, and illustrative substantive issues pertaining to organizations ranging from simple associations of people, to bureaucratic organizations. Prereq: SOC 201.431 (631) Urban Society (3) A study of the origin, growth, and causes of growth of modern cities. Topics include population, ecology, inequality and place, and the effects of urbanization on social institutions, groups, and individuals. Prereq: SOC 201.
433 Population Processes and Problems (3)
Demographic factors and social structure. Trends in fertility, mortality, and migration. Methods of demographic research. Population policy. Prereq: SOC 201.

434 Community, Society, and Change (3)
Origins and structures of community with special emphasis on the impact of change and stratification in the community. Prereq: SOC 201.

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 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 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 hours sociology course, minimum cumulative GPA of 3.00 and instructor's approval of topic and research methods.

495 (695) Comparative Family Systems (3) An examination of families both cross-culturally and historically. Attention is directed to understanding the variation and similarities in family structures, marital arrangements, premarital relations, gender roles and socialization. Prereq: SOC 201. (Same as WMST 495)

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 bas 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 (4) (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 111, students will take the second semester of the elementary sequence, 122 . Three one-hour lectures and two one-hour labs.

115 Transitional Spanish (4) 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 one-hour lectures and two one-hour labs.

122 Elementary Spanish (4) (TBR: SPAN 1020) An introductory course emphasizing listening, speaking, reading and writing. Three one-hour lectures and two one-hour labs. Prereq: SPAN 111 or 115 or equivalent as determined by the department.

222 Intermediate Spanish (4) Grammar review, reading, writing and conversation. Three one-hour lectures and two one-hour labs. 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 Civilization

(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 Certificate 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 composi-
tional 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 Certificate 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 Certificate 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 Ameri-
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 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 Certificate 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 Cinema (3) Study of major works in Spanish and Latin-American 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 Language, 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 Certificate 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 Excep-

 tionalities (3) Characteristics of persons with moderate/severe disabilities and the educational strategies appropriate 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 Exceptionalites
(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.
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 Children with Exceptionalities (4) Examination of the relationship between the characteristics and needs 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 Teacher Education and SPED 300 (500), SPED 440 (640), and Prereq or Coreq SPED 437 (637).

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 Teacher Education, SPED 300 (500) and SPED 440 (640).

440 (640) Advanced Methods for Students with Mild Disabilities (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 methodology and approaches in general and special education classes. Prereq: Admission to Teacher Education, SPED 300. Coreq or Prereq for SPED 440: TCED 302; Coreq or Prereq for SPED 640: TCED 780.

## 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 Teacher Education, SPED 300 and 450 or instructor's approval.
## 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 Interventions (3)
Advanced strategies for managing social behaviors that impact on academic learning of children with exceptionalities. Techniques for eliminating maladaptive behaviors, managing aggressive and antisocial behaviors and teaching appropriate social skills. Prereq: Admission to Teacher Education and SPED 300 (500).

470 (670) Integrating Students with Exceptionalities in Regular Education (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 inclusion and RTI, collaborative teaching, differentiated instruction, modifications and accommodations, and approaches for general and special education teachers. Prereq: SPED 300 (500).
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.

## 700 Consultation Approaches and Strategies

(3) Focus on the special educator as one member of a parent/professional team meeting the needs of children with exceptionalities. Examination of the role of consultation in delivering special education services, definitions of consultations, communication skills and collaborative strategies.
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. Fortyfive 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 (6) Advanced

 special education field-based experience. Focus on refining skills in the sequence of collecting student assessment data, developing IEPs and establishing instructional programs, as well as examining other facets of special education. Prereq: SPED 632, 637 (can be taken concurrently with 632).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 Management (SPMG)

305 Introduction to Sport Management 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.

306-307 Sport Management 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.
35- Topics: [Selected Areas] $(2,3)$ Topics in contemporary sport management 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 305.
406 Advanced Sport Management 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 305 or instructor's approval.

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 406 or instructor's approval.

## 480 Internship in Sport Management (10)

One semester work experience with a cooperating agency. Application must be made and approved one semester prior to the beginning of the internship. If required by the cooperating agency, liability insurance must be purchased before the student may enroll in the course. A student who
has completed HPER 491 cannot receive credit for SPMG 480. Prereq: Must have completed all of the required concentration courses.

## 485 Workshop in Sport Management: [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.

## 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.

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: MATH 498 and consent of the department chair: Graded on Pass/Fail basis.
## 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 teacher education majors with an introduction to teaching as a profession. Includes an overview of the Teacher Education Program (TEP) Conceptual Framework and development of the TEP portfolio.
301 Foundations of Education (2) An introductory course designed to provide prospective teacher education 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 teacher education portfolio. Prereq: Admission to Teacher Education.

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 Teacher Education.

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 teacher education portfolio. Required field experience. Prereq: Admission to Teacher Education.

340 Applied Mathematics and Science (4) Strategies and materials for teaching mathematics and science in the elementary classroom. Lesson unit plans, participation in developmentally appropriate hands-on activities, simulated and direct-teaching experiences. Includes directed observations and 4 hours small group instruction in classroom settings. Prereq: Admission to Teacher Education and TCED 302. Coreq: MATH 192 or instructor's approval.

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 Teacher Education and TCED 302.

## 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 Teacher Education.

401 Seminar in Teaching (1) Structured seminar for advanced discussion of instructional and classroom management, variety in methodology, disci-
pline, school law, professionalism and related topics. Emphasis will also be placed on oral expression and written communication. Coreq: TCED 402-403 or TCED 404-405 or TCED 404-406 (student teaching courses). Prereq: Admission to Teacher Education.

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 401 and TCED 403. Prereq: Admission to Teacher Education, TCED 301-302-303, 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 401 and TCED 402. Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.

404 Student Teaching Grades 7-8 (6) Supervised student teaching in grades 7-8 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 405. Prereq: Admission to Teacher Education, TCED 301-302-303, 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 401 and TCED 404 or 406. Prereq: Admission to Teacher Education, TCED 301-302-303, all specialized teaching strategies courses and Reading requirements. See note above.

406 Student Teaching Grades K-8 (6) Supervised student teaching in grades $K-8$ for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 405 or 407. Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.

## 407 Student Teaching in Special Education (K-

12) (6) Supervised student teaching in special education K-12 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 406. Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, all specialized teaching strategies courses and Reading requirements. See note above.

408 Student Teaching in Special Education: Non-School Setting (PreK-1) (6) Supervised student teaching in special education non-school setting PreK-1 for a minimum of 7.5 weeks. Must be taken with TCED 401 and TCED 407. Prereq: Admission to Teacher Education, TCED 301-302-303, SPED 300, 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 Teacher Education and completion of all specialty area and professional education requirements. See note above. (Same as ECED 409)

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 Teacher Education and TCED 302, 340, or 350. Graduate level students will complete an individual project related to middle school curriculum.

## 475 (675) Learning and the Kindergarten

Child (4) A four-hour credit course in a state-approved kindergarten placement. It includes a weekly one hour seminar with a faculty member. Prereq: for 475-Admission to Teacher Education and TCED 302; TCED 340 or TCED 350 (K-6 majors); ECED 341 or ECED 351 (PreK-3 majors) or permission of instructor; for 675-Admission to Teacher Education. (Same as ECED 475/675)

705 Advanced Strategies for Classroom Management (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 and Admission to Teacher Education.

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 learning 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 in Teaching: Curriculum and Instruction (3) Current trends and practices in education; development of concepts and skills in planning, strategies, objectives, and assessment for the beginning teacher. Practical classroom application required. Credit cannot be received for both TCED 730 and TCED 780.
$\mathbf{7 8 0}$ 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 Teacher Education Program (TEP) portfolio. A minimum of fifteen (15) clock hours of field work in a previously approved grade appropriate diverse public school setting.

791 Master Research Project, K-12 (4) The culminating professional research project for the Master of Science in Education with a major in Teaching Programs. Seminar topics to include but not limited to educational reform, curriculum design, student achievement, parent involvement, cultural diversity, educational technology, assessments and educators as collaborative leaders and mentors (in a K-12 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. Prereq: EDEV 710 and EDFN 710. Must be taken in final semester.

795 Practicum in Initial Licensure (6) Jobembedded 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.

## 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.
## 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.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.

## 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.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 and 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 me-
dia, 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 including: 1) Styles-Classical Greek, Commedia dell' Arte and Shakespearian, 2) Realism - scene work and script analysis of plays by Chekhov, Ibsen and other modern playwrights, 3) Con-temporary- improvisation, scene study and analysis of plays by Tennessee Williams, Sam Shepard, Paula Vogel and other contemporary playwrights. 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 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 Terminology (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 will be covered. Two one-hour lectures and one two-hour lab. Prereq: VET 200 and VET

300: 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: 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: 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. Prereq: VET 200 and VET 300: or permission of veterinary technology program director.

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: 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. Prereq: VET 200 and VET 300: or permission of veterinary technology program director.

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 twohour lab. Prereq: VET 200 and VET 300: or 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 density estimation. Includes field trips requiring walking through strenuous terrain. Two hours lecture and one two-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 of refugia, 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 Relations (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 commnication 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 socio-cultural 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 two-hour lab. Prereq: Natural Resources Management Major or approval of instructor.
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 Studies (WMST)

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. (Same as CFS 100)

## 201 Introduction to Women's 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. (Same as IDST 201)

## 220 Understanding Human Diversity and Op-

 pressed 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. (Same as SWRK 220)231 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. (Same as COMM 231)

## 300 Clothing/Adornment and World Cultures

(3) Functional and sociocultural aspects of dress and adornment in world cultures. Historical, technological and economic influences. (Same as FASH 300)

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. (Same as CFS 303)

304 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. (Same as HIST 303)

308 Marriage and Family (3) The relationships of the family structure to social organization. Particular emphasis focused on the family historically, mate selection, marital adjustment, marital happiness and divorce in a changing society. (Same as SOC 308)

## 341 Men and Women: 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. (Same as SOC 341)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 ARTH 350)

## 351 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. (Same as ENGL 350)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. (Same as PSYC 370)

480 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. (Same as HIST 480 when topic offered is on gender issues in history.)

495 Comparative Family Systems (3) An examination of families both cross-culturally and historically. Attention is directed to understanding the variation and similarities in family structures, marital arrangements, premarital relations, gender roles and socialization. Prereq: SOC 201. (Same as SOC 495 and ANTH 495)
496 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. (Same as ENGL 495 when topic offered is on women's literature and issues.)

## Zoology (Z00L)

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. Z00L 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 fundamentals 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 lecture/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 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 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 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 requies 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 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.

440 (640) General Parasitology (4) A study of animal parasites. Emphasis on morphology, taxonomy, life history, ecology and host-parasite relationships. Three two-hour lecture/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 twohour 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 (3) The study of characteristics and properties of primary normal animal tissues and special histology dealing with the arrangement and adaptations of tissues in organs. One one-hour lecture and two two-hour labs. Prereq: BIOL 130-140 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 onehour 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, ZOOL 251 and 352.

## The Graduate Programs



The University of Tennessee at Martin

## The Graduate Programs

## For information regarding the Graduate Programs contact:

## Dr. Victoria S. Seng

Dean of Graduate Studies
The University of Tennessee at Martin
554 University Street
227 Administration Building
Martin, TN 38238
731-881-7012 or 7118
fax 731-881-7499

## Graduate Program in Agriculture

 and Natural ResourcesMaster of Science in Agriculture and Natural Resources
Dr. Joey E. Mehlhorn
Interim Coordinator of Graduate Program in Agriculture and Natural Resources
574 University Street
254 Brehm Hall
731-881-7211
fax 731-881-7968
mehlhorn@utm.edu

## Graduate Program in Family and

 Consumer SciencesMaster of Science in Family and
Consumer Sciences
Dr. Lisa C. LeBleu
Coordinator of Graduate Program in Family and Consumer Sciences
538 University Street
340B Gooch Hall
731-881-7116
fax 731-881-7106
llebleu@utm.edu

## Graduate Program in Business

Master of Business Administration
Dr. Kevin L. Hammond
Coordinator of Graduate Program in Business
231 Lovelace Street
109 Business Administration Building
731-881-7208
fax 731-881-7241
bagrad@utm.edu
Graduate Program in Education
Master of Science in Education
Dr. Sandra S. Murray
Coordinator for Graduate Program in
Education
538 University Street
237 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, and Education 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 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 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).

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.

Upon receipt of these materials, the Graduate Studies Office will calculate the cumulative GPA based on all coursework completed prior to the current semester. 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, 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 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. Conditional students 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 limita-tion-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 two graduate courses (with at least a B in each course) taken as an unclassified and/or nondegree 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. 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. 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. 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. completed a graduate degree from an accredited institution.

Applicants not meeting any of the above requirements must have the minimum graduate qualifying examination score and approval of the graduate committee in the intended major.

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:

1. meet the college's graduate qualifying examination minimum score and
2. receive approval of the college's graduate committee and
3. have a bachelor's degree with a 2.50 Cum GPA ( 2.75 for unconditional admission in Agriculture and Natural Resources; 2.70 for unconditional admission in Education) and a 3.00 GPA in graduate work attempted at UT Martin, or
4. have a bachelor's degree with a 3.00 SrYr GPA and a 3.00 Cum GPA on graduate work attempted at UT Martin, or
5. have a bachelor's degree with a 3.00 GPA on the SrYr plus any post-baccalaureate upper-division and/ or graduate courses; and have a 3.00 Cum GPA on graduate work attempted at UT Martin. (Any courses included in the SrYr calculation may be repeated to raise the GPA to 3.00.)

Upon admission to a graduate degree program, a maximum of two 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

Faculty members may be admitted to graduate study through regular procedures. However, the following persons may not be admitted to a graduate degree program at The University of Tennessee at Martin:

1. any faculty member who is applying for a graduate degree program in the same department in which he or she holds academic rank; and
2. any member of the UT Martin central administration above the position of director.

## 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.

A General Graduate Record Exam* (GRE) combined score of at least 950 (Verbal plus Quantitative) is required for unconditional admission. A minimum General GRE* combined score (Verbal plus Quantitative) of 750 and other requirements (detailed below) may qualify a student for conditional admission.

Additional requirements for unconditional and conditional admission appear below.

## A. Unconditional Admission

1. Cum GPA of at least 2.75 AND
2. GRE* score (Verbal + Quantitative) of at least 950 AND
3. Applicant must have earned a B.S. degree in agriculture, natural resources management, park and recreation administration, or wildlife science from a regionally accredited institution.
B. Conditional Admission
4. Cum GPA of at least 2.50 or SrYr GPA of at least 3.00 AND
5. GRE* score (Verbal + Quantitative) of at least 750 ( 950 if exempted from the university's $_{\text {s }}$ minimum GPA requirement) AND
6. Minimum formula points as shown below

400 times applicant's Cum GPA plus GRE* must equal or exceed 1,950 OR 400 times applicant's SrYr GPA plus GRE* must equal or exceed 1,950 AND
4. Have earned a B.S. degree in agriculture, natural resources management, park and recreation administration, or wildlife science $\mathbf{O R}$
5. Have a B.S. degree in a closely related applied or natural science (as determined by the M.S.A.N.R. Graduate Coordinator) and have a satisfactory score on the appropriate Department of Agriculture, Geosciences, and Natural Resources senior exit exam as
determined by the M.S.A.N.R. Graduate Coordinator.

## 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.
*The equivalency score data provided by Educational Testing Service (ETS) will be used to determine the aggregate GRE score (verbal and quantitative) applicable for admission purposes. Verbal and Quantitative GRE scores will be translated from current scoring (current maximum of 170 for Quantitative Reasoning and current maximum of 170 for Verbal Reasoning) to the equivalent prior-score based on maximum of

800 for Verbal Reasoning and maximum of 800 for Quantitative Reasoning. If the current score has a single prior-score equivalent, that score will be the conversion. If the current score has multiple prior-score equivalents, the highest prior-score equivalent will be used.

## Undergraduate Articulation Requirements

Students without a degree in agriculture, natural resources management, wildlife science or closely related field (as determined by the M.S.A.N.R. Graduate Coordinator) may be required to take additional undergraduate prerequisite courses to enroll in advanced courses (based on a review by the M.S.A.N.R. Graduate Coordinator.)

## 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 1,850 points (minimum acceptable GRE* score is 650) OR
400 times the applicant's SrYr GPA plus GRE* score (Verbal and Quantitative) must equal or exceed 1,950 points (minimum acceptable GRE* score is 650).
B. Conditional Admission

400 times applicant's Cum GPA plus GRE* score (Verbal and Quantitative) must equal or exceed 1,650 points (minimum acceptable GRE* score is 650) OR 400 times the applicant's SrYr GPA plus GRE* score (Verbal and Quantitative) must equal or exceed 1,750 points (minimum acceptable GRE* score is 650) OR
Minimum GRE* score of 650 (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.
*The equivalency score data provided by Educational Testing Service (ETS) will be used to determine the aggregate GRE score (verbal and quantitative) applicable for admission purposes. Verbal and Quantitative GRE scores will be translated from current scoring (current maximum of 170 for Quantitative Reasoning and current maximum of 170 for Verbal Reasoning) to the equivalent prior-score based on maximum of 800 for Verbal Reasoning and maximum of 800 for Quantitative Reasoning. If the current score has a single priorscore equivalent, that score will be the conversion. If the current score has multiple prior-score equivalents, the highest prior-score equivalent will be used.

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 Intern-
ship 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 650 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 900.

## 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 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 Exam 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 is taken more than once, the highest GMAT Total Score is used for determining admission and the highest Analytical Writing Score is used for determining whether Business Administration 701 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 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 .)
c. have a positive review from the CBGA Graduate Admission Committee

## OR

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 .
c. 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.
d. 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.

## 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, Conditional, or Unclassified) or non-degree as listed below. Degree-seeking applicants must meet the university requirements listed above under Types
of Admission, have received licensure to teach (Major in Teaching-Curriculum and Instruction; Major in Educational Leadership) and must meet the following minimal GRE* General scores:

GRE* Verbal plus GRE Quantitative-770 AND
GRE Writing-minimum score of 3.5 .
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 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 4-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, Teacher Education 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.

For further details, contact the Coordinator/designee of Graduate Program in Education.
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 and GRE* requirements, all applicants for Educational Leadership (degree-seeking, nondegree, or endorsement) must also submit the following documents (items 1-6) for review and recommendation from the Educational Leadership (EDLD) Admission Board.

1. Personal statement of career goals and how the preparation program would assist the candidate in reaching stated goals.
2. Current resumé.
3. The "aspiring candidate 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 teaching license. The applicant's school system should provide verification of experience in writing on appropriate letterhead. Contact the Coordinator/designee for Graduate Programs in Education for more information.
5. Copy of most recent performance appraisal.
6. Current professional development plan.

Admission is dependent upon submission of these documents, positive review by the EDLD Admission Board, and interviews with the candidates.
Applicants who do not receive a positive recommendation from the Educational Leadership Admission Board for admission to the UT Martin Educational 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 GRE* General scores-Verbal plus Quantitative 980 AND Writing 3.5 AND
2. Minimum 2.70 cumulative grade point average.
B. Conditional Admission
3. Minimum GRE* General scores - Verbal plus Quantitative 770 AND Writing 3.5 AND
4. Minimum 2.50 cumulative grade point average, or 3.00 SrYr or 3.00 adjusted SrYr GPA.
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 university Types of Admission.
*Using Concordance Tables provided by ETS, current Verbal Reasoning and Quantitative Reasoning scores will each be converted to prior-scale scores. If the current score has a single prior-score equivalent, that score will be the conversion. If the current score has multiple prior-score equivalents, the highest prior-score equivalent will be used. If the current score is not shown on the table, the next higher score will be used. A Verbal and Quantitative score sum will be calculated and used to determine admissibility.

## 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 teacher education process. This will take place while enrolled in Teacher Education 780. In order to avoid problems once the semester has started, forms and procedures must be completed according to this policy.

## 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 week will leave no record on the student's academic transcript. A drop executed during the second through eighth week will result in a grade of 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 the student health service 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.

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 Division of Student Affairs. Withdrawals executed during the first week of the fall and spring semesters will leave no record of the courses for which the student signed. Withdrawals executed after the first week of the semester will result in a grade of $\mathbb{W}$ (withdrawal) in all courses for which the student signed. Students should consult the summer term timetable for the appropriate summer deadlines. 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.

## 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 S/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 acdemic 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 acdemic 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 Online are subject to fees at $\$ 507$ per credit hour (in-state) and $\$ 553$ per credit hour (out-of-state) as detailed at www.utm.edu/bursar under Fee Schedule.

All students must settle accounts with the Office of Business Affairs and complete the registration for courses prior to attending classes.

The general fees in effect for 2013-2014 are as follows and are subject to change.

## Fees*

Maintenance Fee (In-state Fee) Per Semester ................................................................................. \$3,780
Programs \& Services Fee Per Semester .............................................................................................. $\$ 407$
Technology Fee Per Semester.............................................................................................................. \$100
Facility Fee Per Semester ..................................................................................................................... $\$ 75$
Total In-State Graduate Full-Time Fees Per Semester ........................................................................ \$4,362
Additional Tuition For Out-Of-State Students Per Semester................................................................. \$6,966
Residents of Hickman, Fulton and Graves counties in Kentucky can attend UT Martin without paying out-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:

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

Maintenance Fee (In-state Fee) Per Hour .............................................................. $\$ 420$ per semester hour
Programs \& Services Fee Per Hour ......................................................................... $\$ 46$ per semester hour
Technology Fee Per Hour........................................................................................ $\$ 12$ per semester hour
Facility Fee Per Hour ............................................................................................... $\$ 9$ per semester hour
Total In-State Graduate Hourly Fee ......................................................................... $\$ 487$ per semester hour
Additional Tuition for Out-of-State Students Per Hour .............................................. $\$ 774$ per semester hourGraduate 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. Thisfee 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 ..... $\$ 50.00$

## 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 Business Affairs from the Office of Academic Records.

| Calendar Days of Term | \% Charged | \% Refund |
| :---: | :---: | :---: |
| Day 1-7 | ...no charge . | 100\% |
| Day 8-14 | 20\% | .80\% |
| 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 Division of Student Affairs. 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. | 20\% | . $80 \%$ |
| 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 | $5-7$ | $5-7$ | $8-14$ | $20 \%$ | $80 \%$ |
| 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 $\$ 4,362$ which was paid by a personal check. The student withdrew on the ninth calendar day following regular registration. The refund would be $\$ 3,485.40$.
Calculation: Semester rate - (\# of hours) $x$ (\% Charged) $x$ (per hour rate) $=$ Refund

$$
\$ 4,362-[(9) \times(20 \%) \times(\$ 487)]=\$ 3,485.40
$$

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 $\$ 4,362$. 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 percent ( $100 \%-13.6 \%$ ).

Calculation: $\$ 4,362 @ 86.4 \%=\$ 3,768.77$ 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 all tuition charges, including out-of-state fees, for GAs with at least 30 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.

In addition, positions as assistant head residents of the residence halls are available. Remuneration for these include waiver of all tuition charges, including out-of-state fees, for six hours per semester, free room and board and a monthly stipend.

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 Educational 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. 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 Blackboard. 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 during the semester in which the student expects to receive the degree.

Students majoring in Educational 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). For information regarding the Praxis SLLA test (registration, test dates, fees, etc.) please visit www.ets.org or you may contact the Education Graduate Office in 237 Gooch Hall. ETS offers the test on a limited basis-ordinarily in September, January and June. The test must be taken during the semester in which the student plans to earn their degree; therefore, for fall graduates, September administration; for spring graduates, January administration; and for summer graduates, June administration.

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. Successful submission and completion of the portfolio 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 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 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 (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.

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 Agricul-
ture 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 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)
Agricultural Economics 785 Applied Management Science in Agricultural Systems II (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 and Recreation Administration 760 Management of Interpretive Resources (3)
Natural Resources Management 765 Conservation \& Preservation of Historic Structures (3) or Park \& Recreation Administration 765 Conservation \& Preservation of Historic Structures (3)
Natural Resources Management 770 Topics in Natural Resources Management (1-6)
Park and Recreation 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 and recreation administration, wildlife biology or other science-related area approved by the M.S.A.N.R. Graduate Coordinator
or
Graduate courses from member institutions of the Natural Resources Distance Learning Consortium (NRDLC) as approved by the M.S.A.N.R. Graduate Coordinator (up to 12 hours).
Ic. Systems Science in Agriculture Concentration (1193) ..... 18 hours
Management Science ( 6 hours)Agricultural Engineering Technology 784 Applied Mgt Science in Agricultural Systems I (3) orAgricultural Economics 784 Applied Management Science in Agricultural Systems I (3)Agricultural Engineering Technology 785 Applied Mgt Science in Agricultural Systems II (3) orAgricultural Economics 785 Applied Management Science in Agricultural Systems II (3)
and
Agricultural Systems Technology (9 hours)
choose three courses ( 9 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 andSystem Design (3)Agricultural Engineering Technology 782 GIS for Agricultural and Natural Resources Mgt (3)
Natural Resources Management 722 Production of Biorenewable Resources (3) orPlant Science 722 Production of Biorenewable Resources (3)A 600 level or higher course (3 hours) in agricultural engineering technology, or related appliedscience 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)Agricultural Economics 745 Agricultural Production Economics (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)
II. Agriculture, Geosciences, and Natural Resources Electives ..... 9 hours*Choose nine (9) hours of course work from 600 level or higher courses in agriculture, agriculturaleconomics, geosciences, natural resources, education, natural or physical sciences, or other gradu-ate 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 3 hours
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)
IV. Research ..... 6 hours
Non-Thesis OptionAgriculture 790 Scientific Writing and Presentations (3) orNatural Resources Management 790 Scientific Writing and Presentations (3)
and
Agriculture 791 Master's Research Project in Agriculture (1-3) orNatural Resources Mgt 791 Master's Research Project in Natural Resources Management (1-3)
OR
Thesis Option
Agriculture 701-702 Master's Thesis (3, 1-3) orNatural 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 ........................................................................................ 36
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's program with 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 $(1251,1252)$ <br> Resumé of Degree Requirements <br> General Family and Consumer Sciences Concentration: 30 hours <br> Family and Consumer Sciences Courses (12 hours) <br> Courses selected in one or two areas of Family and Consumer Sciences <br> Research Related Courses (6 hours)

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)
Must be selected from Food Systems Management, Food Science, Nutrition
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 (RD) 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. Curriculum 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 part-time student and consequently most classes are offered at night. 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 Martin and Jackson.

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)-38 Hours Required

Students must successfully complete each of the following courses:
Core Courses (26 hours)
Accounting 711 Accounting for Managerial Decisions (4)
Business Administration 721* Critical Thinking (1)**

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Business Administration 722 Leadership, Group Dynamics and Teamwork (1)** Business Administration 723 Creativity, Innovation and Design (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)
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Elective Courses (9 hours)
Any 700-level course offered by the College of Business and Global Affairs unless specifically excluded in the course description. Students without previous coursework in operations management must complete Management 730 or Management 310 (with a minimum grade of C ) prior to graduation.

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 semester of study.
**These three courses 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).

## 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 to 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)

The Master of Science in Education with a major in Counseling has two concentrations: 1) school counseling and 2) clinical mental health counseling. The school counselor concentration 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 concentration will prepare counselors for addressing the mental-health needs of the community. See below for the Tennessee Professional Licensure (TPL) requirements.

## 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 Counseling3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education \& Counseling. ..... 3
II. Concentration (36-48 hours)
Counseling 716 Growth and Development Across the Life Span ..... 3
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 775 Counseling Children and Adolescents with Psychological Dysfunction ..... 3
Counseling 785 Counseling Practicum ..... 3
Clinical Mental Health Counseling Specialization (18 hours)
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
OR
School Counseling Specialization (6 hours)
Counseling 786 Organization and Administration of School Counseling Services/Programs ..... 3
Electives: Three hours of electives at the 600 level or above (approved by adviser) ..... 3
III. Culminating Experience (6 hours)
Counseling 788 Internship in Clinical Mental Health I and Counseling 792 Internship in Clinical Mental Health II ..... 6
OR
Counseling 789 Internship in Secondary School Counseling and Counseling 790 Internship in Elementary School Counseling ..... 6
Minimum hours required for degree (school counseling) ..... 48
Minimum hours required for degree (clinical mental health) ..... 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

Degree-seeking students are eligible to apply for admission to candidacy once they have enrolled in a minimum of 15 credit hours. Students must have satisfactorily completed Counseling 725 and Counseling 740 prior to completing application. To apply for Admission to Candidacy, students must:

1. submit online application for "Admission to 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 four-day residency (held biannually). Students will be notified of session they will be required to attend (January or June).
2. successfully complete a four-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: Degree-seeking students may not complete more than 24 credit hours without successfully completing the four-day residency and admission to candidacy.

## Residency

All degree-seeking counseling majors are required to attend a four-day residency (either January or June) in order to be admitted to candidacy 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.

## 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. 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.

## 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: | October 15 | application due for Spring internship |
| :--- | :--- | :--- |
|  | March 15 | 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 during the semester in which the student expects to receive the degree. The comprehensive exam will be administered online through Blackboard. A minimum score of $70 \%$ is required for successful completion.

## Major in Educational Leadership (5050)

The Master of Science in Education with a major in Educational 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 (33 hours)
Educational Studies 710 Models of Instruction, Curriculum Development, and Advanced Teaching Strategies. ..... 3
Educational Leadership 710 Introduction to Supervising and Leading Educational Change. ..... 3
Educational Leadership 715 Personnel Management and Professional Development ..... 3
Educational Leadership 730 Public Relations and Resource Allocation in the School Setting. ..... 3
Educational Leadership 735 Electronic Tools for Educational Leaders. ..... 3
Educational Leadership 745 Measurement and Decision-Making ..... 3
Educational Leadership 750 Facility Management for a Safe, Efficient, and Effective Learning Environment ..... 3
Educational Leadership 755 Topics in Special Education for School Leaders. ..... 3
Educational Leadership 760 Law and Policy in the Educational Setting ..... 3
Educational Leadership 775 Classroom and School-Wide Behavior Management. ..... 3
II. Culminating Experience (3 hours)
Educational Leadership 780 Clinical Supervision ..... 3
Minimum hours required for degree: ..... 33

## 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.

## Major in Teaching (5017, 5020, 5016, 5019) <br> Curriculum and Instruction (K-6 or 7-12) (5017) 37 hours

The Curriculum and Instruction Option 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.

I. Foundations ( 12 hours)

Educational Evaluation 710 Educational Statistics
3

Educational Foundations 710 Research in Education.................................................................... 3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education
and Counseling.............................................................................................................. 3
Educational Studies 710 Models of Instruction, Curriculum Development and Advanced
Teaching Strategies......................................................................................................... 3
II. Application (7 hours)
Educational Studies 750 Advanced Computer Applications and Technologies in Education.............. 3

Teacher Education 791 Master Research Project, K-12................................................................. 4
III. Concentration (18 hours)

Elective: Choose three hours from:
Educational Foundations 700 or
Elementary/Secondary Education 760 or Counseling 740 or Special Education 650. 3
Reading 700 Foundations of Reading. ..... 3
Special Education 640 Advanced Methods for Students with Mild Disabilities ..... 3
Special Education 300/500 or equivalent is a prerequisite for this course. Students having credit in Special Education 440 or equivalent must choose another Special Education course at 600 or 700 level.
Teacher Education 705 Advanced Strategies in Classroom Management ..... 3
Teacher Education 712 Learning Theory and Cognition Applied to the School Setting. ..... 3
Teacher Education 716 Growth and Development in School Age Students. ..... 3

## Initial Licensure (Elementary or Secondary) (5020) 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. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to Teacher Education Program, Praxis, and Licensure.
I. Foundations (12 hours)
Educational Foundations 710 Research in Education ..... 3
Educational Foundations 720 Educational Studies: Multicultural Issues in Education and Counseling. ..... 3
Teacher Education 650 Designing Curriculum for the Early Adolescent ..... 3
Teacher Education 780 Principles and Techniques of Teaching ..... 3
II. Application (15 hours)
Educational Evaluation 761 Educational Tests and Measurement ..... 3
Educational Studies 750 Advanced Computer Applications and Technologies in Education ..... 3
Teacher Education 705 Advanced Strategies in Classroom Management ..... 3
Student Teaching: Elementary Education 793 \& 794 Grades K-4, 5-8 OR
Secondary Education 793 \& 794 Grades 7-8, 9-12 OR (for students who are hired before student teaching is completed) Teacher Education 795 Practicum in Initial Licensure ..... 6
III. Concentration (15 hours)
Reading 638 Classroom Approaches for the Teaching of Reading in the Elementary Classroom OR Reading 633 Reading in the Content Area Classroom ..... 3
Elementary Education 730 Methods of Teaching Language Arts and Social Studies in the Elementary Classroom and Elementary Education 731 Methods of Teaching Mathematics and Science in the Elementary Classroom
OR
Secondary Education Instructional Strategies 611 (Science), 612 (Math), 613 (Modern
Foreign Language), 614 (English), 615 (Social Studies), or BUED 630 Business and chooseeither Elementary Education 730 or Elementary Education 7316
Special Education 640 Advanced Methods for Students with Mild Disabilities ..... 3
Special Education 300/500 or equivalent is a prerequisite for this course. Students having credit in Special Education 440 or equivalent must choose another Special Education course at 600 or 700 level.
Teacher Education 716 Growth and Development in School Age Students. ..... 3

## Initial Licensure K-12 (5016) 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-12 or Physical Education. Students in initial licensure programs should refer to section of catalog on undergraduate degrees in education for information on admission to Teacher Education 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 Advanced Methods for Students with Mild Disabilities ..... 3
Teacher Education 780 Principles and Techniques of Teaching. ..... 3
II. Application (15 hours)
Educational Studies 750 Advanced Computer Applications and Technologies in Education. ..... 3
Human Performance 640 Evaluation and Human Performance OR Special Education 637 Assessment of Children with Exceptionalities ..... 3
Teacher Education 705 Advanced Strategies for Classroom Management OR Special Education 660 Behavior Interventions ..... 3
Elementary Education 795 Student Teaching Grades K-6 and Secondary Education 795 Student Teaching Grades 7-12 OR Teacher Education 795 Practicum in Initial Licensure ..... 6
III. Concentration (15 hours)

Health 775 School Health Methods and Health and Physical Education 611 Secondary Methods and Curriculum Design OR Elementary Education 730 Methods of Teaching Language Arts and Social

Studies in the Elementary Classroom and Elementary Education 731 Methods of Teaching Math
and Science in Elementary Classroom
Health and Physical Education 730 Theory and Application in Physical Education and Sport Pedagogy ..... 3
Reading 700 Foundation of Reading OR Human Performance 705 Applied Scientific Principles of Human Performance ..... 3
Teacher Education 716 Growth and Development in School Age Students OR Human Performance 550 Motor Development and Learning Across the Life Span ..... 3

## Interdisciplinary (5019) 37 hours

The Interdisciplinary Option is available for those students who have obtained a bachelor's degree from an accredited college or university. Must have credit in Human Learning 325 or equivalent or take Teacher Education 712 in the first semester that the course is offered after enrollment.

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 CEHB 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. Foundations ( 12 hours)

Educational Evaluation 710 Educational Statistics........................................................................ 3
Educational Foundations 710 Research in Education................................................................... 3
Educational Foundations 720 Educ Studies: Multicultural Issues in Education and Counseling........ 3
Educational Studies 710 Models of Instruction, Curriculum Development and Advanced
Teaching Strategies.......................................................................................................... 3
II. Application (7 hours)
Educational Studies 750 Advanced Computer Applications and Technologies in Education.............. 3

Teacher Education 791 Master Research Project, K-12 ................................................................. 4
III. 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.

## Board, Faculty, and Staff



The University of Tennessee at Martin

## The University of Tennessee Board of Trustees

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Chancellor of The University of Tennessee Health Science Center, Steve J. Schwab, M.D.
Chancellor of The University of Tennessee Institute of Agriculture, Larry R. Arrington, Ph.D.
Chancellor of The University of Tennessee at Knoxville, Jimmy G. Cheek, Ph.D.
Chancellor of The University of Tennessee at Martin, Thomas A. Rakes, Ed.D.

## The University of Tennessee at Martin Administrative Units and Positions

Chancellor, Thomas A. Rakes, Ed.D.
Executive Assistant to the Chancellor, Edie B. Gibson, B.A.
Interim Chief Information Officer, Terry Lewis, B.S
Interim Equity and Diversity Officer, Gail M. Stephens, Ed.D.

## Division of Academic Affairs

Vice Chancellor for Academic Affairs, E. Jerald Ogg, Jr., J.D., Ph.D.
Associate Vice Chancellor for Academic Affairs and Dean of Graduate Studies, Victoria S. Seng, Ph.D.
Dean of Agriculture and Applied Sciences, Todd A. Winters, Ph.D.
Dean of Business and Global Affairs, Ross N. Dickens, Ph.D.
Dean of Education, Health, and Behavioral Sciences, R. Mark Kelley, Ph.D.
Dean of Engineering and Natural Sciences, Richard J. Helgeson, Ph.D.
Dean of Humanities and Fine Arts, Lynn M. Alexander, Ph.D.
Interim Executive Director of Office of Student Engagement and Registrar, Brandy D. Cartmell, M.B.A.
Executive Director of Extended Campus and Online Studies, Tommy A. Cates, Ph.D.
Director of Honors Programs, Lionel J. Crews, Ph.D.

Director of Paul Meek Library, Charles A. Julian, Ph.D.
Director of Research, Grants, and Contracts, Joan K. West, Ph.D.

## Division of Finance and Administration

Interim Vice Chancellor for Finance and Administration, Nancy J. Yarbrough, B.S., M.Ac.
Interim Director of Budget and Management Reporting, Petra R. McPhearson, M.S.
Director of Business Affairs, Laura G. Foltz, Ed.D.
Director of Human Resources, J. Phillip Bright, M.B.A.
Director of Physical Plant Operations, Timothy J. Nipp, M.S.
Director of Public Safety, Scott D. Robbins, B.S.
Manager of University Bookstore, Mara Burton

## Division of Student Affairs

Vice Chancellor for Student Affairs, Margaret Y. Toston, Ph.D.
Assistant Vice Chancellor for Student Affairs, David J. Belote, M.S.
Coordinator of Minority Affairs, Annie Carol Jones, Ed.D.
Nurse Practitioner/Director of Student Health and Counseling Services, Shannon R. Deal, M.S.N.
Director of Housing, Earl Wright, M.S.
Interim Director of University Center, John Abel, M.B.A.
General Manager of Dining Services, Benjamin Long
Coordinator for Student Conduct, Joe Henderson, B.S.
Director of Campus Recreation, Gina McClure, M.S.

## Division of University Advancement

Vice Chancellor for University Advancement, Andrew A. Wilson Assistant Vice Chancellor for Development and Planned Giving, Jeanna Curtis Swafford, B.S. Assistant Vice Chancellor for Alumni Relations, Charles T. Deal, M.B.A.

## Office of Intercollegiate Athletics

Director of Intercollegiate Athletics, Phillip W. Dane, M.B.A.
Assistant Athletic Director for Administration and Senior Woman Administrator, Danelle B. Fabianich, M.B.A. Assistant Athletic Director for Compliance, William R. Kaler, M.S.
Assistant Athletic Director for External Relations, Richard Schoeberl, M.S.
Head Football Coach, Jason E. Simpson, M.P.A.
Head Men's Basketball Coach, Jason James, M.S.
Head Women's Basketball Coach, Kevin McMillan, M.S.
Head Baseball Coach, Victor A. Cates, M.Ed.
Head Softball Coach, Donley J. Canary, M.S.
Head Volleyball Coach, Darrin McClure, B.S.
Head Golf Coach, Jerry E. Carpenter, B.S.
Head Men's and Women's Cross Country Coach, Gordon Sanders, B.S.
Head Women's Tennis Coach, Dennis L. Taylor, M.S.
Head Women's Soccer Coach, Philip McNamara, B.A.
Head Cheer Coach, Fran Spears, M.Ed.
Head Rifle Coach, Robert D. Beard, Ph.D.

Head Rodeo Coach, John F. Luthi, M.S.
Head Women's Equestrian Coach, Meghan Cunningham-Corvin, M.S.
Head Athletic Trainer, Bart A. Belew, M.S.
Interim Director of Sports Information, Ryne K. Rickman, B.S.
Coordinator of Sports Communication, Chris Brinkley, B.S.

## Office of University Relations

Director of University Relations, Robert D. Grimes, M.S.

# Colleges and Departments at UT Martin 2013-2014 

## College of Agriculture and

Applied Sciences
Dean, Dr. Todd A. Winters, Ph.D.
Department of Agriculture, Geosciences, and Natural Resources
Interim Chair, Joseph E. Mehlhorn, Ph.D.
Department of Family and Consumer Sciences Interim Chair, Sue G. Byrd, Ph.D.

Department of Military Science and Leadership
Professor, Major Michael Johnson
College of Business and Global Affairs Dean, vacant

Department of Accounting, Finance, Economics, and Political Science
Interim Chair, William L. Davis, Ph.D.
Department of Management, Marketing, and Information Systems
Chair, John D. Overby, D.B.A.
Center for International Education Executive Director, Malcolm G. Koch, Ph.D.

## College of Education, Health, and

Behavioral Sciences
Dean, R. Mark Kelley, Ph.D.
Department of Behavioral Sciences
Chair, Cynthia H. West, M.S.W.
Department of Educational Studies
Interim Chair, Betty A. Cox, Ed.D.
Department of Health and Human Performance Interim Chair, Deborah J. Gibson, Ph.D.

Department of Nursing
Chair, Mary E. Radford, Ed.D.
Office of Interdisciplinary Studies
Dean, R. Mark Kelley

## College of Engineering and Natural Sciences <br> Dean, Richard J. Helgeson, Ph.D.

Department of Biological Sciences
Chair, Jack W. Grubaugh, Ph.D.
Department of Chemistry and Physics
Chair, Charles R. Thomas, Ph.D.
Department of Computer Science
Chair, Edward W. Wheeler, Ed.D.
Department of Engineering
Chair, Edward W. Wheeler, Ed.D.
Department of Mathematics and Statistics Interim 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, Jenna L. Wright, M.F.A.
Department of History and Philosophy
Chair, David A. Coffey, Ph.D.
Department of Music
Chair, Elaine A. Harriss, Ph.D.
Department of Visual and Theatre Arts
Chair, Douglas J. Cook, M.F.A.

## Faculty and Staff 2013-2014

An asterisk (*) indicates graduate faculty status.
Listing of part-time faculty can be found at www.utm.edulacadaffffacdegr:.btml.
Initial year of employment at the University of Tennessee at Martin indicated in parentheses.

Abel, John C., Interim Director of University Center (1998) University of Tennessee at Martin, B.S., м.B.A.

Adkins, Darlene A., Lecturer of Accounting (2011) Radford University, B.S.; Lynchburg College, B.S.; Old Dominion University, M.B.A.; Virginia Commonweath University, M.A.; CPA
*Airee, S.K., Professor of Chemistry (1966) Panjab University, India, B.S., M.S.; Oklahoma State University, Ph.D.
Alexander, Jason S., Assistant Professor of Physics (2009) Southeast Missouri State University, B.S.; University of Oklahoma, M.S.; Missouri University of Science and Technology, Ph.D.
*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.

Anderson, Samuel R., Instructor of E.S.L. (1976) University of Tennessee at Martin, B.A.; Southern Illinois University at Carbondale, M.A.E.F.L.
Austin, Diane L., Assistant Professor of Nursing (2006) University of Tennessee at Martin, B.S.; Union University, M.S.N.

Barber, David, Associate Professor of History (2005) San Francisco State University, B.A. M.A.; University of California, Davis, 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.

Baskett, Georgia I., Assistant Professor of Library Science (2005) Truman State University, B.S.; University of Missouri-Columbia, M.A.L.S.
*Baxter, Christopher M., Associate Professor of Political Science (2002) University of Tennessee at Martin, B.S.; University of Alabama, M.A., Ph.D.

Beard, Robert D., Coordinator of Career Advising; Head Rifle Coach (1987) Murray State University, B.A.; University of Missouri-Columbia, Ph.D.

Beene, Deidra H., Director of UT Martin McNairy County Center/Selmer (2000) Freed-Hardeman University, B.S.; University of Tennessee at Martin, M.B.A.

Belote, David J., Assistant Vice Chancellor for Student Affairs (1977) University of Tennessee at Martin, B.S., M.S.

Black, Ruby L., Professor of Nursing (1988) Tuskegee University, B.S.N.; Texas Woman's University, M.S.N.; R.N.
*Blanchard, Thomas A., Professor of Biology (2001) Augusta State University, B.S., Southeastern Louisiana University, M.S.; Louisiana State University, Ph.D.

Borden, Shirley, Lecturer of Finance (2011) Purdue University, B.S., B.S.E.; University of Tennessee at Martin, M.B.A.; CFP

Braddock, Matthew, Assistant Professor of Philosophy (2012) University of Texas, Dallas, B.A., M.A.; Texas Tech University, M.A.; Duke University, Ph.D.

Bradley, James R., Instructor of Computer Science (1991) University of Tennessee at Martin, B.S.; University of Tennessee, Knoxville, M.S.
Bradshaw, Charles C., Associate Professor of English (2002) Brigham Young University, B.A., M.A.; University of Missouri-Columbia, Ph.D.

Brannen, Sally G., Instructor of English (2002) Murray State University, B.S., M.A.
Breeden, Sheryl F., Adviser I (1996) University of Tennessee at Martin, B.S.B.A, M.B.A.

Bright, J. Phillip, Director of Human Resources (1978) University of Tennessee at Martin, B.S., м.B.A.

Brooks, Miyoshi, Admissions Counselor (2007) Tennessee State University, B.A.

Brown, Christopher M., Associate Professor of Philosophy (2002) Western Michigan University, B.M.; Western Kentucky University, M.A.; St. Louis University, Ph.D.
*Brown, Laura L., Associate 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) Pacific Azusa University, B.A.; Western Kentucky University, M.A.
Browning, Gloria A., Assistant Professor of Nursing (2001) Austin Peay State University, B.S.N.; University of Phoenix, M.S.N.; University of New Mexico, Ph.D.; R.N.
*Buckelew, Susan P., Associate Professor of Psychology (2001) University of Tennessee at Martin, B.S.; Auburn University, M.S., Ph.D.

Burton, Mara, Manager of University Bookstore (2011)

Buschhaus, Nancy L., Professor of Biology (1997) Miami University, B.S., M.S.; Ohio State University, Ph.D.

Bush, John P., Lecturer of Mathematics (2008) University of Tennessee at Martin, B.S.; Southern Illinois University at Carbondale, M.S.
*Butler, James N., Jr., Professor of Agricultural Education (1995) Louisiana Tech University, B.S., M.A.; Mississippi State University, Ph.D.

Butler, Linda K., Associate Professor of Library Science (1987) University of Memphis, B.A.; University of Tennessee, Knoxville, M.S.L.S.
*Byers, Donna M., Assistant Professor of Biology (2010) University of Texas, El Paso, B.S., Ph.D.

Byrd, Robert Glen, Assistant Director and Academic Coordinator, International Programs and Internal Admissions; Instructor of E.S.L. (1989) Carson-Newman College, B.A.
*Byrd, Sue G., Interim Chair of Department of Family and Consumer Sciences; Professor of Textiles, Clothing and Fashion Merchandising (1987) University of Tennessee, Knoxville, B.S., M.S., Ph.D.
*Caldwell, Chris K., Professor of Mathematics (1984) California State University-Hayward, B.S.; University of California-Berkley, Ph.D.

Camper, Joshua A., Lecturer of History (2011) University of Tennessee at Martin, B.S.; Murray State University, M.A.

Canary, Donley J., Head Softball Coach (2001) Tennessee Technological University, B.S., University of Tennessee, M.S.
Capansky, Trisha K., Assistant 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.
Carpenter, Jerry E., Head Golf Coach (1968) University of Tennessee at Martin, B.S.
Carroll, Erica D., Lab Instructor for Veterinary Health Technology (2012) Murray State University, B.S.

Cartmell, Brandy D., Interim Executive Director of Office of Student Engagement and Registrar (1996) Spring Arbor College, B.A.; University of Tennessee at Martin, M.B.A.
*Cates, Tommy A., Executive Director of Extended Campus and Online Studies; Professor of Management (1983) University of Tennessee at Martin, B.S.; University of Memphis, M.B.A., D.B.A.

Cates, Victor A., Instructor of Mathematics; Head Baseball Coach (1998) Delta State University, B.S., M.Ed.

Chen, Hui-chuan (Christie), Instructor of Management (2013) Abilene Christian University, B.A.; Texas A\&M University, M.B.A.; University of Texas at Arlington, Ph.D.
Clark, Anna H., Instructor of English; Co-coordinator of Hortense Parrish Writing Center (1986) University of Missouri-Columbia, B.S., M.A.
Clark, Katie, Instructor of E.S.L. (2011) Murray State University, B.S., M.S.

Cleary Ian A., Assistant Professor of Biology (2012) University of Alberta, B.S., Ph.D.

Coalter, Alton B., Instructor of Computer Science (2010) University of Arkansas, B.A.; Missouri University of Science and Technology, M.S.

Cochran, John M., Assistant Professor of Mathematics and Statistics (2009) Rose-Hulman Institute of Technology, B.S., M.S.; University of Louisville, M.A., Ph.D.
*Coffey, David, Chair of Department of History and Philosophy; Professor of History (2001) Texas Christian University, B.A., M.A., Ph.D.

Coleman, Ray, Police Captain (1982) University of Tennessee at Martin, B.S.; M.S.
*Collard, Teresa Y., Assistant Professor of Communications (1993) Eastern Illinois University, B.A., M.A.; Union University, Ed.D.

Collins, John L., Professor of Biology (1994) University of Tennessee, Knoxville, B.S., Ph.D.

Connell, S. Denise, Lecturer of Psychology (2002) University of Tennessee at Martin, B.S.; East Tennessee State University, M.A.
*Cook, Douglas J., Chair of Department of Visual and Theatre Arts; Professor of Theatre (1984) University of Tennessee at Martin, B.S.; University of Memphis, M.F.A.

Cowser, Mary Ellen, Instructor of English (1991)
Marquette University, B.S.; University of Connecticut, M.A.
*Cox, Becky J., Assistant Professor of Education (2005) Indiana University, B.S.; University of Tennessee at Martin, M.S.; Union University, Ed.S., Ed.D.
*Cox, Betty A., Interim Chair of Educational Studies; Assistant Professor of Education (2006) University of Tennessee, Chattanooga, B.S., M.S.; University of Tennessee, Knoxville, Ed.D.; Louisiana State University Law School, J.D.

Crawford, Kristy, Coordinator, Education Graduate Programs Management, Education Graduate Programs (1982) University of Tennessee at Martin, B.U.S.

Crews, Kimberly J., Interim Director, Reelfoot Lake Teaching and Research Center (2007) University of Tennessee at Martin, B.S., M.S.

Crews, Lionel J., Director of Honors Programs; Associate Professor of Physics (2000) Vanderbilt University, B.S., M.S., Ph.D.

Culver, Texas E., Lecturer of Educational Studies (2009) Union University, B.S.; University of Memphis, M.S.
Cunningham-Corvin, Meghan. Head Women's Equestrian Coach (2005) Virginia Tech, B.S.; Kansas State University, M.S.

Cupples, Matthew P., Lecturer of Health and Human Performance (2013) University of Tennessee at Martin, B.S.
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Dane, Phillip W., Director of Intercollegiate Athletics (1979) Tennessee Technological University, B.S.; University of Tennessee at Martin, M.B.A.

Daniel, George E, Coordinator of Student Affairs Program Evaluation (2001) Georgia Southwestern College, B.A.; University of Tennessee, Knoxville, B.S., M.S., Ed.D.
*Darroch, Barbara A., Academic Coordinator and Lab Instructor, Agriculture, Geosciences, and Natural Resources (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.

Davis, Dexter J., Assistant Professor of Sport Management (2013) Houghton College, B.S.; Canisius College, M.S.; United States Sports Academy, Ed.D.
Davis, Lajuan V., Assistant Professor of Information Systems (2013) Mississippi State University, B.S.; University of Southern Mississippi, M.S.; Mississippi State University, Ph.D.
Davis, Peggy A., Assistant Professor of Nursing (2000) University of Tennessee at Martin, B.S.; Murray State University, M.S.N.; St. Louis University, Ph.D.
Davis, Phillip H., Professor of Chemistry (1978) Colorado State University, B.S.; University of Southhampton, England, M. Phil.; University of Illinois at Urbana-Champaign, Ph.D.
*Davis, William L., Interim Chair of Department of Accounting, Finance, Economics and Political Science; Professor of Economics (1989) Missouri Southern State College, B.S.; University of Arkansas, M.A.; Oklahoma State University, Ph.D.

Deal, Charles T., Assistant Vice Chancellor for Alumni Relations and Executive Director of WestStar Leadership Program (1992) University of Tennessee at Martin, B.S., M.B.A.

Deal, Shannon R., Director of Student Health and Counseling Center and Nurse Practitioner (2000) University of Tennessee, Memphis, B.S.N.; Tennessee State University, M.S.N.

DePriest, Thomas A., Assistant Professor of Geology (2009) University of Memphis, B.A.; University of Tennessee at Martin, B.S.; University of Mississippi, M.A.; Union University. Ed.D.
Devenyi, Jozsef, Professor of Chemistry (1997) Eotvos Lorand University, Hungary, M.S.; University of Tennessee, Knoxville, Ph.D.

DiBella, Karen, Instructor of Reading; Director of the Reading Center (2013) Pennsylvania State University, B.A.; Florida Gulf Coast University, M.Ed.

Dickens, Ross N., Dean of College of Business and Global Affairs; Professor of Finance (2013) University of North Carolina, M.B.A.; University of Tennessee, Knoxville, Ph.D.

Diffee, Ryan, Instructor of E.S.L. (2013) Union University, B.A.; University of Memphis, M.A.
*Dietrich, David C., Assistant Professor of Counseling (2010) Rhodes College B.A.; University of Memphis, M.S., Ph.D.
*Donavant, Brian W., Associate Professor of Criminal Justice (2006) University of Memphis, B.A.; William Carey College, M.Ed.; University of Southern Mississippi, Ph.D.
Duggin, Jason D., Lecturer of Animal Science (2010) Oklahoma State University, B.S., M.S.

Dunagan, Stan P., Associate Professor of Geology (2002) University of Tennessee at Martin, B.S.; University of Tennessee, Knoxville, Ph.D.

Duncan, Terry, Career Counselor, Student Success Center (2003) Murray State University, B.S.; Loyola University, Chicago, M.Ed.

Dunlap, Mickey P., Assistant Professor of Statistics (2004) University of Tennessee at Martin, B.S.; Mississippi State University, M.S.; Texas A \& M University, Ph.D.

Easley, Delana M., Lecturer of Music (2008) University of Tennessee at Martin, B.M.
Eckert, Carol A., Associate 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.

Elliott, Chelsey, Lecturer of Nursing (2013) University of Tennessee at Martin, B.S.N.; Union University, M.S.N.
*Elliott, E. Steve, Assistant Professor of Mathematics and Statistics (2005) United States Military Academy, B.S.; University of Kentucky, M.A., Ph.D.
Ebrahim, Arbin, Assistant Professor of Electrical Engineering (2013) Bangalore University, B.E.; Wayne State University, M.S.; University of Alabama, Ph.D.

Entner, Jeremy F., Instructor of Statistics (2013) Rochester Institute of Technology, B.F.A.; SUNY Brockport, B.S., M.A.
*Erk, Robert R., Professor of Education (1976) Troy State University, B.S., M.S.; Mississippi State University, Ed.D.
*Erkal, Cahit, Professor of Physics (2000) Hacettepe University, Ankara, Turkey, B.S.; University of Wisconsin, Ph.D.

Esch, Virginia C., Associate Professor of Education (1999) Keuka College, B.S.; Syracuse University, M.S.; Converse College, M.Ed.; University of South Carolina, Ph.D.

Eskew, Thomas E., Interim Chair of Department of Mathematics and Statistics; Instructor of Mathematics (1982) University of Tennessee at Martin, B.S.; University of Mississippi, M.S.

Evans, Kathy D., Associate Professor of Education (1997) Wheaton College, B.A.; Vanderbilt University, M.S., Ph.D.

Fabianich, Danelle B., Assistant Athletic Director for Administration and Senior Woman Administrator (1991) University of Northern Colorado, B.S.; University of Tennessee at Martin, M.B.A.

Fackler, Kenneth P., Instructor of E.S.L. (1989) Berklee College of Music, B.A.; American University in Cairo, Egypt, M.A. TEFL
*Faught, Samuel C., Assistant Professor of Management (2010) Arkansas State University, B.S., M.B.A., M.S.I.S.; University of Mississippi, Ph.D.

Fieser, James F., Professor of Philosophy (1993) Berea College, B.A.; Purdue University, M.A., Ph.D.

Flórido, Lúcia F., Associate Professor of French (2002) Universidade Federal Fluminense, Brazil, B.A., M.A.; Michigan State University, Ph.D.

Floyd, Julie P., Assistant Professor of Nursing (1998) Union University, B.S.N.; University of Tennessee Health Science Center, M.S.N.; Union University, Ed.D.; R.N.
*Foltz, Charles Bryan, Associate Professor of Information Systems (2006) Southwest Missouri State University, B.S.; University of Arkansas, M.B.A., Ph.D.

Foltz, Laura G., Director of Business Affairs
(2006) University of Arkansas at Fayetteville, B.S., M.B.A.; Vanderbilt University, Ed.D.

Forbess, Donna K., Lab Instructor, Biology (1993) University of Tennessee at Martin, B.S.; Southern Illinois University at Carbondale, M.S.

Frazier, Sheryl, Interim Director of Financial Aid and Scholarships (1984)

Freed, Rodney L., Instructor of Communications (1997) Murray State University, B.S., M.S.

Freed, Stacy A., Lecturer of Communications (2005) Murray State University, B.A.; University of Tennessee at Martin, M.B.A.; Murray State University, M.S.
Fry, Shirley A., Assistant Professor of Nursing (2000) Berea College, B.S.N.; Medical College of Virginia, M.S.N.; R.N.

Frye, Joseph W., Assistant Professor of Music (2011) University of Tennessee, Knoxville, B.M.; Florida State University, M.M., D.M.
Fuqua, Staci H., Coordinator of Field Placements (1995) University of Tennessee at Martin, B.S., M.S.
*Gale, Paula M., Professor of Soil Science (1994) University of Arkansas, B.S., Ph.D.

Garcia-Fernandez, Anton, Assistant Professor of Spanish (2011) Universidade de Virgo, Spain, B.A.; Vanderbilt University, M.A., Ph.D.

Garcia-Fernandez, Erin E., Lecturer of English (2012) Rhodes College, B.A.; Vanderbilt University, M.A., Ph.D
Gardner, Eleanor E., Laboratory Instructor of Geology (2011) Agnes Scott College, B.A.; University of Georgia, M.S.

Garlitz, Richard P., Assistant Professor of History (2008) Purdue University, B.A.; Ball State University, M.A.; Ohio University, Ph.D.

Garza, Randal P., Associate Professor of Spanish, (2002) Michigan State University, B.A., M.A., Ph.D.

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## 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 requirementsClassification - 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 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: $\mathrm{A}=4, \mathrm{~B}=3, \mathrm{C}=2, \mathrm{D}=1$ )

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

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## 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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