## Contents

### 4 The University
- Mission and Guiding Principles
- Accreditation and Membership
- Campus Overview
- History
- Chattanooga
- Student Conduct, Rights, and Responsibilities
- Falsifying Documents
- Statement of a Drug-Free Environment
- Campus Safety Report
- Student Right To Know
- Family Educational Rights and Privacy Act (FERPA)

### 12 Enrolling at UTC
- Undergraduate Admissions
- Applying for Admissions
- Regular Admission
- The University Honors Program
- Exceptions to Regular Admission Requirements
- Adult Freshman Admission
- Admission with GED-High School Equivalency Diploma
- Early Admission
- Joint High School Enrollment
- Undergraduate Non-Degree-Seeking Status
- Special Admission
- Transient Students
- Transfer Students
- Transfer Coursework
- International Students
- Academic Forgiveness
- Readmission
- Post-baccalaureate Students
- Non-Traditional Credit
- Petitions and Appeals

### 20 Advising, Orientation, and Registration
- Academic Advising
- Important Advising Resources
- New Student Orientation and Registration
- Regular Advisement and Registration
- General Rules and Guidelines Related to Selecting Courses
- Registering for Classes

### 29 Student Financial Aid
- Five Steps to Financial Aid
- Satisfactory Academic Progress
- Types of Financial Aid
- Grants
- Student Loans
- Student Employment

### 44 Student Financial Obligations
- Mocs Express Statement
- Cancellation for Non-Payment
- Prepayment Plan
- Deferred Payment Plan
- Refund Policy
- Tuition and Maintenance Fees
- Late Fees
- Fees for Audit Courses
- Laboratory/Studio Fees
- Listener's Fee
- Music Fee
- Returned Check Charge
- Housing
- Dining Plans
- Orientation Fee
- Parking
- Credit by Special Examination Fees
- If You Owe the University Money

### 47 Student Services and Resources
- Americans with Disabilities Act and Disability Services
- Advisement Center
- Adult Services
- Bookstore
- Bus System (Mocs Express Shuttle)
- Check Cashing Service
- Copy and Mail Services
- Computer Network and Acceptable Use Practices: Privileges and Responsibilities
- Continuing Education
- Cooperative Education
- Counseling Center
- Dining Services
- Email
- Exchange Programs
- Information Technology
- Insurance
- Health Services
- Housing
- Library
- Mocs Card
- Placement Services
- Security
- Southeast Center for the Arts
- Student Government Association
- Student Handbooks
- Student Newspaper
- Student Tickets
- Student Support Services
- Transcripts
- University Center
- University Honors Program
- Upward Bound
- WUTC

### 55 Organizations and Activities
- Student Government Association
- Fraternities and Sororities
- Academic and Interest Clubs
- Honor Societies
- Major Campus Organizations
- Service Organizations
- Religious Organizations
- Student Publications
- Eligibility for Athletics
- Intramurals
- Bands, Orchestra, and Choral Activities
- Mocs Athletics, Mocs Cards, and Athletic Event Information

### 59 Academic Regulations
- Degrees, Major, Concentration, Minor
- Catalog Effective Dates
- Registration Classification
- Registration Limits and Excess Hours
- Grades
- Grade Point Average
- Courses Included and Excluded in GPA and Degree Requirements
- Academic Standards
- Honor Code
- Grade Appeal Process
- Course Repeat and Grade Replacement Policy
- Withdrawals
- Academic Recognition and Honor Societies
- Enrolling in Graduate Courses

### 66 Degree and Graduation Requirements
- Requirements for the Bachelor’s Degree
- Special Degree Options
- Second Bachelor’s Degree
- Double Major Requirements
- General Education Requirements

### 73 Special Academic Programs
- Pre-Professional Programs
Contents ::

76  College of Arts and Sciences
    76   Art
    80   Biological and Environmental Sciences
    87   Chemistry
    90   Communication
    92   Criminal Justice
    94   Legal Assistant Studies
    96   Economics
    98   English
102   Foreign Languages and Literatures
108   History
111   Interdisciplinary Studies
111   Humanities
115   University Studies
115   Mathematics
119   Military Science
121   Music
128   Philosophy and Religion
131   Physics, Geology, and Astronomy
136   Political Science, Public Administration and Nonprofit Management
140   Psychology
143   Sociology, Anthropology, and Geography
148   Theatre and Speech
151   University Honors Program

153  College of Business
153   Accounting
155   Finance
156   Management
159   Marketing and Entrepreneurship
161   General Business Administration

163  College of Engineering and Computer Science
164   Cooperative Education Program
164   Engineering
175   Engineering Technology Management
177   Computer Science

182  College of Health, Education and Professional Studies
183   Health and Human Performance
191   Interior Design
193   School of Nursing
197   Rehabilitation Science: Occupational Therapy
198   Rehabilitation Science: Physical Therapy
199   Social Work
201   Teacher Preparation Academy
204   Early Childhood
206   Exceptional Learning
206   Foreign Language Education
207   Middle Grades Education
208   Secondary English
208   Secondary Mathematics
208   Secondary Natural Sciences
209   Secondary Social Sciences

214  Administration and Faculty
221   Endowed Funds
227   Index

The University of Tennessee at Chattanooga does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap, or veteran status in provision of educational opportunities or employment opportunities and benefits. The University does not discriminate on the basis of sex or handicap in the education programs and activities which it operates, pursuant to the requirements of Title IX of the Education Amendments of 1972, Pub. L. 92-318; and Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112; and the Americans With Disabilities Act of 1990, Pub. L. 101-336, respectively. This policy extends to both employment by and admission to the University. Inquiries concerning Title IX, Section 504, and the Americans with Disabilities Act should be directed to the Office of the Director for Affirmative Action, 104 Founders Hall, (423) 755-4124. Charges of violation of the above policy should also be directed to the Office of the Director for Affirmative Action. E040222-004-09

In compliance with The Family Educational Rights and Privacy Act, The University of Tennessee at Chattanooga provides for the confidentiality of student records. Additional information pertaining to the privacy rights of students can be found at www.utc.edu/Records-Registration/ferpa.html.

Information

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 is no guarantee that they will not be changed or revoked. Current information may be obtained from the following sources:

Visit our website at: www.utc.edu

Admission requirements—(423) 425-4662 or toll-free 1-800-UTC-MOCS
Course offerings (423) 425-4111
Department offering course or faculty adviser, head of major departments, or dean of college.
Call for department number. (423) 425-4111
Fees and tuition (423) 425-4781
Financial aid (423) 425-4677
Graduate School (423) 425-4666
Admission Requirements (423) 425-4662
or toll-free 1-800-UTC-MOCS
Housing/
Student Development (423) 425-4304
Records (423) 425-4414
Registration (423) 425-4414
Transcripts (423) 425-4102
University operator (423) 425-4111
The University of Tennessee at Chattanooga will be recognized as a premiere metropolitan university, known for its outstanding undergraduate and graduate academic programs, scholarly and creative achievements, diversity and inclusiveness, and critical partnerships that take advantage of our setting to provide solutions to global concerns.

Mission
The University of Tennessee at Chattanooga is an engaged, metropolitan university committed to excellence in teaching, research, and service, and dedicated to meeting the diverse needs of the region through strategic partnerships and community involvement.

Core Values
In fulfilling our mission, we are committed to our core values:

Preparing for the Future
- The development of ethical and socially responsible leaders, professionals, scholars, and citizens
- The creation of opportunities for those who seek truth, knowledge, and higher quality of life

Education and Engagement
- Excellence in teaching within a student-focused, supportive, and challenging environment
- Achievement and national recognition in research, scholarship, and creative endeavors
- Effective partnerships that provide meaningful involvement in educational, economic, and community development

Positive Institutional Environment
- A collegial, mutually respectful, and professionally rewarding environment
- Broad diversity of people and ideas to strengthen our institution and community
- Reasonable and affordable access to quality higher education

The University has also earned accreditation from the following organizations:
- Accreditation Council for Education in Journalism and Mass Communication
- Accreditation Council of Occupational Therapy Education
- Association to Advance Collegiate Schools of Business
- Association to Advance American Chemical Society
- Collegiate Schools of Business
- Commission on Collegiate Nursing Education
- Commission on Accreditation for Dietetics Education of the American Dietetics Association
- Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association
- Council on the Accreditation of Nursing Anesthesia Education Program
- Engineering Accreditation Commission/Accreditation Board for Engineering and Technology
- National Association of Schools of Art and Design
- National Association of Schools of Music
- National Association of Schools of Public Affairs and Administration
- National Athletic Trainers Association
- National Council of Accreditation of Teacher Education

Membership
The University is a charter member of the Southern University Conference. Additionally, memberships include the following:
- American Alumni Council
- American Council on Education
- American Association of Colleges for Teacher Education
- American Association of State Colleges and Universities
- Association for Continuing Higher Education
- Association of American Universities
- Council of Graduate Schools in the United States
- National University Extension Association
- Servicemembers Opportunity Colleges
- Tennessee College Association

Oak Ridge Associated Universities
Since 1969, students and faculty of The University of Tennessee at Chattanooga have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 98 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a
multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at http://www.orau.gov/orise/educ.htm, or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact:

- **Monnie E. Champion**
  ORAU Corporate Secretary (865-576-3306); or
- **Visit the ORAU Home Page** (http://www.orau.org)

### Campus Overview

The University of Tennessee at Chattanooga educates students by enlightening and disciplining their minds, and preparing them for ethical and active leadership in the civic, cultural, and professional spheres of their lives. To achieve these goals, the University engages in the complementary activities of teaching, scholarship, and service.

In its constant pursuit of academic excellence, UTC is committed to several strategic imperatives:

- claiming the assets of technology
- recruiting, retaining, and celebrating diversity in faculty, staff, and students
- demonstrating accountability
- enhancing partnerships
- enhancing the learning environment
- using evaluation to drive change

The hallmark of the University is outstanding teaching by a talented and dedicated faculty. Small classes, personalized advising, and frequent opportunities to interact with faculty provide a student-oriented learning experience.

Scholarship and research are priorities for the campus because these activities provide students with opportunities to mature as scholars, foster the intellectual growth of the faculty, and enhance the region's growth.

The University's academic programs provide students with a foundation in the liberal arts and preparation for many professions. The Colleges of Arts and Sciences; Business; Health Education, and Professional Studies; and Engineering and Computer Science provide bachelor's, master's, and doctoral degrees as well as several post-master's specialist degrees.

Education at UTC goes beyond the traditional classroom and laboratory. UTC faculty continue to bring their professional expertise to bear on the concerns of the larger community. Moreover, the University takes advantage of its metropolitan location to provide firsthand learning experiences to students through career-related work experience. Innovative programs, such as our University Honors Program, serve exceptionally talented students. Off campus, the University offers credit and noncredit instruction for professional and intellectual development, extending its educational mission to an even broader range of citizens.

The University's mission is enhanced by continuing support from its alumni; the community; and the University of Chattanooga Foundation, a public, nonprofit organization that administers most of UTC's private endowment. Income from the endowment funds a number of endowed professorships as well as scholarships for students. Support from the State also provides funding for several Chairs of Excellence.

As UTC looks to its future and the emerging needs of the metropolitan region, it will continue its commitment to quality education, excellent research, and dedicated service.

### History

Since its founding as Chattanooga University in 1886, The University of Tennessee at Chattanooga has developed an institutional excellence that rests on an unusual blend of the private and public traditions of American education.

For 83 years the University was a private school. Three years after its founding, the University merged with another church-related school, East Tennessee Wesleyan University at Athens, to form Grant University. In 1907 the school changed its name to the University of Chattanooga.

In 1969 the University of Chattanooga and a junior college, Chattanooga City College, merged with The University of Tennessee, one of the oldest land-grant universities in the nation, to form The University of Tennessee at Chattanooga. As it joined the UT system, UTC received the mandate to devote a major portion of its resources to excellence in undergraduate education and in selected areas of graduate study.

The University's wide diversity of degree programs has attracted a current enrollment of more than 8,500, representing students from across the state, the region, and the world.

### Chattanooga

The University is located a few blocks from downtown Chattanooga. Claiming more than 600 industries, Chattanooga lies at the foot of Lookout and Signal Mountains where the Tennessee River forms Moccasin Bend. With a population of about 163,000 in a metropolitan statistical area of approximately 467,000, Chattanooga is easily accessible by car and air. Chattanooga frequently receives national recognition for its regional beauty, quality of life, and rich historical heritage.

The University and many civic organizations enhance the cultural environment of Chattanooga by supporting the arts through theatrical productions, concerts, and art exhibits. The greater Chattanooga area provides 10 city parks, 7 public golf courses, and a 35,400 acre lake that affords many recreational activities.
Student Conduct, Rights, and Responsibilities

Students enrolled at UTC are citizens of the University and its surrounding communities. This citizenship carries with it opportunities and responsibilities - opportunities that enrich one's intellectual social life and responsibilities to conduct oneself in public and private life with integrity and respect for others. The University expects that its students will respect and comply with the law and the University's Code of Conduct both on campus and in the surrounding communities.

The University treats students like adults and expects mature and responsible behavior from them. Indeed, the reputation of the University depends, in part, on the conduct of its students. Consequently, the University maintains rules and policies to maintain a safe and civil environment for all members of the academic community. Students should understand that they assume full responsibility for the consequences of their behavior. Those who violate the University's policies are subject to disciplinary action, including permanent dismissal from the University.

Students are responsible for understanding and complying with the University's Catalog, with its Undergraduate Student Handbook, and with other regulations. The Undergraduate Catalog is available online at: www.utc.edu/catalogs/. The Student Handbook is available at: www.utc.edu/Administration/StudentDevelopment/handbook/. The University publishes both documents annually.

Falsifying Documents

Misrepresentation of academic credentials is a Class A misdemeanor in Tennessee. A person commits the offense of misrepresentation of academic credentials who, knowing that the statement is false and with the intent to secure employment or admission to an institution of higher education in Tennessee, represents, orally or in writing, that such person: (1) has successfully completed the required course work for and has been awarded one or more degrees or diplomas from an accredited institution of higher education; (2) has successfully completed the required course work for and has been awarded one or more degrees or diplomas from a particular institution of higher education; or (3) has successfully completed the required course work for and has been awarded one or more degrees or diplomas in a particular field or specialty from an accredited institution of higher education.

Violation of this policy is grounds for disciplinary action, which includes immediate and permanent dismissal of the student. Federal and State laws provide additional penalties for such unlawful activities, including fines and imprisonment (21 U.S.C. 841 et seq.; T.C.A. 39-6-401 et seq.). Local ordinances also provide various penalties for drug- and alcohol-related offenses. The University is bound to take all appropriate actions against violators, which may include referral for legal prosecution or requiring the individual to participate in an approved drug use or alcohol abuse assistance or rehabilitation program.

Campus Safety Report

Each year The University of Tennessee at Chattanooga publishes UTC Campus Safety and Law Enforcement Handbook which includes campus crime statistics for the three most recent calendar years as well as various campus policies concerning law enforcement, the reporting of criminal activity, and crime prevention programs. Prospective students, current students, and employees may receive a copy of the report by visiting www.utc.edu/PublicSafety or by writing to:

Department of Public Safety Dept. 3954
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, TN 37403

Student Right To Know

In accordance with the Student Right To Know Act, the University provides the following information. By the end of the 2006-07 school year, 40 percent of students who entered The University of Tennessee at Chattanooga as full-time freshmen in fall 2002 completed baccalaureate degrees at UTC.

Any questions concerning this or similar information on student athletes contact:

Dr. Richard Gruetzemacher
Office of Planning, Evaluation and Institutional Research
Dept. 4654
615 McCallie Avenue
Chattanooga, TN 37403-2598
(423) 425-4007
Family Educational Rights and Privacy Act (FERPA)

Access to Student Education Records
Also known as the “Buckley Amendment,” the Family Educational Rights and Privacy Act ("FERPA") is a federal law enacted in 1974 that affords students certain rights with respect to their education records. Specifically, FERPA affords students (1) the right to inspect and review their education records, (2) the right to request the amendment of the student’s education records that the student believes are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA, (3) the right to provide written consent before the University discloses personally identifiable information from the student’s education records, except to the extent that FERPA authorizes disclosure without consent, and (4) the right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with FERPA. The University strives to fully comply with this law by protecting the privacy of education records and judiciously evaluating requests for release of information from those records.

I. Definitions

A. Student. A student is a person who attends or who has previously attended The University of Tennessee at Chattanooga, including attendance in person, by correspondence, by distance (using videoconference, satellite, internet, or other technology), or a period during which a person is working under a work study program. This does not include persons who have been admitted to the University but have not registered for classes.

B. Education Record. An education record is a record directly related to a student that is maintained by the University or by a person acting for the University. Excluded from the definition of an education record are:

1. Records that are kept in the sole possession of the maker of the record, are used only as a personal memory aid, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record.
2. Law enforcement records created and maintained by the Office of Safety and Security solely for a law enforcement purposes.
3. Records made or maintained by a physician, psychiatrist, psychologist or other recognized professional or paraprofessional if the records are used only for treatment of a student and made available only to those persons providing the treatment.
4. Records that relate to an individual who is employed by the University and that (i) are made and maintained in the normal course of business, (ii) are not available for use for any other purpose, and (iii) relate exclusively to the individual in that individual's capacity as an employee. This exception does not apply to records that relate to a student in attendance at the University who is employed as a result of his or her status as a student.
5. Peer graded papers before the papers are collected and recorded by faculty.
6. Records created or received by the University after an individual is no longer a student in attendance and which are not directly related to the individual's attendance as a student (i.e., alumni records).

C. Personally identifiable information. Personally identifiable information includes, but is not limited to:

1. A student’s name;
2. The name of a student’s parent or other family members;
3. The address of a student or a student’s family;
4. A personal identifier, such as a student’s social security number, student number, or biometric record;
5. Other indirect identifiers, such as a student’s date of birth, place of birth, and mother’s maiden name;
6. Other information that, alone or in combination, is linked or linkable to a specific student that would allow a reasonable person in the University community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty; or
7. Information requested by a person who the University reasonably believes knows the identity of the student to whom the education record relates.

II. Scope of Student Rights to Inspect and Review Education Records

A. A student shall be permitted to inspect and review his or her education records within 45 days following the date on which the University receives the student’s request for access. To exercise this right, a student should submit to the registrar, dean, head of the academic department, or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The University official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

B. A student shall be provided with a copy of any part or all of his or her education record on request but may be charged a fee not to exceed the University's cost of producing a copy of the education record as a condition to receiving it, unless the imposition of a fee effectively prevents a student from exercising the right to inspect and review the record. A student shall not be charged a fee to search for or retrieve the student's education records.

C. A student does not have the right to inspect and review:

1. The financial records of the student's parents.
2. Confidential letters and statements of recommendation which were placed in the University's records prior to January 1, 1975.
3. Confidential letters and statements of recommendation placed in the student’s education records after January 1, 1975, respecting admission to the University, application for employment, or receipt of an honor or honorary recognition if the student has signed a waiver of access rights.
University shall not require any student to waive access rights. A party from whom a recommendation is sought may require such a waiver. A student who has signed a waiver shall be notified by the University of the names of parties providing confidentiality letters and statements of recommendation. Confidential letters and statements of recommendation shall be used only for the purpose for which they were solicited.

4. Records that personally identify other students even if the student also is personally identified. In such a case, the student shall simply be informed of the specific information about the student that is contained in the record.

D. Reasonable requests by a student for an explanation or interpretation of records shall be granted.

III. The Right to Seek to Amend Education Records

A. FERPA gives a student the right to request the amendment of the student’s education records that the student believes are inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA. The right to request the amendment of education records does not include a right to question substantive educational judgments that have been correctly recorded. Disputes between the University and the student concerning the content of a student’s education record should be resolved informally, if possible.

B. A student who wishes to ask the University to amend a record should write the University official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. The University official in charge of the office or department to which the challenge is submitted shall mark the date of the request on the front page of the request.

C. If the University decides not to amend the record as requested, within ten (10) days of the receipt of the student’s request, the University will notify the student in writing of the decision and the student’s right to a hearing regarding the request for amendment. The written notification to the student shall be reasonably in advance of the hearing and shall notify the student about:

1. When the hearing will be conducted (no later than 30 days from the date on which notification is given or mailed to the student);
2. Where the hearing will be conducted; and
3. Who will conduct the hearing (the official in charge of the office or department or his or her designee may act as hearing examiner).

D. A hearing on a student’s request to amend the student’s education record shall include the following procedures:

1. The hearing examiner should not have a direct interest in the outcome of the hearing.
2. The student may, at his or her own expense, be assisted or represented by one or more individuals of his or her own choice, including an attorney.

3. The student shall be provided with a full and fair opportunity to present relevant evidence in support of the challenge including any records, testimony of witnesses, or other evidence which the student reasonably believes to support the challenge. Material which is redundant or immaterial need not be accepted or considered as evidence. The hearing examiner may require that voluminous material be summarized if the examiner deems such action appropriate.

4. The hearing examiner may request the presence of witnesses at the hearing in addition to those called by the student. The student shall be made aware of and have an opportunity to rebut any evidence considered by the hearing examiner which would serve to disprove the student’s challenge.

5. Within thirty (30) days of the conclusion of the hearing, the hearing examiner shall make his or her decision in writing. In reaching a decision, the hearing examiner shall consider only the evidence presented at the hearing and must include in a summary of the evidence and the reasons for the decision in the written decision.

6. A record of the hearing shall be maintained in the office or department to which the challenge was submitted which notes all particulars of the challenge including date received, date of hearing, name of hearing examiner, names of witnesses, decision reached, and the date on which notification of decision was sent. The record shall include a copy of the challenge, the decision, and any written or other tangible evidence submitted.

E. If, as a result of a hearing, the University decides that the information in the education record is not inaccurate, misleading, or otherwise in violation of the privacy rights of the student, the University shall inform the student of the right to place a statement in the record commenting on the contested information in the record and stating why he or she disagrees with the decision of the University.

IV. Release of Records to Third Parties

A. The University will not disclose personally identifiable information from a student’s education records without the prior written consent of the student, except as authorized by FERPA. FERPA authorizes the University to disclose personally identifiable information from a student’s education records without the prior written consent of the student when the disclosure is:

1. To school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted as its agent to act or provide a service instead of using University employees or officials (such as an attorney, auditor, consultant, volunteer, or collection agent), the person is under the direct control of the University, and the person is subject to the same conditions governing the use and redisclosure of education records that apply to other school officials; a person serving on the Board of Trustees; a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in
2. Upon request, to officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled so long as the disclosure is for purposes related to the student’s enrollment or transfer (this includes sending updated or corrected information and sending disciplinary or health records). The student shall be provided with written notification of the disclosure unless the student initiated the disclosure. In addition, the University is not required to obtain the written consent of a student before it responds to the request of an institution to explain the meaning or validity of an education record sent to it in connection with a student’s new enrollment.

3. To authorized federal, state, or local government officials. Specific requests for access by government officials shall be brought to the attention of the Office of General Counsel as soon as possible after receipt of such request and prior to the release of records.

4. To comply with a judicial order or lawfully issued subpoena. Release shall be made only after a reasonable attempt is made to notify the student of such order or subpoena, unless applicable law or the order or subpoena by its terms prohibits contacting the student. The University may also refrain from notifying a student if it receives an ex parte order obtained by the United States Attorney General (or designee not lower than an Assistant Attorney General) concerning investigations or prosecutions of an offense listed in 18 U.S.C. § 2332b(g)(5)(B) or an act of domestic or international terrorism as defined in 18 U.S.C. § 2331. The student bears the responsibility for keeping an up-to-date address on file in the Records and Registration Office. The records custodian shall notify the Office of General Counsel upon the receipt of a judicial order or subpoena.

5. To a party who is identified as the provider or creator of an education record (this is not a disclosure under FERPA).

6. To an appropriate party in connection with an emergency if the University determines, based on the totality of the circumstances, that (i) there is an articulable and significant threat to the health or safety of the student or other individuals and (ii) the party’s knowledge of the information is necessary to protect the health or safety of the student or other individuals. Such health or safety emergencies shall be brought to the attention of the Office of the General Counsel. An appropriate party may be a parent of a student even if the student is not a dependent for income tax purposes.

7. To persons or organizations in connection with a student’s application for, or receipt of, financial aid, if the information is necessary for such purposes as to determine eligibility, the amount, conditions or enforce the terms and conditions of the aid. The student shall be provided with written notification of the disclosure.

8. To accrediting organizations in order to carry out their accrediting functions.

9. To a parent of a student who is a dependent for federal tax purposes, as defined by Section 152 of the Internal Revenue Code of 1954. However, FERPA does not require the University to disclose information to parents. The University presumes that students are independent and generally does not release information based on a student’s tax dependency. A student will be presumed to be a non-dependent.

10. To organizations conducting a study for, or on behalf of, the University for the purpose of developing, validating, or administering predictive tests, administering student aid programs, or improving instruction, if the study is conducted in a manner that does not permit personal identification of students by individuals other than representatives of the organization and the information is destroyed when no longer needed for the purposes for which the study was conducted.

11. Authorized by the student pursuant to a signed and dated written consent that specifies the records to be disclosed, states the purpose of the disclosure, and identifies the party or class of parties to whom the disclosure may be made. Regardless of whether the student is a dependent, a student may give a parent access to his or her educational records by submitting, by mail or personal delivery, a notarized form, which can be obtained in the Records and Registration Office.

12. To Veterans Administration officials pursuant to Title 38, section 3690(c), United States Code.

13. To the court, without a court order or subpoena, those records that are (i) necessary to defend the University when a student initiates legal action against the University or (2) relevant for the University to proceed with a legal action as a plaintiff or defendant.

14. To an alleged victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense (or to the alleged victim’s next-of-kin if the alleged victim dies as a result of the crime or offense), but only the final results of the disciplinary proceeding conducted by the University with respect to that alleged crime or offense, regardless of whether the University concluded a violation was committed. This disclosure is required by Tennessee law.
15. The disclosure of information concerning registered sex offenders, provided to the University under the Wetterling Act, including information made available under state sex offender registration and community notification programs.

16. To anyone the disclosure of the final results of a disciplinary proceeding conducted by the University with respect to a student who is an alleged perpetrator of a crime of violence or non-forcible sex offense, if the University has concluded the student committed a violation of the University’s rules or policies. The University may not disclose the name of any other student, including a victim or witness, without the prior written consent of the other student. The “final results” are limited to the name of the student being disciplined, a description of the violation committed, and any sanction imposed by the University. Final results of disciplinary proceedings reached prior to October 7, 1998 shall not be released.

17. The disclosure* to a parent of a student regarding the student’s violation of any Federal, State, or local law, or of any rule or policy of the institution, governing the use or possession of alcohol or a controlled substance if:

(i) the University determines that the student has committed a disciplinary violation with respect to that use or possession; and

(ii) the student is under the age of 21 at the time of the disclosure to the parent.

*This disclosure is required by Tennessee law.

18. The disclosure of information the University has designated as “directory information,” unless a student has signed and filed a valid Request to Withhold Directory Information. Directory information is information contained in a student’s education record that would not generally be considered harmful or an invasion of privacy if disclosed. The University has designated the following as directory information: a student’s name, address, telephone listing, UTC email address, major fields of study, college, classification, participation in officially recognized activities and sports, weight and height of athletic team members, dates of attendance, enrollment status (e.g., undergraduate or graduate; full-time or part-time), degrees and awards received, dates of degrees, and the most recent previous educational agency or institution attended by the student.

FERPA permits the University to disclose directory information without a student’s consent unless a student signs and files a Request to Withhold Directory Information with the Records Office. In order to restrict directory information from being published in the printed student directory, students must sign and file the Request to Withhold Directory Information by the date designated in the Registrar’s annual email to students regarding their FERPA rights. A student may not use the right to request that directory information be withheld to prevent disclosure of the student’s name, e-mail address, or other identifiers in a class in which the student is enrolled. The University must continue to honor a request to not release directory information after an individual no longer attends the University if the request was made while the individual was in attendance at the University and the request has not been rescinded.

Directory information does not include a student’s social security number or student id number. In addition, a student’s social security number, a student id number, or other non-directory information will not be used either alone or in combination with other data to identify a student when disclosing or confirming directory information, unless the student has provided written consent. Instead, other directory information will be used to identify a student. When a person submits a non-directory information (e.g., social security number) along with a request for directory information, the person will be informed that the University has not used the non-directory information to locate the student’s records and that the University’s response does not confirm the accuracy of the non-directory information supplied with the request for directory information.

C. The custodian of a student’s education records shall maintain a record of requests for access to and disclosures of information from a student’s education records as long as the education records are maintained. The record shall indicate the name of the party who obtained or requested access, what information, if any, was received, and the legitimate interest the party had in requesting or obtaining the information. The record shall be kept with the student’s records and shall be available only for inspection by the student and University personnel in charge of the particular records concerned.

Recordkeeping is not required if the request was from, or the disclosure was to:

1. the student;
2. a school official determined to have a legitimate educational interest;
3. a party with written consent from the student;
4. a party seeking directory information; or
5. a federal grand jury or law enforcement agency pursuant to a judicial order or subpoena that by its terms requires nondisclosure.

When the University discloses personally identifiable information from a student’s education record under the health or safety emergency exception, the University must include in the record of the disclosure:

1. the articulable and significant threat to the health or safety or a student or other individuals that formed the basis for the disclosure; and
2. the parties to whom the University disclosed the information.
D. Whenever records are released to any third party, a written statement shall accompany the records’ release stating that the release is conditional upon the third party not permitting any other party to have access to the records without the student’s written consent. This requirement does not apply to disclosures to parents of dependent students; disclosures made pursuant to court orders, lawfully issued subpoenas, or litigation; disclosures of directory information; disclosures made in connection with a disciplinary proceeding; or disclosures made to parents of a violation of law, rule or policy governing the use or possession of alcohol or a controlled substance, if the student is under 21 at the time of the disclosure; or a party who is identified as the provider or creator of an education record.

V. Destruction of Education Records

All or part of a student’s education records may at any time be removed from a file and destroyed by University personnel authorized to perform such act. However, once a student requests access to his or her records, such removal and destruction may not occur until access has been granted.

VI. Custodians of Education Records

The Registrar shall serve as custodian of all undergraduate student education records maintained by the Office of Records. The Director of Graduate School shall serve as custodian of graduate student education records. All other student education records shall be in the custody of Student Development.

VII. University Resources

Questions related to FERPA or the University’s policies concerning the privacy of students’ education records should be directed to the Records Office, 109 Race Hall, 615 McCallie Avenue, Chattanooga, TN 37403, (423) 425-4416. Additional information can be found on the website of the Records Office, www.utc.edu/Administration/Records.

VIII. Complaints

Complaints concerning alleged failures by the University to comply with the requirements of FERPA may be filed with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-5901.
Undergraduate Admissions
The Admissions Office staff oversee the undergraduate admission process. Send requests for information and application forms to:

Office of Undergraduate Admissions Dept. 5105
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, Tennessee 37403

The Admissions Office is located in room 203 Guerry Hall; the telephone number is (423) 425-4662.

Applicants may request admission for the fall or spring semester, or any summer session. Prospective students should submit the completed application and supporting credentials no later than four weeks before the beginning of the semester in which they intend to enroll. Students applying for the fall semester should submit all admission materials by June 1 for freshman students, and August 1 for transfers.

Applying for Admission
This section presents the requirements for admission, including special requirements for adult, early admission, and transfer student applicants, and other groups of prospective students.

Credentials for all Freshman Applicants
Applicants for freshman admission must submit the following:
1. Application for admission
2. Official high school transcript. Applicants may send this transcript any time after the completion of the junior year of high school, and must submit a final transcript showing all grades, type of diploma, and the date of graduation after graduation from high school. Applicants with a high school equivalency diploma must submit scores from the General Education Development Test (GED) as well as official transcripts of completed high school coursework.
3. ACT or SAT scores (for applicants under 21)
4. A $30 nonrefundable application fee is required of all candidates who have not previously attended another University of Tennessee campus or applied to The University of Chattanooga.

Required High School Courses
All applicants must have completed the following high school courses:

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Units Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. English..............................................</td>
<td>4</td>
</tr>
<tr>
<td>2. Algebra..............................................</td>
<td>2</td>
</tr>
<tr>
<td>3. Geometry............................................</td>
<td>1</td>
</tr>
<tr>
<td>4. Laboratory Science..................................</td>
<td>2</td>
</tr>
<tr>
<td>5. American History...................................</td>
<td>1</td>
</tr>
<tr>
<td>6. World History/World Geography/European History</td>
<td>1</td>
</tr>
<tr>
<td>7. A single Foreign Language........................</td>
<td>2</td>
</tr>
<tr>
<td>8. Visual/Performing Arts.........................</td>
<td>1</td>
</tr>
</tbody>
</table>

Total..........................................................14

The University may deny admission to applicants who have deficiencies in any of these units. Students admitted with deficiencies must complete the missing courses. These courses will not apply toward the student's college degree(s) and will not apply toward the minimum credit hours required for graduation.

In addition to the minimum high school unit requirements listed above, an applicant should plan a high school course of study that will prepare them for their specific area(s) of interest. In particular, the University encourages all applicants to complete four years of college preparatory mathematics. Prospective engineering majors should take three units of college preparatory mathematics. After admission, UTC freshmen take placement tests in reading, writing, and mathematics to determine whether they will need to enroll in developmental courses prior to college-level courses. Completing a strong college preparatory curriculum in high school will help students do well on these placement tests (The “Academic Regulations” chapter describes the placement exam requirements).

Measles Immunization Requirement
In an attempt to maintain a healthy campus environment, The University of Tennessee campuses require that all new entering students born after 1956 furnish documentation of having immunity to measles or immunization with a live measles vaccine after January 1, 1980, unless exempted because of pregnancy, allergy to a vaccine component, or other valid medical reasons. A verification of immunization, signed by a health care provider, must be returned to Health Services. An official copy of the “Permanent Tennessee Certificate of Immunization” (form PH-2414) or a comparable immunization form from another state is also acceptable. Evidence of the immunization is not required for admission but is required for course registration.
Regular Admission (by applicants under 21 years of age)
The University grants regular admission to graduates of approved high schools* who meet one of the following two descriptions:
1. A high school grade point average of at least 2.75 (on a 4.0 scale), a minimum score of 17 on the Enhanced ACT (830 SAT), and completion of all 14 high school units listed above.
2. A high school grade point average of at least 2.00 (on a 4.0 scale), a minimum score of 21 on the Enhanced ACT (990 SAT), and completion of all 14 high school units listed above.
*Approved high schools are those approved by the State Department of Education or by the regional accreditation association. In the case of graduates of high schools that have not been so approved or home schooled students, regular admission will be granted to applicants with a high school grade point average of at least 2.75 on a 4.0 scale, a score of 21 on the Enhanced ACT (980 SAT), and completion of all 14 high school units.

The University Honors Program
Each year the University Honors (UHON) Program admits 30 to 40 freshmen. This prestigious program offers to members an atmosphere that nurtures their intellects, sense of social responsibility, and drive to lead. The goal is to foster a community of scholars who enjoy each other's company, benefit from each other's work, and provide the University with new ideas and ways to excellence.

To achieve this goal, the Program provides Honors students with a specialized general education curriculum tailored to their talents and needs (See University Honors Program in Course Listing Section); opportunities for social, University, and community service; personal advisement; priority registration; an exclusive reading room and computer lab; and membership in a highly visible and respected group of students. Most Honors students receive a full four-year scholarship (see Financial Aid Chapter).

Applicants to the UHON Program should have a record of outstanding achievement and promise. Continuance is reviewed each semester and is contingent upon the student's academic performance. All UHON students are obligated to complete Departmental Honors. Interested high school seniors should submit a UHON application by December 15.

For more information and a current application write to:

University Honors Program Dept. 1101
University of Tennessee at Chattanooga
615 McCallie Ave.
Chattanooga, Tennessee 37403

The University Honors Program is located in room 202 Guerry Hall; the telephone number is (423) 425-4128; the web page is www.utc.edu/univhon.

Associate Honors Scholars
Current UTC students who were not initially admitted to the UHON Program and who have completed at least 24 hours of credit with a GPA of 3.5 may apply for membership as Associate Honors Scholar. Although ineligible for any University Honors Scholarships which are awarded to incoming freshmen only, Associates enjoy most of the benefits of the other UHON students, including admission to specialized UHON courses, early registration for classes, access to the UHON reading room and computer lab, and a stipend to spend on concert and theater tickets.

Interested students can obtain an application at the Honors Program Office, 202 Guerry Hall, or on line at www.utc.edu/UniversityHonors/associate.php.

Exceptions to Regular Admission Requirements
A limited number of students who do not meet the regular admission standards may be admitted to UTC by petition to the Admissions Office. Applicants will receive the official petition form from the Admissions Office after an initial application review has been completed. The deadlines for submission of these petitions will be August 1 for fall semester and December 1 for spring semester respectively.

Students admitted with high school unit deficiencies must fulfill these requirements by completing the necessary courses within their first 42 hours of enrollment. Credit earned in these courses does not apply toward any degree requirements, including the 120 credit hours required for graduation, the general education requirements, and major or elective requirements.

Students admitted with a high school deficiency in American history are required by Tennessee law to complete six semester hours of college-level American history (Tennessee Code Annotated Section 549-3253).

If a student must complete developmental courses, the overall cumulative GPA will determine the student's eligibility to continue coursework. The overall cumulative GPA includes all developmental and all for-credit courses used for continuation purposes for admitted students. The institutional cumulative GPA determines the continuation standards of all other students. The institutional cumulative GPA includes all for-credit courses only. Additionally, freshmen admitted by petition or exception may be subject to one or more of the following conditions:
1. Reduced course credit load
2. Specific course requirements
3. Specific academic advisor
4. Specific program of developmental studies
5. Enrollment in summer programs designed to improve academic skills.
Adult Freshman Admission
(applicants over 21 years of age)
The University of Tennessee at Chattanooga encourages applications from adults who are 21 years of age or older. Adult freshmen applicants must submit official high school transcripts or equivalent, including type of diploma and date of graduation. Adult applicants do not need to submit ACT or SAT scores. The University may require some applicants to take UTC placement examinations to demonstrate academic preparedness. An applicant with a high school equivalency diploma must have a score of at least 45 on the General Education Development (GED) test.

The Director of the Admission Office, or a designee, reviews applications for Adult Freshman admission on a case-by-case basis using all available evidence, including the applicant’s post-high school experiences. The University may require that students admitted to this program comply with one or more of the following conditions:
1. Reduced course credit load
2. Specific course requirements
3. Specific academic advisor
4. Specific program of developmental studies.

Admission with GED: High School Equivalency Diploma
The University will accept a high school equivalency diploma if the applicant scored 45 or higher on the General Education Development test (GED). Applicants who are 21 or older should refer to the section entitled “Adult Freshman Admission.” Applicants younger than 21 should refer to the section entitled “Regular Admission.”

The Director of the Admission Office, or a designee, reviews on a case-by-case basis applicants with extenuating circumstances who fail to meet admission requirements. Applicants who do not meet the admission requirements should present in writing the extenuating and other circumstances that produced the deficiencies.

Early Admission
The University has an early admission program for exceptionally gifted high school students. This program is available only to applicants who intend to complete their high school requirements with college-level courses and will not enroll in high school courses while participating in the program. In order to be eligible for the Early Admission Program, applicants should have at least a 3.5 GPA (on a 4.0 scale) and score at or above the 95th percentile of university norms on the ACT or the SAT examination at the end of the junior year in high school. Additionally, applicants must have the consent of their parents and the approval of their principal or guidance counselor. Applicants who meet these criteria will be admitted if the Director of Admissions determines that participation in early admission is in the applicant’s best interest. In most cases, a personal interview with the applicant is required.

Joint High School Enrollment
The Joint High School Enrollment Program allows outstanding high school students to enroll in college courses while they enroll in high school courses. The admission to the Joint High School Enrollment Program requires the following:
1. Concurrent enrollment in high school,
2. A grade point average of at least a 3.0 (B on a 4.0 scale),
3. Recommendation of the high school principal or guidance counselor, and
4. Permission of the UTC instructor and/or department head.

Students may earn up to 24 semester hours in the program and may take a maximum of 12 hours during the summer and no more than two courses during the fall and spring semester. Students may apply the credits toward a degree at UTC or transfer them to another college or university.

Undergraduate Non-Degree-Seeking Status
Applicants who wish to take courses for personal fulfillment or career enhancement can apply as non-degree-seeking applicants. To qualify for this status, applicants must be at least 21 years of age and must be a high school graduate or have a GED. Non-degree-seeking students can earn no more than 60 semester hours. Students can apply these hours toward an undergraduate degree after admission as a degree-seeking student. Admission as a non-degree-seeking student does not guarantee admission as a degree-seeking student. Non-degree-seeking students who wish to enroll in upper level courses requiring prerequisites must provide the appropriate department head with an official transcript to verify completion of the prerequisite courses.

Former UTC students, international students, and applicants denied admission to UTC may not enroll as non-degree-seeking students. Non-degree-seeking students are not eligible to receive academic advising or financial aid. Non-degree-seeking students must maintain a 2.0 institutional cumulative grade point average in order to continue enrollment at UTC.

Special Admission
Adult Degree Seeking Students
Applicants 25 or older who wish to receive a Bachelor’s degree must apply through Adult Services.

The Adult Services Center (Margaret Daniel, Director) is located in Room 361 of the University Center (Hours of operation: 11 a.m. - 7 p.m., Monday through Thursday; 11 a.m. - 5 p.m., Friday; and 10 a.m. - noon, Saturday). The Center provides individualized advisement, registration, fee collection, and other University services for non-traditional students. Telephone: (423) 425-4485

Audit Student Status
Adults who wish to attend undergraduate classes without earning credit or receiving grades may register as auditors only if the space is available in the class desired and if the instructor approves the registration. Any adult student entering under audit classification who subsequently wishes to take courses for credit must meet all requirements for admission to the University.
Those under 21 may have this privilege only if they have fulfilled the admission requirements of the University. Auditors are under no obligation of regular attendance, preparation, recitation, or examination. They receive no letter grades and no credit. The degree of their participation in class discussion, laboratory, or field work shall be determined by the instructor of the class. The tuition and fee charge is the same for audit registration as for credit registration.

Special Audit and Special Fee Students
(Tennessee Residents Only)
Tennessee residents who are at least 60 years of age may audit classes on a space available basis without paying a fee. Similar arrangements are available for Tennessee residents who are totally disabled.

Tennessee residents who are 65 years of age or older and persons totally disabled who meet admission requirements may enroll for credit for a fee of $7.50 per semester hour to a maximum of $75 per semester.

Persons wishing to participate in any of the above programs should call the Adult Services Center (423) 425-4485.

Transient Students
Students who are enrolled in good standing at another college or university and do not wish to transfer to UTC may enroll as transient students. Enrollment under this classification is usually for one semester, and students usually enroll in courses that will transfer to another institution. An official letter indicating that the student is in "good standing" (i.e., eligible to return) must be sent to the Office of Undergraduate Admissions from either the registrar or academic dean of the student's present institution. A transient student cannot be on any type of academic or disciplinary restriction, warning or action such as probation, suspension or dismissal. If a transient student wishes to continue enrollment past the initial semester, an additional letter of good standing may be required.

Transient students who wish to enroll in upper level courses requiring prerequisites must provide the appropriate department head with an official transcript to verify completion of the prerequisite courses.

Transient students are not eligible for advisement and financial aid.

Transfer Students
Admission Requirements
Applicants for admission as degree seeking students who have been registered at another college or university are classified as transfer students. They must submit to the Undergraduate Admission Office an official high school transcript showing graduation and type of diploma and complete official transcripts from each previously-attended college or university. Transfer students applying for the fall semester must have all supporting credentials listed above on file in the Admission Office by August 1. Transfer students applying for the spring semester must do so by December 1. Transfer students applying for any summer semester must apply by April 15.

For admission as a transfer student, an applicant must have pursued courses appropriate to the curriculum at The University of Tennessee at Chattanooga, must be classified as in good standing and eligible to return to the last institution, and must meet The University of Tennessee at Chattanooga's continuation standards. Grades for all previous coursework determine the continuation standards. An applicant who graduated from high school in 1989 or after and are transferring fewer than 60 hours of semester credit must also meet the minimum high school unit requirements and is required to take UTC's placement exams unless an exemption is granted. An applicant who transfers fewer than 12 hours of college level non-developmental coursework must meet the minimum requirements for new freshmen. Refer to the “Required High School Courses” section in this chapter for high school unit and placement exam requirements.

An applicant whose records do not meet the admission standards will be denied admission unless, in the opinion of the Vice Chancellor for Student Development, the applicant can be admitted and classified as on scholastic probation. If admitted on probation, the student will be required to remove high school unit deficiencies within the first 30 hours of enrollment at UTC. Credits earned in such courses do not apply toward any degree requirements, including general education, major or elective requirements, or the 120-hour graduation requirement.

- Senior level (e.g., 300-400 level) credit is not awarded for courses completed at a two-year institution.
- Transfer students from senior institutions must complete at least 25% of the minimum semester hours required for the degree under the direction of UTC faculty; the last 24 semester hours must be completed at UTC.
- Transfer students from two-year institutions must complete a minimum of 60 semester hours at a senior institution.
- A student who earns credit at a two-year college during his last 24 hours at UTC may choose not to apply the credit toward graduation.

Credit from Non-Regionally Accredited Colleges
Applicants wishing to transfer to The University of Tennessee at Chattanooga from colleges and universities that are not regionally accredited must meet UTC’s admission requirements. Applicants do not receive credit for courses completed at regionally unaccredited colleges or universities.

Applicants who fail to declare previous college attendance and to submit transcripts of such records will be subject to dismissal from the University.

Transfer Coursework
Students who transfer to UTC will receive credit for coursework attempted at other regionally accredited institutions. The transfer process ensures that students receive credit for college-level work that they have already completed. Upon admission, students will receive a course-by-course evaluation of all previously completed course work. This evaluation will reflect current UTC policy regarding repeated courses, replacement courses, grading policy, etc. The University maintains articulation agreements with Tennessee community colleges that allow students who have received the Associate’s degree to complete a baccalaureate degree.
degree at UTC. This section describes the procedures the University uses to allow students to transfer the coursework they attempted at other regionally accredited institutions to UTC. Applicants who fail to declare previous college attendance and to submit transcripts of such records will be subject to dismissal from the University.

Transfer Equivalency
When transferring to this University, students must submit official transcripts of coursework attempted at all the regionally accredited institutions they attended. The University's staff evaluates each course to determine its equivalency to UTC courses. Courses without an exact UTC equivalent will transfer in as an elective course related to the specific department. If UTC has no equivalent department, the course will transfer in as elective. Transfer students will not receive credit for courses that are not at the college level or are not appropriate to the curriculum at UTC, such as technical or vocational coursework.

The grades for transferred courses are included in the transfer grade point average as well as the cumulative grade point average according to UTC's grading policies and scale. Students who transfer a course grade that is lower than the UTC required grade must repeat the course.

Students who transfer community college coursework that is equivalent to 300- or 400-level UTC equivalent will receive elective credit for the course. These courses will not fulfill the University's requirement for upper division coursework.

Students who believe that their transfer coursework was misclassified should present their concerns in writing to the Registrar as soon as possible. Staff will review the coursework and issue a response to the student.

Transfer Articulation
The purpose of a Transfer Articulation is to provide students with a list of courses to complete at a Tennessee college and at UTC that will lead to a Bachelor's degree in a specific major.

Transfer articulation agreements list the courses that students must take to earn an Associate degree in a major as well as the coursework in the same major required for the Bachelor's degree. Transfer students who change their majors once enrolled at UTC will receive full credit for their college-level transfer work but will not be considered to be within the articulation program.

Students completing an articulation program must also fulfill all UTC academic regulations listed in the Degree Requirements section of the Undergraduate Catalog.

Students transferring to UTC under an articulation agreement must meet the following criteria:

- Meet UTC admission requirements.
- Have a 2.0 institutional cumulative GPA with no transferred grade below a “C.”
- Have earned an Associate of Arts (AA) or Associate of Science (AS) degree from a Tennessee two year public institution and transfer major to major.
- Be currently enrolled in coursework at UTC.
- Submit Intent to Articulate form to the Records Office to request a review of the academic record for articulation.

Articulation agreements are valid only for the major under which the AA or AS degree was awarded and must be completed within 10 years of admission to UTC.

Applicants with the Associate of Applied Science (AAS) degree may not participate in the articulation program. Individual courses earned under the AAS degree may transfer as electives and count toward completion of a degree.

**International Students**

International students wishing to apply for admission as an undergraduate student must provide the following:

1. A completed application for undergraduate admission accompanied by the $30 application fee
2. Authenticated copies of the applicant's academic records (These records should describe the courses of instruction in terms of years spent in school and types of subject matter covered with grades earned in each subject. These documents must be written in English.)
3. A minimum score of 500 on the Test of English as a Foreign Language for applicants whose native language is not English (The Educational Testing Service provides information about this test at www.ETS.org.)
4. Evidence of a TB skin test upon arrival in the United States and of an MMR vaccination before enrolling in courses
5. Evidence dated no earlier than six months prior to registration that the applicant has adequate financial resources to meet the expenses of attending the University and that the resources will be available to the applicant in the United States prior to the date of his or her registration at the University
6. An estimate of expense form signed by the student showing he/she is aware of the costs of attending the University
7. Clear Copy of current passport

Transfer students must supply a letter of good standing from their Foreign Student Adviser and must meet the requirements for admission to the University as a transfer student and an international student. These requirements are stated in the section on Transfer Students.

All international students are required to enroll in the insurance program for UT students.

All application materials must be submitted and processed by June 30 for the fall semester and by October 31 for the spring semester. Send all admission materials to:

**International Student Services Office**

The University of Tennessee at Chattanooga
Dept. 4755
615 McCallie Ave.
Chattanooga, TN 37403
United States of America
Academic Forgiveness

The University maintains an academic forgiveness policy for courses taken at any institution, including UTC. The policy allows for the removal of all previous coursework from the calculation of the student's grade point averages and from consideration for fulfillment of all University requirements. Academic forgiveness does not remove the record of these courses from the student's transcript. Upon issuance of academic forgiveness, the student must retake, as necessary, and complete all coursework specified for an academic degree and other courses the student may be required to complete (e.g., deficiency courses).

The Policy
1. A student must be admitted to UTC and registered for classes at UTC.
2. Academic forgiveness applies to all undergraduate courses taken anywhere by the student eight years prior to the date of application for academic forgiveness.
   • The eight years extend from the semester preceding the date that the Records Office receives the application for academic forgiveness.
   • For the purposes of this policy, the summer represents one semester.
   • All work attempted more than eight calendar years before the date of application will be removed from consideration for credit for fulfillment of general education or major requirements or for grade point average or for any other purpose or requirement.
3. Students can receive academic forgiveness only once.
4. When granted, the academic forgiveness is irrevocable.

The Process
1. Submit the application for academic forgiveness to the Records Office, 109 Race Hall. The application form is available in the Records Office and at www.utc.edu/Administration/Records/forms.php. Submission of the form indicates that the student wishes to forfeit all previously-completed coursework and understands the consequences of this action.
2. The staff will verify the application and the eligibility of the student's coursework for this policy. The staff will list for the student the course credits forfeited in compliance with the policy.
3. Sign the final agreement to forfeit eligible courses and return the form to the Records Office for processing.

Readmission

Former students in good standing who have not enrolled in UTC courses for one or more semesters (excluding the summer) must apply for readmission. If they have attended another college or university during their absence, they must also meet the requirements for admission to the University as transfer students, with the exception that no application fee is required for readmission.

Students who have been suspended or dismissed from the University should review the section on Retention and Continuation Standards Appeals section for information on readmission.

Students applying for readmission who have not attended any other institution in their absence must submit the completed application by August 15 for enrollment fall semester; December 31 for enrollment spring semester; and April 15, June 1 or July 1 for each respective summer term. Students who have attended another institution must meet the transfer student deadline and submit a completed application by August 1 for fall semester, December 1 for spring semester, and April 15 for all summer terms.

Post-baccalaureate Students

Second Undergraduate Degree Students
Students seeking a second Bachelor's degree must apply for readmission through the Adult Services Center. A student may receive a second Bachelor's degree if the student fulfills requirements for each degree.

Students may earn a second Bachelor's degree whenever they simultaneously complete the requirements for more than one degree (e.g., B.A. and B.S.) or, after receiving one degree, return to the university to complete another degree.

A student may receive a second Bachelor's degree if:

1. The student fulfills all requirements for both degrees.
2. The curriculum for the second degree includes at least 25 percent of the minimum hours required for the degree not applied to the first degree. These hours must consist of courses taken at UTC. A grade point average of at least 2.0 is required in these courses.
3. The additional hours beyond the first degree shall include a minimum of 12 hours taken at UTC in the major department of the second Bachelor's degree. A grade point average of at least 2.0 is required in these courses.

Post-baccalaureate students with Bachelor's degrees from regionally accredited colleges or universities who are seeking undergraduate UTC degrees are not subject to UTC general education requirements. However, they are subject to major requirements, including general education courses specifically required for the major. Post-baccalaureate students who are not seeking a UTC degree also do not need to meet UTC general education requirements.

Non-degree Post-baccalaureate Students
Post-baccalaureate students who are not seeking a second undergraduate degree should apply through UTC's Graduate School.

Non-Traditional Credit

Limitations on Non-Traditional Credit
Students may earn no more than 60 semester hours of non-traditional credit. Moreover, no student may earn more than 24 semester hours of non-traditional credit for each of the categories listed below.

Normally, non-traditional credit will not apply toward the last 24 hours of residency. However, students who have completed their 24 hours of traditional coursework at UTC and earn IEP credit in their final semester need not petition for an exception to the final 24 hour residency requirement.
Except for credit by special examination, credit earned by these
non-traditional means is elective. Exceptions to this principle
occur only with the written approval of the respective depart-
ments, indicating specifically the amount and type of credit to be
applied to a major degree program.

Advanced Placement
Students admitted to the University may obtain advanced place-
ment by any of several examinations. The University participates
in the advanced placement program of the College Entrance
Examination Board (CEEB). Applicants who have taken the
advanced placement examinations may submit the results to the
Undergraduate Admission Office for consideration. The University
may grant credit and advanced placement in a subject
for students whose test scores are three or higher. Some depart-
ments require a minimum score of four.

Credit earned through advanced placement will be entered on
the student's academic record as satisfactory credit but will not be
computed in the grade point average. Students may earn no more
than 24 semester hours of advanced placement credit.

College Level Examination Program (CLEP)
UTC recognizes and accepts credit derived from several of the
subject area examinations of the College Level Examination
Program or CLEP. The CLEP subject examinations measure
achievement in a number of specific undergraduate courses. The
Undergraduate Admission Office must receive the report of test
scores directly from CLEP. Individual academic departments set
standards for the acceptance of CLEP credits. Therefore, the
required percentile grade for credit at UTC varies. Some depart-
ments accept no credit via CLEP.

Students may earn up to 15 elective hours for successfully pass-
ing CLEP general examinations. They may earn three hours of
elective credit by successfully passing the CLEP general examina-
tion in English composition with a score of 530-610. Students
may earn three hours of elective credit per exam by passing CLEP
general examinations in mathematics, humanities, natural sci-
ences, social sciences, and history with a score of 421-500. These
credits, however, will not satisfy UTC general education require-
ments.

Credit earned will be entered on the student's academic record
but will not be computed in the grade point average.

Correspondence and Extension Credit
Up to one-fourth of the hours (excluding physical education)
required for an undergraduate degree may be earned by corre-
spondence or by a combination of correspondence and extension
courses. The same limitations apply to hours in the major. All
such courses must meet degree requirements at The University of
Tennessee at Chattanooga.

Students may not use correspondence and/or extension cours-
es within the last 24 hours of degree credit work unless the
Petitions Committee grants advanced approval or the
Department Head of the student's major department grants prior
approval for the student to use one such course to be completed
at another University of Tennessee campus.

The University of Tennessee correspondence program provides
over 100 college credit courses that may satisfy degree require-
ments. Students may learn more about these course options at
www.anywhere.tennessee.edu.

Credit by Special Examination (Undergraduate)
Any student admitted to the University is eligible to receive cred-
it by special examination. Students may earn credit by special
examination for courses offered in the catalog with the exception
of the following:

1. courses described as directed research, tutorial, or directed
   independent study;
2. any course from which the student has been exempted by
   placement examination or which the student has presented
   for admission purposes;
3. any course in any education teaching block; or
4. courses in which the student received a grade.

Students must pay the published fee for each undergraduate
semester hour of credit. Students seeking credit by special exam-
ination should use forms provided by the Records Office to
request approval from the department under which the course is
described in the Catalog. The department will grant or deny the
request pursuant to the standards stated on the request form; the
department shall deny the request if it determines that the stu-
dent would realize substantial benefits from participating in the
activities of the course.

The departmental committee on special examinations in the
department in which credit is to be awarded shall grant the
request for credit by special examination when it is satisfied that,
in addition to meeting the requirements for special examinations
stated in the catalog, the student can demonstrate competence
gained through study and/or experience primarily independent of
University class activities. Thus, the course material must be such
that the student has achieved the objectives of the course with-
out class attendance.

The academic department will determine the method for
designing, administering, and evaluating the special examination.
In all cases, the examination must equal the scope and difficulty
of a comprehensive final examination in that course. No student
may repeat a special examination in a given course within one
year.

Students will receive credit, recorded as S (Satisfactory) on the
academic record, upon demonstrating the development of the
abilities and attitudes of students who have taken the course and
upon passing the examination with a minimum equivalent grade
of C. Students earning less than a C grade equivalent receive NC
(No Credit) on the academic record. Neither S nor NC grades
will be used in computing the grade point average.

Military Service Credit
The University may grant credit for military science to students
with six or more months of honorable active service in the armed
services of the United States or in a service academy. Students
may receive up to 30 semester hours of elective credit, including
basic military service, from the Community College of the Air
Force. University policy permits and encourages granting credit
for appropriate educational experience in the armed services in
according with their evaluation in the American Council on
Education's 1986 Guide to the Evaluation of Education
Experiences in the Armed Services or by the Commission on the
Accreditation of Service Experiences evaluation service.
Veterans requesting military service credit should submit a copy
of their DD Form 214 to the Records Office for evaluation. The
University of Tennessee at Chattanooga is a member of Service
Members Opportunity Colleges.

Credit for Work Experience
Adult students who have not earned a degree and wish to enter
or return to the University after working for several years may be
eligible to receive credit for their professional work experience,
in-service training, and completion of certified professional pro-
grams. UTC's Credit for Work Experience program awards elec-
tive credit for those professional and in-service training experi-
ences that have University equivalencies. Information concern-
ing Credit for Work Experience is available in the Office of
Cooperative Education and International Programs (423) 425-
4735. Students pay a portfolio/registration fee of $50.00 and an
additional fee per credit hour, based on current University
charges for IEP credit hours awarded.

Normally, non-traditional credit will not apply toward the last
24 hours of residency. However, students who have completed
their last 24 hours of traditional coursework at UTC and earn IEP
credit in their final semester need not petition for an exception to
the final 24-hour residency requirement.

Petitions and Appeals
This section presents the appeal processes for matters related to
admission, readmission, and residency. Applicants should note
that all petitions of appeal must be made in writing and that
many of the petitions must be submitted before specific deadlines.
In each case, the applicant must first submit a petition to the
appropriate committee or office. Applicants who receive a nega-
tive decision may then appeal to the Chancellor for special con-
sideration.

Admission and Readmission Decisions
Applicants who are denied admission or readmission may peti-
tion the Admission Committee. A petition form is automatically
mailed to applicants for whom admission has been denied. This
form must be completed and submitted to the Office of
Undergraduate Admissions by the appropriate admission applica-
tion deadline date: August 1 for the fall semester, December 1 for
the spring semester, and April 15 for all summer sessions. Applica-
tants are not permitted to attend class during the
Admission Committee's review of the petition.

Applicants may appeal to the Chancellor to overturn the deci-
sion of the Admission Committee by following the procedures
described in the Appealing to the Chancellor section below.

Transfer Course Classification
Students who believe that their transfer coursework was misclas-
sified should present their concerns in writing to the Records
Office as soon as possible. Staff will review the coursework and
issue a response to the student.

Residency Classification
Undergraduate students classified as non-residents may appeal
this classification by submitting a petition and supporting evi-
dence to the Admission Office on or before the fifth day of class-
esc. Those appealing for a five-week summer term have until the
third day of classes. Those deadlines also apply to students seek-
ing to pay in-state fees due to their full-time employment in the
State of Tennessee. Decisions on appeals made before the dead-
line will be effective for that semester. Petitions received after the
deadline, if granted, will be effective the following semester.

The Director of Admissions serves as the primary classification
officer for undergraduate students enrolled at The University of
Tennessee at Chattanooga. Residence classification appeals
should be made by completing the petition form provided by the
Admission Office. Appeals should include appropriate evidence
to support the student's establishment of domicile in the State of
Tennessee. Evidence of residence includes rental agreements,
property deeds, voter registration, and other instruments that
verify that the student's permanent residence is in Tennessee.

The student may appeal the decision of the Director of
Admissions by submitting a formal request to the chair of the
Residency Appeals Committee. The chair of the committee will
schedule a hearing to review the student's request. The student
may be present at the committee's hearing and may bring to the
hearing any materials or other individuals (including legal coun-
sel) that he or she believes will support the appeal.

The student may appeal in writing the committee's decision to
the Chancellor of UTC. The student has the right to appeal in
writing the Chancellor's decision to the President of The
University of Tennessee. The President of The University of
Tennessee makes the final decision on all residency appeals.

Appeals to the Chancellor
Applicants and students who are not satisfied with the result of a
petition review may submit an appeal to the Chancellor request-
ing specific action. The appeal must be a written letter that can
be mailed or hand-delivered to:

Dr. Roger Brown, Chancellor
Office of the Chancellor Dept. 5605
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, TN 37403

The letter should provide:
• a clear rationale for why the Chancellor should overturn the
decision, waive the regulations of the University, or both;
• additional information that was not presented with the origi-
 nal petition or a review of procedural errors made in the
 review of the petition;
• a list of actions the individual requests;
• a list of courses in which the individual intends to enroll for
 the forthcoming semester (for appeals to be admitted or
 readmitted);
• current mailing address;
• daytime telephone number where individual may be
 reached; and
• UTC ID.
Academic Advising at UTC

Academic advising is an important part of a student’s education. The advising process helps students choose the proper sequence of courses to meet their academic needs and interests and to ensure a timely graduation. Given the importance of course selection, the University requires all students to work with an academic advisor before registering for classes each semester. Students should always consult their advisors when creating or revising their course schedules.

This chapter reviews the advising and registration processes. More specifically, this chapter reviews the orientation program in which all undergraduate students participate when they start their education at UTC and the advisement and registration processes that they will follow for each semester they are enrolled at UTC.

Important Advising Resources

Advisors: Academic advisors are members of the faculty teaching in the student's major. Some colleges and programs use professional staff to advise students. Students can find the name of their advisor on the RAP sheet or in their MocsNet account at www.utc.edu. Students may also contact the Advisement Office to have an advisor assigned if the RAP sheet does not list an advisor. Students who have declared majors are assigned advisors within the academic departments. Students who have not declared a major will be advised by the Advisement Office.

Advisement: Before a student may enroll in courses for the semester, he or she must meet with the advisor. The advisor will help the student select courses that meet the student's needs and interests. The advisor can also help the student with other questions about academic matters.

Advisement Code: At the end of the advisement session, the advisor will give the student an advisement code. The student must use this code to register for classes online. The advisement code changes each fall and spring semester. Either the fall or the spring advisement code will work for the summer semester registration.

Catalog: The Undergraduate Catalog lists the requirements for specific academic degrees, provides course descriptions and pre- or corequisites for all courses, and lists all degree and University graduation requirements. Each departmental section lists the requirements for the major, minor, and other academic programs that the department provides. Some courses require students to meet certain criteria, known as corequisites and prerequisites, before enrolling in the course. Each course description in this catalog lists the course requirements. Students should review these course descriptions to ensure they have the necessary requirements and permission to enroll in the course.

Check Sheets: Official program check sheets that list all requirements for the degree are listed on the Records Office website at www.utc.edu/Administration/Records/checksheets.php. These program checksheets are available by catalog year, major, and concentration beginning with the 2004 catalog year.

RAP Sheet: The Report of Academic Progress, or RAP sheet, indicates a student's major, catalog year, advisor, remaining requirements, placement scores, completed courses, attempted and earned hours, and grade point average. This information will guide the student and advisor in selecting appropriate courses. Students may review and print the RAP sheet online through the MocsNet account by clicking on the "Student Information" link.

The RAP sheet is an advisement tool and should be used in conjunction with the requirements listed in the student's appropriate catalog year. The RAP sheet is only an advisement tool and not an accurate reflection of all graduation requirements.

Registration: Registration is the process where the student enrolls in courses. In most cases, students may register online using a computer. The student's advisor will help explain these steps.
Schedule of Classes: Several weeks before the registration process begins, the Records Office posts the class schedule at www.utc.edu/Public/ClassFind. This webpage allows students to review all the available courses for the upcoming semester. For each course, the webpage lists the course name and number and the number of each section of the course. The webpage also lists the name of the instructor, the days and times that the course meets, the maximum enrollment, any pre- or corequisites for the course, and the number of students currently enrolled in each section of the course. Students should consult the Schedule of Classes to prepare a preliminary schedule before meeting with the advisor.

The Advisement Office: Located in room 361 of the University Center, the staff of the Advisement Office help students in their academic growth and adjustment to university life. The staff provide academic advising and registration services for students who have not declared a major. In addition to course selection and registration, the staff provide students with information regarding student support services.

The Records Office: The Records Office, located in 109 Race Hall, maintains all student academic records, coordinates course scheduling and registration processes, certifies NCAA continuing academic eligibility, certifies veterans, and verifies students' eligibility for graduation.

New Student Orientation and Registration
Orientation
The Orientation Office in coordination with the Admissions Office, the Advisement Office, and the Student Development Office provides the new student orientation programs for freshmen and transfer students. These programs introduce students to the campus and University life.

Each orientation session includes a tour of the campus, an explanation of its facilities and academic programs, small group discussions with faculty and students, placement exams, advising and registration, and the opportunity to become acquainted with fellow students.

The University also hosts an optional Parent Orientation. The Parent Orientation occurs at the same time as the student orientation and helps parents learn about campus services, financial aid, and other topics.

Participation in an orientation session is mandatory for all new students. The dates for upcoming sessions are found on the Orientation web pages (see below). Orientation information is sent to all accepted students. Information regarding orientation registration, fees, and other requirements is included in the packet. Students should carefully read this information prior to attending an orientation session. Students register for orientation sessions online. Orientation availability is limited, and students may register on a first come first serve basis. Students are encouraged to register for orientation early. Once registered for orientation, students receive a confirmation brochure with a detailed agenda.

Prior to attending an orientation session, the student must have completed the admission process. Students registering for the Early Bird Program may complete their admission immediately following high school graduation. A final high school transcript, college transcripts for joint-enrollment credit, and Advanced Placement scores must be sent to the Admissions Office. The student must return the completed medical history form to Student Development prior to course registration. Other orientation information (e.g., housing, meals, contact information, etc.) can be found on the freshman and transfer student orientation web pages via the Admissions Office: www.utc.edu/Administration/Admissions/orientation. For additional information, contact the Orientation Office at (423) 425-5220.

Placement Exams
The University asks most entering freshmen to complete placement exams prior to enrolling in certain courses. Students take these exams during orientation to establish their proficiency in mathematics, writing, and reading. Additionally, students should contact the Foreign Languages Department for appropriate testing times and dates for foreign language placement.

English Placement Test
Students with an ACT English subscore of 18 or less (SAT Verbal of 459 or less) must take the English placement exam. Students with an ACT English subscore of 28 or greater (SAT Verbal of 630 or greater) may enroll in English 121 or elect to take the placement test to place in a higher-level composition course. Students who have transferred the equivalent of English 105, 106, 121, or 122 do not need to take the English placement exam.

<table>
<thead>
<tr>
<th>ACT English Subscore</th>
<th>SAT English Verbal Score</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 or less</td>
<td>459 or less</td>
<td>Must take English Placement test. Placement score determines English requirements.</td>
</tr>
<tr>
<td>19 or higher</td>
<td>460 or higher</td>
<td>Students are not required to take the placement test and are automatically placed into ENGL 121.</td>
</tr>
<tr>
<td>28 or higher</td>
<td>630 or higher</td>
<td>Students may opt to take the English placement test to determine if placement in ENGL 122 is appropriate. English Department personnel will be responsible for updating placement information for students who are placed into 122.</td>
</tr>
</tbody>
</table>

Note: Students who transfer the equivalent of ENGL 105, 106, 121 or 122 do not need to take the English placement test, but will be expected to enroll in the next sequential English course until composition requirements are completed.
Mathematics Placement Test and Placement System
Who Must Take the UTC Mathematics Placement Test
Students with an ACT Mathematics subscore of 23 or less (SAT Mathematics of 550 or less) must take the UTC Mathematics Placement Test. Students who have transferred the equivalent of Math 105, 106, 131, 136, 144, 145, or 151 with a grade of C or above do not need to take the UTC Mathematics Placement Test.

Students with an ACT Mathematics subscore of 24 or greater (SAT Mathematics of 560 or greater) may elect to take the UTC Mathematics Placement Test in order to place into a higher level mathematics course.

Students may take the UTC Mathematics Placement test only once.

How to Determine Appropriate Mathematics Courses
Students may use the higher of either their UTC Mathematics Placement Test Level or ACT Mathematics subscore to determine their eligibility for a mathematics course. The following table should be used in conjunction with the mathematics requirements for a specific major and with prerequisite course requirements to determine a student’s first mathematics course.

For sequential courses, including Math 105-106-131-136, Math 105-106-144-145-151, and Math 105-106-215-216, students may, under unusual circumstances, start with a lower level course than the course listed in the following table. In no case may a student start with a higher level course.

The Mathematics Department strongly encourages students to enroll in a mathematics course during their first year at UTC. Success in mathematics requires that students remember specific skills learned in previous mathematics courses.

<table>
<thead>
<tr>
<th>Math Placement Test Levels</th>
<th>ACT Math Subscore</th>
<th>Math Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>less than 19</td>
<td>Math 105: Elementary Algebra</td>
</tr>
<tr>
<td>15</td>
<td>19 - 21</td>
<td>Math 106: Intermediate Algebra</td>
</tr>
<tr>
<td>20</td>
<td>22 - 36</td>
<td>Math 123: Mathematics in Our Modern World</td>
</tr>
<tr>
<td>20</td>
<td>22 - 36</td>
<td>Math 210: Introductory Statistics</td>
</tr>
<tr>
<td>20</td>
<td>24 - 25</td>
<td>Math 131: College Algebra</td>
</tr>
<tr>
<td>20</td>
<td>24 - 25</td>
<td>Math 215: Mathematics for Elementary and Middle School Teachers I</td>
</tr>
<tr>
<td>20</td>
<td>24 - 25</td>
<td>Math 144: Precalculus I</td>
</tr>
<tr>
<td>30</td>
<td>26 - 36</td>
<td>Math 136: Calculus for Management, Life, and Social Sciences</td>
</tr>
<tr>
<td>30</td>
<td>26 - 36</td>
<td>Math 145: Precalculus II</td>
</tr>
<tr>
<td>30</td>
<td>26 - 36</td>
<td>Math 216: Mathematics for Elementary and Middle School Teachers II</td>
</tr>
<tr>
<td>40</td>
<td>28 - 36</td>
<td>Math 151: Calculus I</td>
</tr>
</tbody>
</table>

Notes:
1. Math 105 and 106 are developmental courses that do not count toward degree requirements.
2. Students with an ACT Subscore of 22 or 23 will be required to take Math 106 (a developmental course) if their major requires a mathematics course other than Math 123.
3. Math 123, 131, 136, 144, 145, and 151 satisfy the General Education Mathematics requirement. These courses also fulfill mathematics requirements for some majors.
4. Math 210 satisfies the General Education Statistics requirement; it does not satisfy the General Education Mathematics requirement. (Certain majors may require a different statistics course for the General Education Statistics requirement.)
5. To be eligible for Math 151, students must have the equivalent of at least a semester of high school trigonometry.

Students placed in Math 106, Intermediate Algebra, may elect to participate in Step Ahead, a short course to prepare for College Algebra. For more information, visit www.utc.edu/Academic/DevelopmentalMath.

Reading
Students with an Enhanced ACT composite score of 18 or better (SAT total of 840 or above) are exempt from the reading course. Students with an Enhanced ACT composite score of 17 or lower must enroll in Education 105.

Freshman students without the Enhanced ACT or the SAT must take the reading placement exam. Students with a raw score of 49 or lower may be required to take University Studies 100 after completion of Education 105.

Foreign Language
All incoming students who have three years or more of high school study in a single foreign language (and no college level study of the language) and who wish to continue study in that language will be required to take a placement test to determine their level of competence in that language. A student may begin study of the language at the level determined by the placement exam.

New Student Registration
During orientation sessions, students will receive academic advisement and register for courses. In most cases, students who have declared a major will be advised in the major departments. Students who have not yet declared a major will be advised by personnel from the Advisement Office. In addition to meeting with their major department, student athletes should also meet with staff in the Athletic Department to verify compliance with NCAA regulations.

Advisement begins after the placement exam results are available. Each student will receive a RAP sheet and will meet with an academic advisor to determine the student’s courses for the upcoming semester.
Regular Advisement and Registration
Each student must schedule an advisement session before registering for courses for the following semester. This section describes campus resources available to all students to help in the advisement and registration process. This section also presents information related to registering for courses.

The Advising Process
The following sections review the specific advising processes for different groups of students.

Advising for Adult Students
Students enrolled through the Adult Students program may receive academic advising from the Adult Students Center located in 361 University Center or call (423) 425-4485. The staff of the center can assist students in course enrollment as well as the payment of fees.

Advising for Transfer Students
All transfer students must meet with an advisor before registering for classes. Transfer students who have declared a major should contact the department to schedule an advising session. Transfer students who have not declared a major must contact the Advisement Office located in room 361 of the University Center or (423) 425-4573 for assistance. Questions or concerns regarding the acceptance of transfer credits should be directed to the Records Office.

Advising for Students Who are Pre-Majors or Who Have Not Declared a Major
The staff in the Advisement Office advise students who are pre-majors or who have not yet declared a major. To schedule an appointment with an advisor, the student should go to the Advisement Office located in 361 University Center or call (423) 425-4573.

All students must declare a major after they have completed 24 credit hours.

Pre-Law Students
Students who plan to attend law school should meet with a pre-law advisor in the Department of Political Science, the Department of English, the Department of History, or the Department of Legal Assistant Studies. The advisors help students develop a course of study that will prepare them for the Law School Admission Test (LSAT). The pre-law advisor will also suggest additional courses and non-academic activities that will prepare students for law school. Students should also contact their major departments for guidance in completing the Bachelor degree.

Pre-Medical and Pre-Dental Students
Students who plan to attend medical or dental school should meet with a pre-medical advisor in either the Department of Chemistry or the Department of Biological and Environmental Science. The advisors help students develop a course of study that will prepare them for the Medical College Admission Test (MCAT). The minimum requirements for admission to a medical school are 16 hours of Chemistry (general and organic), 8 hours of Biology (general biology), 8 hours of Physics (general physics), and 6 hours of English. The pre-medical advisor will also suggest additional courses and non-academic activities that will prepare students for medical school. Students should also contact their major departments for guidance in completing the Bachelor degree. See this website for a list of health career advisors: http://www.utc.edu/Academic/HealthCareers/l-advisors.php.

Advising for Students Who Have Declared a Major
Students who have declared a major should seek regular advising from their major department or their college. When a student declares a major, he or she should meet with the Department Head to be assigned an advisor.

Advising for Students Enrolled in the Honors Program
Because students enrolled in the University Honors Program (UHON) must complete a unique curriculum, they are advised by members of the Honors Program staff as well as by the faculty of their major departments.

Freshman honors students are required to meet with a program advisor each semester to review their goals and academic progress and to plan schedules for subsequent semesters. Sophomore, junior, and senior honors students are strongly encouraged to schedule advisement and review sessions with the staff. Each semester, the Honors Program Director reviews the academic progress and standing of all students in the program and meets with students to discuss areas of concern.

In addition, all honors students enroll in one of four special advisement courses (UHON 100, 200, 300, or 400), which offer information on academic and career planning, unique opportunities to enhance students' educational experiences, and university resources appropriate to the student's class level and goals.

Advising for the Student Athlete
Students who are members of University varsity sport teams should seek the advice of their major department and the athletic academic advisor to ensure they remain eligible to participate in their sport.

Advising for Students with Disabilities
Students with disabilities should follow the regular advising procedures described above. During the advising process, the student should ensure that the advisor understands the accommodations that the student requires and that the course schedule reflects these needs. Students and advisors are strongly encouraged to contact the Office of Students with Disabilities located in 110 Frist Hall or call (423) 425-4006 should specific questions about the student’s needs arise.
General Rules and Guidelines Related to Selecting Courses

This section reviews the general guidelines students should follow when selecting courses. Other sections of this catalog present more specific rules and regulations regarding specific degree requirements.

Classification of Students

The University classifies undergraduate students as freshmen, sophomores, juniors, or seniors according to the number of credit hours the student has completed. The student’s classification determines the level of course for which the student may enroll. The following table presents the relation between class standing and semester hours completed.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>0-23</td>
</tr>
<tr>
<td>Sophomore</td>
<td>24-59</td>
</tr>
<tr>
<td>Junior</td>
<td>60-89</td>
</tr>
<tr>
<td>Senior</td>
<td>90 or more</td>
</tr>
</tbody>
</table>

Course Numbers and Levels

The course number represents its appropriateness for a student’s classification. The following table presents the course levels and corresponding classification of students who should enroll in the courses.

<table>
<thead>
<tr>
<th>Course Numbers</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>000-099</td>
<td>Activity, service or noncredit courses. Students may count no more than eight hours of S grade in courses in this group toward a degree.</td>
</tr>
<tr>
<td>100-199</td>
<td>Primarily for freshmen but may be taken by sophomores and juniors. The faculty recommend that seniors do not enroll in these courses.</td>
</tr>
<tr>
<td>200-299</td>
<td>Primarily for sophomores but open to juniors and seniors.</td>
</tr>
<tr>
<td>300-399</td>
<td>For juniors and seniors.</td>
</tr>
<tr>
<td>400-499</td>
<td>For seniors and graduate students. When taken for graduate credit, the letter G will precede the credit hours.</td>
</tr>
<tr>
<td>500-799</td>
<td>Restricted to graduate students. Courses at this level cannot be used for an undergraduate degree.</td>
</tr>
</tbody>
</table>

Prerequisites and Corequisites

Many courses require that students fulfill one or more prerequisites and/or corequisites to enroll in the course. Each course description in this catalog lists the course requirements. A prerequisite is a course that must be successfully completed before the student may enroll in the course. A corequisite is a course in which the student is required to enroll during the same semester. Students should review these course descriptions before registering for the class. Students who do not have the required pre- and/or corequisites will have their registration in that class cancelled.

Courses Requiring Special Permission for Registration

Some courses require special permission before students may register for the course. The course listing will list these requirements along with the course prerequisites. Students should review these course descriptions and obtain the necessary permission before registration.

Freshmen may not register for 300- and 400-level courses without the approval of the department that houses the course. The Records Office provides a form for this approval.

Institutional Credit and Developmental Studies Program

The University may require some students to participate in the Developmental Studies Program. The Developmental Studies Program is a collection of courses designed to help students succeed at UTC. These developmental courses cover a range of academic areas and include the following topics:

- Reading: EDUC 105
- Mathematics: MATH 105 and MATH 106
- Study skills: USTU 100
- Study skills lab: PSY 100 and SOC 199
- Writing: ENGL 105 and ENGL 106

Students required to enroll in developmental studies courses should successfully complete the courses within the first 42 attempted hours, counting both institutional and regular credit. Transfer students should complete required developmental courses within 30 attempted hours following initial enrollment at UTC. All students in the Developmental Studies Program must earn a grade of C or better for each required developmental course.

Students required to take any of developmental courses must complete these courses in addition to courses required for specific degrees. Although students may be required to complete developmental courses, the credit earned in these courses does not apply to the hours required for graduation, major requirements, general education requirements, or electives. These courses do not count toward full-time enrollment, however. Moreover, the grades earned in these courses are not included in the calculation of the grade point averages for graduation or honors.
Grade Point Average Definitions

- **Institutional Semester**: includes the most recent UTC and/or transfer work added to a student’s academic record (excludes developmental course work).
- **Institutional Cumulative**: includes all UTC and transfer work—cumulative meaning more than one semester (excludes developmental course work).
- **Transfer Semester**: Includes the most recent transfer work added to a student’s academic record.
- **Transfer Cumulative**: Includes all transfer work only—cumulative meaning more than one semester.
- **Overall Semester**: Includes the most recent UTC, transfer, and developmental course work added to a student’s academic record.
- **Overall Cumulative**: Includes all UTC, transfer, and developmental course work—cumulative meaning more than one semester.
- **UTC Only Semester**: Includes the most recent UTC course work completed by the student.
- **UTC Only Cumulative**: Includes all UTC course work—cumulative meaning more than one semester.

Continuation standards are based upon Institutional GPA for all students.

Deficiency Courses

Students admitted with a high school deficiency may satisfy that deficiency by taking the appropriate course identified in the chart below. Courses taken to satisfy a deficiency are registered as deficiency credit and do not count toward the degree, although the grade will be calculated in the grade point average. Deficiency hours are in addition to the hours required for the degree.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>High School Units</th>
<th>Courses that Satisfy a Deficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>4 units</td>
<td>English 105, 106, 121</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2 units Algebra 1 unit Geometry</td>
<td>Math requirements are satisfied by Math 105, 106, 123, 131, 144, 145, 151/152</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>2 units</td>
<td>Geology 100, ESC 150, GNSC 111/181</td>
</tr>
<tr>
<td>American History</td>
<td>1 unit</td>
<td>6 hours from HIST 203, 204, 343</td>
</tr>
<tr>
<td>Social Science (Geography, World or European History)</td>
<td>1 unit</td>
<td>GEOG 103 or HIST 104</td>
</tr>
<tr>
<td>A single foreign Language</td>
<td>2 units</td>
<td>1 or 2 semesters of the same foreign language</td>
</tr>
<tr>
<td>Visual/Performing Arts</td>
<td>1 unit</td>
<td>ART 111, MUS 111, THSP 111 or 115</td>
</tr>
</tbody>
</table>

Undergraduate Degrees

The University offers undergraduate programs that lead to the degrees of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Nursing, and Bachelor of Social Work. Majors offered within these degrees are as follows. Specific requirements for these degrees are outlined in the appropriate colleges and divisions in the following chapters.

Applied Mathematics (B.S.)
- Concentrations: Actuarial Science, General
Art (B.A.)
- Concentrations: Graphic Design, Painting and Drawing, 3-D
Art Education (B.S.)
Biology (B.S.)
- Concentrations: General, Ecology, Molecular, Organismal, Preprofessional
Business Administration (B.S.)
Chemistry (B.A.)
Chemistry (B.S.)
- Concentrations: Chemistry, Biochemistry
Communication (B.A.)
Computer Science (B.S.)
- Concentrations: Computer Engineering, Information Security and Assurance, Software Systems, Scientific Applications
Criminal Justice (B.S.)
Early Childhood (B.S.)
- Concentrations: Child and Family Studies, Early Childhood Education
Economics (B.A. and B.S.)
Electrical Engineering (B.S.E.E.)
Engineering (B.S.E.)
- Concentrations: Chemical, Civil, Environmental, Industrial Engineering Technology Management (B.S.)
- Concentrations: Construction Management, Engineering Management
English and American Language and Literature (B.A.)
- Concentration: Writing
Environmental Science (B.S.)
- Concentrations: Biology, Chemistry, Engineering Science, Geographic and Cartographic Sciences, Geology, Mathematics, Sociology-Anthropology
Exceptional Learning K-12 (B.S.)
Foreign Languages (B.A.)
- Concentrations: French, Greek and Latin, Latin, Spanish
Foreign Language Education (B.S.)
- Concentrations: French, Greek, Latin
Geology (B.S.)
- Concentrations: Geology, Environmental Geology
Health and Human Performance (B.S.)
History (B.A.)
Humanities (B.A.)
- Concentrations: International Studies, Women's Studies
Interior Design (B.S.)
Legal Assistant Studies (B.S.)
Concentrations: Legal Assistant Studies, Social Science
Mathematics (B.A.)
Mechanical Engineering (B.S.M.E.)
Middle Grades Education (B.S.)
Concentrations: English, Mathematics, Natural Sciences, Social Sciences
Music (B.A.)
Music (B.M.)
Concentrations: Instrumental Performance, Theory and Composition, Vocal Performance
Music Education (B.M.)
Concentrations: Instrumental, Vocal Music
Nursing (B.S.N.)
Philosophy and Religion (B.A.)
Concentrations: Philosophy, Religious Studies, Combined
Physics (B.S.)
Political Science (B.S.)
Concentrations: American Studies, International and Comparative Studies, Legal Studies, Public Policy and Administration, Public Administration and Nonprofit Management
Psychology (B.A. and B.S.)
Rehabilitation Science (B.S.)
Concentrations: Occupational Therapy, Physical Therapy
Secondary English (B.S.)
Secondary Mathematics (B.S.)
Secondary Natural Sciences (B.S.)
Concentrations: Biology, Chemistry, Earth and Space Science, Physics
Secondary Social Sciences (B.S.)
Concentrations: Economics, Geography, History, Political Science
Social Work (B.S.W.)
Sociology and Anthropology (B.A. and B.S.)
Concentrations: Anthropology, Sociology
Theatre (B.A.)
Theatre: Theatre Education K-12 (B.S.)

Minors are currently available in the following areas:
Africana Studies
Anthropology
Art History
Asian Studies
Athletics Coaching
Biology
Business Administration
Chemistry
Classics
Communication
Computer Science
Criminal Justice
Drama
Economics
Education
English: Literature, Writing, Creative Writing
Entrepreneurship
Environmental Science
Exercise Science
Food and Nutrition
French
Geographic Information Science
Geography
Geology
Greek
History
Humanities
International Studies
Latin
Latin American Studies
Leisure Studies
Legal Assistant Studies
Mathematics
Music: Composition, History, Performance
Philosophy
Physics
Political Science
Promotion
Psychology
Public Administration and Nonprofit Management
Religious Studies
Sociology
Spanish
Speech
Theatre
Women's Studies
Responsibility for Following Degree Requirements
Each student is responsible for understanding and following the policies outlined in this catalog and for understanding the specific degree requirements for his or her program of study. The "Academic Regulations" chapter of this catalog describes the general requirements that all students must fulfill to complete a Bachelor’s degree. The "Course Listing" section describes the course requirements for each major. Although faculty and other University officials may offer advice regarding particular matters, the student must ensure that he or she understands the consequence of acting on such advice. Moreover, the student assumes sole responsibility for the consequence of creating or modifying his or her course schedule.

The Records Office is responsible for determining whether the student has fulfilled the requirements for the degree. The Report of Academic Progress (RAP) sheet is an advising aid and is not an official audit of the student’s fulfillment of degree requirements.

The Office of Financial Aid is responsible for determining the student’s eligibility for specific financial aid and scholarship considerations. Students are responsible for understanding that altering the course schedule may jeopardize the eligibility for financial support.

Registering For Classes
All UTC students are responsible for registering for courses. The Records Office sends to each student’s MocsNet email account the date and time that their registration sessions begin. Students may register for courses after their advising session, during which they receive the advisement code.

Students may register online through the Student Information link in the MocsNet account. Students must know their Secure ID (SID) to access the Student Information link in MocsNet. Online registration also requires the advisement code.

Students may also register at the Records Office if they have the completed Registration Form and Closed Class Forms with appropriate signatures. International students must register through the International Student Office and cannot register online or in any other office.

Registration Limits and Excess Hours
Students may register for 20 or fewer hours each spring and fall semester without prior approval of the Petitions Committee. Students must receive advanced approval of the Petitions Committee to register for more than 20 hours.

Summer registration limits are as follows:
• 7 hours during any 5-week session
• 10 hours during any 7-week session
• 10 hours during any overlapping 5-week and 7-week sessions
• 20 hours during the entire summer term

Written consent of the advisor is required to register for a total of 17 to 20 hours in the summer. Requests for exceptions to these limits must receive advance approval by the Petitions Committee.

Students requesting approval of the Petitions Committee to register for excess hours for a given semester must submit the petition to the Records Office (109 Race Hall) no later than one week prior to the first day of class for each semester or summer term. The petition form can be accessed through the UTC website at www.utc.edu/Administration/Records/forms.php.

Drop/Add Policy
All students are responsible for processing their course registrations, additions and drops. All students who register must pay fees unless the student drops the courses before the first day of classes. Failure to attend classes is not evidence of the student’s intent to drop classes or withdraw from the University. Students who do not attend classes will remain on the class roster and will receive grades for these courses. Registration and drop dates for each specific term can be found on the University’s online calendar.

Closed Classes
Students may find that a course is closed when attempting to add the course to the schedule. If there are not other suitable sections of the course, students may seek permission of the department head in which the class is housed for permission to enroll in the closed class. Students seeking this permission need to complete a Closed Class Form, available in the Records Office or have the department head give permission for an online closed class authorization.

Auditing Classes
Students who wish to attend undergraduate classes without earning credit or receiving grades may register as auditors. Students auditing a course are under no obligation of regular attendance, preparation, recitation, or examination, and receive no letter grades or credit. Fees for auditing courses are the same as those for courses taken for credit.

Modifying the Course Schedule
Students may alter the course schedule before the term begins and during the first two weeks of classes. Students may alter the schedule online during the first week of classes. During the second week, students must submit a course registration form with the appropriate instructor’s and/or department head’s signature to the Records Office, 109 Race Hall. The General Regulations section presents specific rules governing the addition and withdrawal from courses. Students who receive financial aid or scholarships should consider modifying their schedules with care as some changes may produce negative financial consequences. For more information, contact the Financial Aid Office.
Attending Class

Each member of the faculty may establish an attendance policy for his or her courses and should describe the policy in the course syllabus. Faculty may choose to use attendance to determine a portion of the student's final course grade. Consequently, students should ensure that they understand and follow the instructor's attendance policy.

Although the University does not have a uniform attendance policy, students should attend all scheduled meetings of the course. Students assume sole responsibility for obtaining information presented during a missed class session. Students who miss assignments, tests, and other exercises may complete the missing work at the instructor's discretion.

Failure to attend scheduled class meetings is not evidence of the student's intent to withdraw from a course. Students wishing to withdraw from courses must withdraw online or submit a Request to Withdraw form to the Records Office during the official drop period. Students cannot withdraw from a course either online or in the Records Office after the official last day to withdraw for the semester or summer term. Failure to withdraw officially from any course will result in a grade of F if the student has not successfully completed the assigned work.

Students who have not registered for a course may not attend or otherwise participate in the course.
Student Financial Aid

The University of Tennessee at Chattanooga offers a comprehensive program of student financial aid. The staff of the Financial Aid Office help students secure Federal and state financial aid, scholarships, and recommend private loan options for which the student may apply.

The financial aid that a student may receive reflects financial need, which is the difference between the student's cost of attending the University and the family's estimated contribution to that cost. The cost of attendance includes tuition, fees, books, transportation, and living expenses. The Free Application for Federal Student Aid (FAFSA) determines the Estimated Family Contribution (EFC) which then determines the amount of financial aid a student may receive. A student may not receive financial aid greater than the cost of attendance.

A student may receive one or more types of financial aid: Grants, Loans, Part-time employment, and Scholarships. These can be awarded individually or in combination, depending on the student's financial need and eligibility.

Information and Assistance
The Financial Aid Office staff provide assistance with the financial aid application process and financial budgeting. In addition, the student and parents may request a review of the determination of the student's need and award. For further information regarding financial aid, call or write:

UTC Financial Aid Office Dept. 4805
The University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, Tennessee 37403
(423) 425-4677

Information and forms are also available on the UTC Financial Aid website at: www.utc.edu/Administration/FinancialAid/.

Application Procedures
All students must apply each year for financial aid to be eligible for grants, loans, work-study, and the Tennessee Education Lottery Scholarship funds. Students currently receiving University scholarships will automatically receive the scholarship if they meet the scholarship renewal criteria.

Freshmen who wish to be eligible for University scholarships must be admitted no later than February 1 and have completed the Admissions Application form. Students currently not receiving University scholarships who believe that they are eligible for a scholarship should complete the Continuing Student Scholarship Application. The following lists the easiest way to apply for all Federal and state aid.

Five Steps to Financial Aid at UTC

Step 1 Complete and e-Sign the FASFA on the Web
Complete and submit the FAFSA at: www.fafsa.ed.gov. This service is free. Be sure to include UTC and its Title IV code "003529" in the appropriate section of the FAFSA. Allow 2-3 weeks for UTC to receive the FAFSA information. Students must complete this step before February 1 to ensure that they receive the largest financial aid possible.

Step 2 Submit all requested documents to the Financial Aid Office.
Other documents for the verification process may be requested as the need arises. Therefore, students should review their MocsNet account frequently for requests for more information. Additional documents should only be submitted as requested. These documents may be obtained from the UTC Financial Aid Office and must be submitted before April 1. Students may meet with a financial aid counselor during May to review their accounts.

Step 3 Accept Financial Aid awards
The award process occurs 5-8 weeks following receipt of all requested forms and a completed financial aid file. Students will receive a Financial Aid Notification email in their MocsNet email accounts.

The student must accept the aid to receive the funds. To receive the aid, the student will log onto the MocsNet account using the UTC ID and Secure ID (SID). All offered aid (loans, work study, etc.) must be accepted or denied in the offered status area on the student's MocsNet account. Grants will be automatically entered as accepted. If a scholarship or grant has been offered or estimated, the student will need to contact
Satisfactory Academic Progress

The Federal Government requires schools that provide financial aid to review academic progress to ensure that only those students who are making good academic progress receive financial aid. According to this policy, students are immediately ineligible for financial assistance when they are not progressing academically because of poor grades, have withdrawn, or have been suspended or dismissed. For students to maintain satisfactory academic progress, they must meet the following two standards:

- Students must satisfy continuation standards to continue their education at the University according to the University's Standards of Continuation published in this Catalog;
- Students must earn a required number of hours each year based on enrollment status (part-time, three-fourths time, and full-time student) on the first day of each semester.

Students who are enrolled full-time must earn at least 20 hours per academic year to be classified as making satisfactory progress. The required number of hours is prorated for students enrolled less than full-time.

Students who attempt more than 150% of the hours required for graduation in their program of study are ineligible for additional financial aid funds.

Students receiving University scholarships must complete 24 hours per academic year to maintain the scholarship.

The Financial Aid Office provides a thorough explanation of satisfactory academic progress. The guidelines are available at the Financial Aid Office and on the UTC Financial Aid website.

Types of Financial Aid

Grants

Federal Pell Grants

Pell Grant awards range from $300 to $5,350 with the value of the award reflecting the Estimated Family Contribution and the number of credit hours in which the student has enrolled. The grant is the "base" award of financial aid and is awarded before other forms of aid. Regulations and provisions of the Pell Grant Program are subject to change by Federal legislative action.

Federal Supplemental Educational Opportunity Grants (SEOG)

This grant, which ranges from $250 to $500, is available to undergraduate students with high financial need as determined by the FAFSA. Funds are limited, so it is essential that students complete the FAFSA and all other required documents as early as possible.

Academic Competitiveness Grant (ACG Grant)

The Academic Competitiveness Grant (ACG) is a Federal grant available to students who have completed the FAFSA, are eligible for the Pell Grant, are U.S. citizens, and are under the age of 20. This award is given to Freshmen and Sophomore students who have completed a qualifying rigorous high school curriculum as defined by the U.S. Department of Education. Self-certification through the Federal website is required to apply. Recipients must maintain a 3.0 GPA to receive the grant during the sophomore year. Awards range from $375 to $1,300 per academic year. Regulations and provisions of the ACG are subject to change by Federal legislative action.

Science and Mathematics Access to Retain Talent (SMART) Grant

The SMART Grant is a Federal grant available to students who have completed the FAFSA, are eligible for the Pell Grant, are U.S. citizens, and have declared one of the eligible majors as defined by the U.S. Department of Education. Students must also have a 3.0 GPA in their declared major to receive these funds. The maximum award for the academic year is $4,000. Regulations and provisions of the SMART Grant are subject to change by Federal legislative action.
**Tennessee Student Assistance Corporation (TSAC) Grants**
Grants are made by the Tennessee Student Assistance Corporation to residents of the State of Tennessee who show financial need according to the FAFSA. TSAC annual awards range from $1,314 to $2,322. Students must apply before March 1 because these funds are limited.

**Georgia Tuition Equalization Grant**
The Georgia Finance Authority provides grants of approximately $600 per semester to Georgia residents who are juniors or seniors at UTC. Students must live within 50 miles of UTC and more than 50 miles from a four-year Georgia educational institution. Full-time enrollment at UTC is required, and the student must have completed 60 credit hours. Applications are available in the UTC Financial Aid Office and must be filed by the last day to register for classes in the term.

**Student Loans**

**Federal Stafford Loans**
The Federal Stafford Loan program provides students with interest-free or low interest student loans based on financial need as determined by the FAFSA. Most students with good academic standing and satisfactory academic progress for continuing financial aid are eligible for the Federal Stafford Loan program.

There are two types of Stafford Loans: subsidized and unsubsidized. For a subsidized Stafford Loan, the interest is paid by the Federal government as long as the student is enrolled at least half-time. For an unsubsidized Stafford Loan, the student is responsible for the interest at a low government fixed rate while enrolled at least half time in college. The repayment of the loans is deferred for 6 months after a student graduates, terminates his or her education, or drops below halftime; and then the payments are structured over a 10-year repayment plan.

The maximum Stafford loan amount for a dependent undergraduate (as defined by the FAFSA) in a 12-month period is $5,500 for freshmen; $6,500 for sophomores; and $7,500 for juniors and seniors. Independent students, as defined by the FAFSA, are eligible for additional unsubsidized funds in the amount of $4,000 for freshmen or sophomores, and $5,000 for a junior or seniors.

The Federal Stafford loan maximum aggregate may not exceed $31,000 for the dependent undergraduate or $57,000 for the independent undergraduate or post-baccalaureate student. The Federal loan aggregate limit for Stafford Loans for graduate and professional students is $138,500. A list of recommended lenders for the Stafford loan program may be found on the UTC Financial Aid website or in the UTC Financial Aid Office.

**Federal Parents Loan for Undergraduate Students (PLUS)**
Federal PLUS loans allow parents with good credit histories to borrow for each dependent child who is enrolled half-time or more. These loans, like Federal Stafford Loans, are made by a lender. A list of recommended lenders for the PLUS loan is available on the UTC Financial Aid website or in the UTC Financial Aid office. The yearly loan limit is the student's cost of attendance minus any estimated financial aid the student receives. The interest rate, as set by the Federal government, will be variable but not higher than 9.0 percent. If a parent is denied a PLUS loan by a lender, the student may be eligible for an additional unsubsidized Stafford loan at the independent loan amount.

**Federal Perkins Loans**
The Federal Perkins Loan Program is a long-term loan available to students at a 5.0 percent interest rate. This program is funded through the U.S. Department of Education and awarded by UTC on a first come first serve basis. These funds are limited. Eligibility for the Perkins loan is based on demonstrated financial need as determined by the FAFSA. Loan repayment and interest on Perkins Student Loans are deferred for 9 months after graduation or as long as the individual remains in half-time attendance at an eligible accredited institution of higher education. The maximum repayment period is normally 10 years. Upon making a properly documented written request, portions of the Federal Perkins Student Loan may be canceled if the borrower performs full-time service in one of the several service areas. More information about Perkins Loan forgiveness may be found on the U.S. Department of Education’s website www.ed.gov. An undergraduate may be extended a maximum loan of $5,500 per year up to an accumulated loan total of $20,000. Due to limited funding, UTC awards all of its Perkins Loans to undergraduate students. The above regulations and provisions of the Federal Perkins Loan Program are subject to change by Federal legislative action.

**Alternative/External/Private Loans**
Additional funds are available to students through a lender in the form of an alternative loan. These loans are also referred to as private loans or external loans. A list of recommended lenders for alternative loans is available on the UTC Financial Aid website or in the UTC Financial Aid Office. Interest rates, origination fees, deferment options and terms vary by lender, so students are encouraged to comparison shop. These loans should be a student's last resort in attempting to pay for college costs. Students who are not in good standing with the office of Financial Aid (Unsatisfactory Academic Progress) may apply for these loans as an option to cover educational expenses.

**Student Employment**

**Federal Work-Study Program**
The University participates in the Federal Work-Study Program administered by the U.S. Department of Education. To be eligible for the Federal Work-Study Program, a student must be accepted for admission and enrolled with good standing. A student's eligibility is determined by the FAFSA. On-campus part-time work opportunities are available in various departments, offices, and agencies of the University. Off-campus work in community service organizations may also be available through the Federal Community Service Learning Program.

**Additional Employment Opportunities**
Additional part-time employment opportunities, both on and off campus, are handled by the Job Location and Development Program in the Financial Aid Office. These positions are available to any student, regardless of financial need. To be eligible for this part-time employment, the student must meet the requirements established by the employing agency. The UTC Placement and Student Employment Center also provides job postings.
Chattanooga Yes Grant
In addition to the University's other scholarship programs, the University provides the Chattanooga Yes Grant to students with high financial need, as defined by the FAFSA, who are residents of Tennessee and who are first-time freshmen. The University awards these grants on a first come first serve basis. The grant award reflects the applicant's EFC, high school GPA, and ACT or SAT composite score.

The grant award is $3,000 per year, to which students may add the $3,800 to $4,800 of Tennessee Lottery Scholarship funds. Scholarships are renewed for up to four years based on the student's academic performance. Approximately 200 awards are available each year. Recipients are determined by the UTC Scholarships Committee. The application deadline is April 1.

Tennessee Education Lottery Scholarships (TELS)
Tennessee residents who graduated from a Tennessee high school in 2003 or after may qualify for the Tennessee Education Lottery Scholarships (TELS) or the HOPE Scholarship. Students must have graduated from high school with a 3.0 unweighted overall GPA out of a possible 4.0, or scored at least a 21 ACT (980 SAT) completing required college core courses. These funds are administered by the Tennessee Student Assistance Corporation (TSAC), and awards generally range from $3,800 to $5,300 per year.

The application form for Lottery Scholarship funds is the FAFSA. The TSAC deadline for application is May 1. The University of Tennessee at Chattanooga must be listed first on the FAFSA to receive the student's eligibility for the Lottery Scholarship. In the event UTC was not listed first, the student must change the FAFSA to list the school as their first choice.

Adult students, over the age of 25, who have never been enrolled in college may also be eligible for these funds. All students who believe they are eligible should check with the Financial Aid Office to receive the most up to date information as these scholarships are subject to annual changes by the State legislature.

Refund Process—Return of Title IV Funds
Students who receive Federal Title IV assistance will be subject to a refund calculation return if they withdraw from all classes. Students who withdraw during the first 60 percent of the term will have a refund calculated under the Return of Title IV Funds Refund Policy. The percentage of the refund will equal the percentage remaining in the term at the time that the student withdraws. All refunds caused by a student withdrawing from classes will be returned to the appropriate financial aid account(s) or lender in the case of student loans. Refunds will be credited/returned within 45 days to the appropriate student financial aid program(s) in the order listed:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal Perkins Loan
4. Federal Plus Loan
5. Federal Pell Grant
6. Federal Academic Competitiveness Grant or SMART
7. FSEOG
8. Other Student Financial Aid Programs

9. Other Federal, State, private, or institutional sources of aid
10. Student

Note: UTC reserves the right to bill the student for any return of Title IV refund amount that exceeds the University's published institutional refund policy.

Repayments
Students who receive Federal student financial assistance funds in excess of what is owed to the University (e.g. maintenance, tuition, room) may be required to repay funds to certain Title IV programs:

1. Federal Pell Grant
2. Federal Academic Competitiveness Grant or SMART
3. FSEOG
4. Other Student Financial Aid Programs
5. Other Federal, State, private, or institutional sources of aid

General Refund Information
Students who stop attending classes prior to the completion of the term should carefully read the information on unofficial withdrawals. All refund/repayment calculations are completed within 45 days of the official withdrawal date, and all funds are returned to the appropriate programs. Students may present their official withdrawal/drop forms in person to the Financial Aid Office, or do so online. Failure to withdraw officially will result in the University applying its own administrative procedures for determining the unofficial withdrawal date.

Scholarships
The University of Tennessee at Chattanooga scholarship program for new and currently enrolled students is made possible through funds provided by the University, outside foundations, estates, private businesses, civic groups, individuals, and alumni.

Most scholarships are awarded to students who demonstrate strong academic achievement and proven need for financial assistance. There are, however, many scholarships based solely on academic achievement. Unless otherwise stated, to compete for any scholarship, a student currently enrolled at UTC or a transfer student must submit a UTC Application for Scholarship. First-time freshmen may apply via the Application for Undergraduate Admissions and Academic Scholarships.

The Financial Aid Office must receive the UTC Application for Scholarship by March 1.

University Honors Program Scholars
Each year 30 to 40 outstanding freshmen entering the University Honors Program are selected to receive four-year scholarships covering the cost of tuition, fees, books and a large portion of campus housing. The selection of these scholars, based on their strengths in academics, service, and leadership, is made by the faculty and staff of the University Honors Program. Applicants must file both a regular application for admission to the University and a special application for admission to the UHON Program by December 15 of the applicant's senior year in high school.
The following endowed funds support the program:

William E. Brock, Jr. Scholarship: Established in 1979 by University of Chattanooga Foundation in honor of William E. Brock, Jr., a longtime member of the UC Board of Trustees.

Paul Koblentz Memorial Scholarship: Established in 1990 through a bequest from Abe J. Koblentz as a memorial to his deceased son in order to provide scholarships for deserving students.

Dorothea Woods Obear Scholarship: Established in 1990 by Chancellor Frederick Obear in memory of his mother who had a strong interest in the University and its honors program. The scholarship goes to a student in the University Honors Program.

Vasconez and Donovan Scholarship: Established in 1994 by James M. Donovan, a UTC Brock Scholar graduate of the Class of 1981. The scholarship, in memory of his partner Jorge Vasconez, is for students in the University Honors Program.


Chancellor’s and Provost’s Scholars
First-time freshmen who present certain minimum high school grade point averages and ACT or SAT scores are eligible for scholarship considerations. Scholarships are renewed for up to four years based on the student’s academic performance and the funds available. Approximately 130 awards are available each year in the Chancellor’s and Provost’s Scholars programs combined. Recipients are determined by the UTC Scholarships Committee.

Chancellor’s Scholars
First-time freshmen who are admitted by February 1 with a 3.75 GPA and a 30 ACT (1320 on SAT) will be considered for Chancellor’s Scholarships, an annually renewable award of $3,500. Students may also receive an additional $3,800 to $4,800 of Tennessee Lottery Scholarship funds. Out-of-state students will qualify for different stipend amounts.

Provost’s Scholars
First-time freshmen who are admitted by February 1 with a 3.5 GPA and 26 ACT (1170 SAT) will be considered for a $3,000 annually renewable award. Students may also receive an additional $3,800 to $4,800 of Tennessee Lottery Scholarship funds. Out-of-state students will qualify for different stipend amounts.

Additional Endowed Scholarships
The University of Tennessee at Chattanooga is proud to offer a broad array of scholarships that help students complete their education. These scholarships represent the generous support of former students, faculty, and friends of the University who wish to ensure that UTC continues to recruit, enroll, and retain a qualified student body and to prepare those students to work and live in a diverse and global community as citizens and leaders. The following describes scholarships available for the 2009-2010 academic year.

Julius Ochs Adler Scholarship: Established in July 1956 by an anonymous donor in memory of the distinguished citizen who was associated with Adolph S. Ochs in the management of The Chattanooga Times.

Ruth Trimby Aiken Scholarship: Established in 1998 by Jane Aiken Dowden in memory of her mother, Ruth Trimby Aiken. Awards are made based on academic performance and financial need.

Alumni Centennial Scholarships: Established during the Centennial Campaign, four area scholarship endowments were funded by friends and alumni of UTC living in the Riverview and Lookout Mountain residential sections of Chattanooga and in both Nashville and Cleveland. The Cleveland scholarship was named in memory of Dickie Norton, UTC alumnus, who served as chair of the effort before his death in 1988. Preference for each scholarship will be given to students residing in the particular area.

Marinose Arendale Scholarship: Established in 1990 through the estate of Miss Arendale, a 1952 history graduate and former economics professor at Chattanooga State Technical Community College. To be awarded annually to a qualified and deserving student.

Creed F. Bates Scholarship: Established in 1976 by more than 300 individual gifts from friends, former students, and citizens of the Chattanooga community in honor of Creed Fletcher Bates, student, teacher, principal, University trustee, and community leader, to be awarded annually to a qualified and deserving student from the local area.

Margaret Whiteside Buhrman Scholarship: Established in 1978 by Mrs. Buhrman’s son, Richard, in honor and recognition of her 46 years of distinguished service to the University, to be awarded to deserving students with preference for English majors.

Cyril C. and Imogene H. Burgner Scholarship: Established in 1991 through the estate of Mrs. Brooks Burgner in honor of her late husband for the benefit of worthy graduates of Tyner High School where Mr. Burgner served for many years as principal.

Ralph T. and Alice P. Call Scholarship: Established in 1999 by Harry Call, class of 1971, to honor his parents, Ralph T. and Alice P. Call. Restricted to students majoring in engineering.

Campbell and Associates Scholarships: Established in 1987 as a Centennial gift by John F. Germ, president and chief executive officer of Campbell and Associates, Engineering Consultants. Germ, a UTK graduate, has served on UTC’s Chancellor’s Roundtable and was involved in the design and construction of UTC’s Arena and the Fine Arts Center.
**Student Financial Aid**

**Student Financial Aid**

**Edith White Cassell Memorial Scholarship:** Established in 1996 by Florence White Taylor in memory of her sister, Class of 1935 alumna Edith Cassell, who attained financial assistance through the help of President Alexander Guerry. Edith majored in German and worked for many years for TVA.

**Mario and Grace Charles Foundation Scholarships:** Established in 1999 by the estate of Grace B. Charles to provide scholarships for students majoring in electrical engineering and in elementary education. Both Grace Charles and her late husband, Mario, attended the University of Chattanooga.

**Chattanooga Coke and Chemical Scholarship:** Established in 1979 during the Tennessee Tomorrow Campaign in celebration of the company's 60th year of operation, the award goes to a qualified undergraduate student.

**Walter W. Colby Memorial Scholarships:** Established in 1982 by Benjamin W. Colby, a UC alumnus, in memory of his father, an early resident of Walden's Ridge (1878). Needy and worthy students from the Hamilton and Sequatchie County areas of Walden's Ridge are given preference.

**Culpepper Family Scholarship:** Established in 1997 by Cecil Culpepper in appreciation for the financial assistance he received which enabled him to attend the University of Chattanooga on the GI Bill and in order to make a similar opportunity available to other students. Two of the Culpepper children are UTC graduates: Steven Ward Culpepper, Class of 1978, and Mary Alice Culpepper, Class of 1979. Preference for the award goes to students majoring in business or history.

**Joe and Rachel Decosimo Scholarships in Business:** Established in 1997 by Toby and Brenda McKenzie of McKenzie Development Corporation of Cleveland in honor of their friends and colleagues Joe and Rachel Decosimo for the role played by the Decosimos in their success personally and professionally. The awards go to students majoring in business.

**John E. and Claudia F. Gilbreath Scholarship in Memory of Katherine Frazier:** Established in 1971 by Mrs. Gilbreath for deserving male students in memory of her husband and her sister, two of the founders of the Chattanooga Federal Savings and Loan Association, both prominent business and civic leaders who died in 1969. Mr. and Mrs. Gilbreath graduated from The University of Tennessee, Knoxville.

**Douglas Chamberlain Griffith Memorial Scholarship:** Established in 1984 by Mrs. Robert H. Griffith in memory of her son (1941-1984). A graduate of the University of Chattanooga, he was a captain in the U.S. Air Force and a professional photographer. The scholarship award is based on student need.

**Dr. William Q. Gurley Scholarship:** Established in 1999 by Colleen Gurley, widow of Dr. Gurley, and memorial gifts from friends and colleagues. Dr. Gurley was UTC professor of mechanical engineering and former department head. Awards go to students majoring in engineering.

**William Q. Gurley Scholarship:** Established in 1999 by Joe and Marianna Wheeler in memory of Dr. Gurley, UTC professor of mechanical engineering and former department head, awarded to sophomore, junior and senior students enrolled in the College of Engineering.

**Ken and Cary Harpe Scholarship:** Established in 1997 with a planned gift by UT alumni Ken and Cary Harpe, to be awarded in the future to one English major and one member of the varsity football team or a candidate who meets both requirements.

**Russell M. Hart Scholarship:** Established in 2005 by the will of Russell Hart, a 1937 graduate of the University. Awards are made based on academic performance and financial need.

**Ken and Cary Harpe Scholarship:** Established in 1997 with a planned gift by UT alumni Ken and Cary Harpe, to be awarded in the future to one English major and one member of the varsity football team or a candidate who meets both requirements.

**Estes Kefauver Memorial Scholarship:** Established through a nation-wide campaign in 1963 which was led by Mr. Noble Caudill, Mr. Ed Orgill, Mr. Charles Brakebill as a memorial to the late Senator Kefauver. This one-year award goes to entering freshman students regardless of their course of study.

**Margaret N. Kelley Graduate Scholarship:** Established in 2007 by the daughter and son-in-law of Dr. Margaret Kelley, retired Vice Chancellor of Advancement, in recognition of her many contributions to the University.
David McKendrie Key Scholarship: Established by Sarah Key Patten in memory of her father, Postmaster General of the United States, U.S. Senator, Federal Judge, and one of the founders of the University.

Gene E. Kistler Scholarship: Established in 1994 through a bequest from the estate of Dr. Kistler, a longtime Chattanooga physician and surgeon, as an expression of his appreciation for his community and for the University. Kistler had been chief of surgery for Erlanger and T. C. Thompson Children's hospitals. This award goes to students with declared premedical majors.

David Ardell Knauff Memorial Scholarship: Established in 1990 by Major Charles H. Knauff, U.S. Army Ret., in honor of his son, a cum laude graduate of UTC in 1977, who died in Atlanta where he worked for CBS Television Productions. First consideration given to students from Ooltewah High School.

Lookout Mountain Alumni Scholarship: Established during the 1985-86 UTC Centennial Campaign by alumni from the Lookout Mountain area. Preference given to students from the Lookout Mountain area zip code 37350.

Lovemans Marketing Scholarship: Established in 1988 as a Centennial gift to the University by the donor company under the leadership of its late president James L. Moore Jr. The Moore family and Lovemans Department Store have been economic and cultural leaders in Chattanooga with a long history of involvement with the University.

Harold Marlowe Scholarship in Physics: Established in 1999 by Betsy Marlowe Bush in her desire to honor her son, UTC Professor of Physics Robert Marlowe. Award is made to a student in the physics department.

George S. and Norma L. McCarty Scholarship: Established in 2008 by the family of Mr. and Mrs. McCarty. Scholarship awarded to graduates of public high schools in Hamilton County, Tennessee.

Stan McCay Scholarship: Established in 2006 in memory of Mr. McCay, former employee of the Combustion Engineering Metallurgical Research Lab. He worked for 27 years in the quality control support areas of the company and had assignments in Spain, Canada and throughout the United States. The scholarship is for students majoring in chemical engineering.

Toby and Brenda McKenzie Education Scholarships: Established in 1997 by entrepreneurs Toby and Brenda McKenzie of McKenzie Development Corporation of Cleveland in appreciation for the great influence of good teachers in their formative years. The award is meant to encourage and assist students preparing to become educators.

Joan Reagin McNeill Scholarship: Established in 1999 by Joan Reagin McNeill, UTC alumna whose interests have included the athletics program, the arts, and Sigma Kappa Sorority. Award is to be based on academic performance and financial need, with first consideration given to a female student.

Robert C. Mildram Scholarship: Established in 2000 by Amy Mildram to honor her late husband, Dr. Robert Mildram, former Dean of Students at the University of Chattanooga and chair of the Department of Philosophy and Religion. Preference is given to students majoring in philosophy and religion.

Nashville Area Alumni Scholarship: Established during the 1985-88 UTC Centennial Campaign by alumni from the Nashville area. Preference given to students from the Nashville area who have financial need and successful academic performance.

Herschel W. Nation Memorial Scholarship: Established in 1996 by William, Jeffrey, and Michael Nation, Lou Nation, and Ray L. Nation, the sons, widow, and brother, respectively, of Herschel W. Nation, in his honor. A graduate of the Class of 1947, Nation served as student radio announcer at The University of Chattanooga and after a career in radio, founded and became president of Gateway Hosiery Mills. The award is divided between students majoring in English and communication.

Newbold Scholarship: Established in 2000 as a memorial to Dr. Nathan C. Newbold, his son, Nathan Newbold, Jr. and his grandson, Nathan Newbold III. Preference for the award is made to deserving African-American students who show promise in both academics and integrity. Dr. Newbold was for 37 years North Carolina Director of the Division of Negro Education; his son retired from TVA after 40 years of service, and Newbold III was a 1963 UC graduate who made his career with American National Bank.

Charles A. Noone Scholarship: Established in 1961 and enhanced at her death in 1980 by Mrs. Noone in memory of her husband, a prominent lawyer who practiced in Chattanooga for many years and was the father of an alumnus.

Dickie Norton Memorial Scholarship: Named in memory of Dickie Norton, a UTC alumnus who was chair of the effort to endow a scholarship for Cleveland-area students before his death in 1988. Preference is given to a student from Cleveland, Tennessee.

Nursing Alumni Scholarship: Established in 2004 by alumni of the nursing program to provide assistance to nursing majors who have completed the first semester of classes. Recipient selection is by the Scholarship Committee of the School of Nursing.

Adolph Ochs Journalism Scholarship: Established in 1999 by his granddaughter, Ruth S. Holmberg, in memory of Adolph Simon Ochs (1858-1935), esteemed newspaper publisher. Ochs was publisher of The Chattanooga Times and The New York Times and made extraordinary contributions to his community, region, state and nation through newspaper journalism. He also helped found The University of Chattanooga. Preference for award is to a student majoring in communication.

Barbara and Robert Oldham Scholarship: Established in 2003 by Barbara and Robert Oldham, both first-generation college graduates, to be awarded to students who have shown success in academics and have financial need. First consideration is given to single mothers.
Cynthia Glasscock Parker Scholarship: Established in 2000 by Elizabeth Glasscock in honor of her daughter, who graduated from UTC in 1973 with a B.S. degree in home economics and has multiple sclerosis. Ms. Parker's father, the late Leroy Glasscock, was a member of the Class of 1940, and her mother also attended UTC.

Jenks Fain Parker Memorial Scholarship: Established in 1984 by the family of Jenks Fain Parker. The scholarship is awarded to deserving students in the College of Engineering and Computer Science as recommended by UTC Scholarships Committee.

Elizabeth Bryan Patten Scholarships: Established in 1972 by businessman Z. Cartter Patten in honor of his wife, active civic, welfare, and religious leader of her community.

Sarah Key Patten Scholarship: Established in 1955 by Z. Cartter Patten in honor of his mother, one of Chattanooga's most beloved matrons, daughter, and mother of University trustees.

P. Robert Philp Scholarship: Established in 1997 by Ms. Katherine Philp Fowler in memory of her late husband, P. Robert Philp, former president of First Tennessee Bank of Chattanooga, civic leader and trustee of the UC Foundation. Award is made on academic performance and/or financial need with preference to employees of First Tennessee Bank or their children.

Leslie Vaughn Prater Memorial Scholarship in Criminal Justice: Established in 2005 by the parents, brother and friends of Leslie Vaughn prater to honor his life and the sensitivity he showed toward others and provide scholarship assistance to Criminal Justice students. Preference is for African-American students.

Katharine E. Pryor Scholarships: Established through a bequest from the estate of Miss Pryor, a 1936 alumna and longtime teacher at Chattanooga High School, who died in 1992. Scholarship recipients shall be graduates of the Chattanooga or Hamilton County Public School Systems.

Ralph F Quarles Scholarship: Established in 2002 by Dr. and Mrs. Daniel Quarles and Annette Reiney in memory of father and husband. Preference is given to academically successful students who are residents of Georgia pursuing full-time study in teacher education degree programs.

Alex Radin American Public Power Association Scholarship Fund: Friends and colleagues of alumnus Alex Radin established in 1986 an endowed scholarship honoring Radin, the distinguished executive director of the American Public Power Association, a national organization headquartered in Washington, D.C., which represents more than 1,750 municipal and other local publicly owned electric utilities.

J.L. Raulston Stove Manufacturing Scholarship: Established in 1957 by the Institute of Appliance Manufacturers and named for the president of that association at the time, Mr. Leonard Raulston. Awards are based on financial need.

Lee Rast Endowed Scholarship: Established in 2007 by Mrs. Rast's grandson and his wife to honor the longtime pioneering businesswoman who spent more than 80 or her 98 years in Chattanooga. She was highly successful in business and had a strong commitment to her community through volunteer work. The scholarship is for undergraduate, female Entrepreneurship majors in the College of Business.

Olivia Caroline Grisham Rayl Scholarship: Established in 2003 by Leo S. Rayl, Jr., in memory of his wife of 57 years who graduated from Chattanooga Central High School in 1937. The scholarships are for students who have been orphaned at an early age.

Riverview Area Alumni Centennial Scholarship: Established during the 1985-88 UTC Centennial Campaign by alumni from the Riverview area. Preference given to students from the Riverview area zip code 37405.

Ray Robinson, Jr., and Nancy Robinson Oliver Scholarship: Established in 1999 by Jimmie Robinson and Ray Robinson, Sr., in memory of their son, Ray Robinson, Jr., engineer and UTC graduate, and in honor of their daughter, Nancy Robinson Oliver, also a UTC graduate who is active in community service. The scholarship is based on academic performance.

Henry V. and Judith Talley Secor Scholarship: Established in 1996 with a gift from Henry V. Secor, Class of 1955, and Judith Talley Secor, who attended the University of Chattanooga in 1952-53 and graduated from the University of North Carolina. Former Chattanoogans, the couple reside in Midlothian, Va. The awards are based on successful academic performance and financial need.

C.G. "Doc" Schettler Memorial Scholarship: Established in 1998 by Ann Schettler Worthy to memorialize her father, C.G. "Doc" Schettler, pharmacist, state representative and Circuit Court Clerk in Sweetwater, TN. Scholarship is awarded with preference to students in emergency systems management.

Douglas Sherman Golf Scholarship: Established in 2003 by friends of Douglas Sherman to honor their late friend, fellow golfer and golf enthusiast by establishing scholarship assistance to a young student athlete. Preference for awarding is to students who qualify as members of the UTC golf team and transfer to UTC from Cleveland State Community College. Second preference goes to graduates of certain named area high schools.

Hubert Shuptrine Fine Art Scholarship: Established in 2006 in memory of Shuptrine, an internationally known visual artist and graduate of the University of Chattanooga. He was recipient of the 1976 Distinguished Alumnus Award. The scholarship is for art majors.

Siskin Circle of Scholars Scholarships: Established in 2003 by a partnership between the Siskin Children’s Institute and The University of Tennessee at Chattanooga. The scholarship allows students in the special education program and graduate students in the school psychology program at UTC the opportunity to

:: Student Financial Aid
complete their degrees while continuing employment. Siskin Scholars are required to participate in activities at the Siskin Children's Institute.

Becky Cooke Smith Scholarship: Established in 2008 in memory of Mrs. Smith who received her CPA certification in 1975 and who had a highly successful career that included business partnerships in Cleveland. The scholarship is for accounting majors.

Sydney and Charlotte Smith Memorial Scholarship: Established in 2003 by the will of the Smiths. Awards are made based on financial need.

Jim Spencer Scholarship: Established in 1999 by Ann Spencer and Marguerite Cleveland in memory of UTC graduate Jim Spencer, Mrs. Spencer's son and Mrs. Cleveland's nephew. Spencer was a Certified Public Accountant and master gardener. Award is made to students majoring in accounting on the basis of demonstrated financial need.

Dr. Roy Stinnett Memorial Scholarship: Established in 1994 by the Stinnett family as a memorial to Dr. Stinnett who was an assistant football coach and later dean of the College of Education and Applied Professional Studies at UTC. The scholarship is for students in the education program.

Judith Finley Stone Scholarship: Established in 2007 by the donor who is a graduate of the College of Business. She has served as a trustee and is the treasurer of the University of Chattanooga Foundation. Scholarships awarded to students who are residents of other countries.

Lillian Summers Scholarship: Established in 2003 with a bequest from the estate of Lillian Summers who dedicated her life to the American Red Cross serving in the Mediterranean Theatre of Operations in World War II. The scholarship is awarded to graduates of Chattanooga's Notre Dame High School.

Hannah T. Thomas Scholarship: Established in 2006 by the will of Amanda Ruff to carry the name of her sister Hannah Thomas. Awards are made based on academic performance and financial need.

Ann Timnon/Alpha Society Scholarship: Established to honor the memory of Ann Timnon who was a member of the Alpha Society. Award is made to students who are members of the Alpha Society.

Horace Traylor Scholarship: Established in 1988 to honor Dr. Horace Traylor, former president of Chattanooga City/Zion College at the time of the merger with UT and UC and the first minority graduate of UTC.

James Edward Walker Jr. Memorial Scholarship: Established through a charitable bequest from the estate of Sarah Burrell Walker, who died in 1994, in honor of her late husband. The award goes to students majoring in English or French.

Howard L. Westbrook Scholarship: Established in 1993 by alumnus Howard L. Westbrook of Fairhope, AL., Class of 1958, for students studying science or engineering.

Fred Westcott Scholarship: Established in 1985 as a result of a bequest from Mr. Fred Westcott, a pioneer in the Dalton, Georgia, carpet industry, for general scholarships.

Gertrude Jackson Witt Scholarship: Endowed in 1997 by a bequest from Gertrude Witt Hellman, Class of 1938. The award goes to students with demonstrated academic success and financial need with preference to single parents and students with siblings attending college.

UT Alumni Scholars

These scholarships are awarded by the UT Alumni Association, which also sponsors the:

Andrew D. Holt Scholarships: Established in 1971 by the UT National Alumni Association in honor of the late Dr. Andrew D. Holt, president of UT from 1959 to 1970. These awards are available on every UT campus. Eight UTC undergraduate students are allocated four-year Holt Scholarships annually based on academic merit. These are $5,000 annual awards.

UT Alumni Chapter Scholarships: One year $1000 award. UT Alumni Chapters win these scholarships for students from their respective chapters based upon the chapter's percentage of participation in the annual giving program.

Department Scholars

Department Scholars are those who receive prizes, grants, and scholarships associated with a particular department or academic program. All recipients are selected by the faculty of the given department, usually on the basis of demonstrated merit or talent.

Alstom Power Gear Up Scholarships: Established in 2001 by Alstom Power (formerly Combustion Engineering) for the Gear Up program's scholarships for African-American students at the middle and high school level who plan to major in engineering at UTC. Gear Up assists middle and high schools in Chattanooga's inner city by providing scholarship assistance at the college level before high school graduation.

Marvin L. Anthony Scholarship: Established in 1965 by Chicago banker, Marvin L. Anthony, a 1926 chemistry graduate and Phi Delta Sigma member, for students of business or chemistry.

Clayton Arnold Teacher Training Scholarships: Established in 1965 by Clayton Arnold, who served as postmaster at Thompson Station, Tennessee, for many years and had a strong interest in the education of teachers. Arnold, who died in 1987, gave the University gifts in excess of $1 million and felt that his gifts would do the most good if made for the training of teachers in public education. UTC receives a portion of the proceeds from the Arnold Endowment for students in the College of Education and Applied Professional Studies.
his children, Roland D. Carter, Jr. and Yvonne Carter Gardenhire, in memory of Gillie Queener Carter who taught in the Chattanooga public school system for many years, to be awarded to a student majoring in special education.

**Chattanooga Area Personnel Association/Dr. Dan A. Mack Scholarship:** Established by members of the Chattanooga Area Personnel Association, one half of the award goes to a graduate or undergraduate student majoring in human resource management in the College of Business Administration and one half to a graduate student in the industrial organizational psychology in the College of Arts and Sciences. The award in industrial organizational psychology was renamed in 2001 in memory of Dr. Dan Mack, a UTC graduate and faculty member recognized for outstanding performance in his short teaching career at the University.

**Dr. Elizabeth L. Dalton/Kappa Delta Pi Scholarship:** Established in 1996 by William J. Overend, representing the children of Dr. Dalton: Barbara Dalton Warner, David Landress Dalton, Anna Dalton Overend, and Robert Sethur Dalton, and other relatives, colleagues, and friends as a memorial to Elizabeth Dalton, who was a professor at UTC for 12 years, following a 30-year career as a teacher and administrator in the Chattanooga Public Schools. At UTC, she was named Alumni Distinguished Service Professor. She was an alumna of the University of Chattanooga and founding sponsor of Kappa Delta Pi at UTC. She died in 1996. The award goes to students who are declared majors in education who desire to become teachers.

**Harry B. Deuberry Physics Scholarship:** Established in 1985 by Deuberry, president of the class of 1930, to encourage physics majors in assisting faculty with projects.

**Glenn Draper Music Scholarship:** Established in 2002 by friends and colleagues in honor of Dr. Glenn Draper, retired University music professor and choral director whose choirs achieved international recognition through tour performances. The scholarship is for music majors.

**Edwin B. Duckett Memorial Scholarship:** Established in 2002 to honor the late Mr. Duckett, a University of Chattanooga engineering physics graduate and retired vice president of Combustion Engineering Inc. Preference is for engineering majors.

**Lillian B. Feinstein Art Scholarship:** Established in 1980 in honor of Lillian B. Feinstein, sculptor, patron of the arts, and longtime supporter of the Hunter Museum and the University Art Department. The scholarship is awarded annually to a student majoring in art.

**Stanton P. Fjeld Fund:** Established in 1996 by Ruth Fjeld in honor of Dr. Stanton Fjeld who was the Psychology Department Head and later a faculty member in Criminal Justice. Award is made to a full-time graduate student majoring in Criminal Justice with demonstrated successful academic performance.

Thomas and Louise Morris Garrison Scholarship: Established in 2002 by David Garrison, head of the UTC English Department, and their daughter-in-law Donna Barger to honor the Garrisons, who believed strongly in higher education. Mrs. Garrison was a longtime elementary school teacher in North Carolina, and Mr. Garrison was employed by American Enka Corp. Preference is given to English majors.

Thomas Geraghty Scholarship: Established in 1990 by friends and colleagues of Geraghty, who joined the faculty in 1960 as assistant professor of economics, later serving as director of the computer center and holding the Clark Chair of Economics when he retired. Preference for this scholarship is given students majoring in business.

Richard H. Ginn Scholarship: Established in 1996 by Ginn. Preference is given to College of Nursing majors.

Sharon Gilley Grant Memorial Scholarship: Established in 1984 by Claude and Mildred Gilley in memory of their daughter, an honor graduate of UTC. This scholarship is awarded on a competitive basis in either opera or voice.

Friends of Doug Griffith Scholarship: Established in 1985 by Wendell Burns and other friends and colleagues. The award is based on need with preference given to graphic design majors.

Nita T. and Irvine W. Grote Scholarships: Established in 1976 by the Chemistry Department in memory of Dr. and Mrs. Grote. Grote served as a distinguished member of the chemistry faculty from 1931-1969. Endowment income annually provides scholarships for 12 outstanding chemistry majors.

Matt Haase Memorial Art Scholarship: Established in 2002 by the family of student Matt Haase, who died suddenly while a student at UTC. Matt was a graduate of Notre Dame High School, a member of Pi Kappa Phi Fraternity, and active in many outdoor sports and activities. First consideration is given to rising sophomores majoring in art.

Wayne Hannah/Chattanooga Advertising Federation Scholarship in Graphic Design: Established in 1985 in memory of Wayne Hannah, a noted radio and television broadcaster in Chattanooga. The scholarship is awarded by the Art Department with the Chattanooga Advertising Federation to a student entering the sophomore year as a major in graphic design.

Arlie E. Herron Scholarship: An endowed scholarship for English majors established in 1999 to honor Arlie E. Herron, former professor and head of the Department of English. Herron, who retired in 1998 after 39 years at UTC, is an authority on East Indian culture and American Southern literature. He was instrumental in establishing the highly acclaimed Chattanooga Conference on Southern Literature.

Marjorie Fox Higdon Chemistry Scholarship: Established in 2001 by Marjorie Higdon to provide book stipends for Chemistry majors.

UTC History Department Scholarship: Established by Dr. Ronald Moore, Dr. James Ward, Dr. Larry Ingle, Dr. Russell Linnemann, Dr. Tyler Deierhoi, Dr. Richard Rice, Dr. James Russell, Dr. William Wright, and Elke Lawson, 1985-86 faculty members of the history department, to perpetuate the century of high standards of their discipline at this institution for history majors.

Hoover-Nofsinger Scholarship: Established in 1998 by Dr. Sara Hoover and Ms. Norma Nofsinger, adult students who wanted to assist other students majoring in geology. The award is based on successful academic performance and/or financial need.

Dr. Karel Hujer Scholarship: Established in 1990 through a bequest from the estate of Harriet Hunt Hujer in memory of her husband Dr. Karel Hujer, an internationally known astronomer on the faculty of UTC, for students majoring in astronomy, physics, or mathematics.

John W. Jayne Memorial Mathematics Award: Established in 1994 by family and colleagues in memory of Dr. John W. Jayne, a member of the Department of Mathematics for 22 years who died in 1993. The award is given each year to an outstanding sophomore mathematics student.

Clarence T. Jones Prize in Astronomy: Funded in 1989 through the estate of Arthur H. and Mary Louise Jones in honor of his father. The prize goes to an outstanding physics student who is a rising senior and has excelled in astronomy.

Mr. and Mrs. Paul J. Kinser Scholarship: Established in 1986 by Paul J. Kinser, University of Tennessee trustee, for juniors or seniors enrolled in the industrial engineering program with a 3.0 G.P.A. or better and with financial need.

Norbert Koch Scholarships: Two funds established in 1979 by gifts from former students, colleagues, and citizens of the Chattanooga community in honor of Dr. Norbert Koch, professor of engineering, on the occasion of his retirement after 32 years of dedicated service to the University to be awarded annually to a qualified and deserving engineering student.

Robert Lees Theatre Endowment: Established in 2006 by the estate of Robert Lees to provide scholarships to gifted and deserving students majoring in Theatre and Speech.

Joyce Litchford Scholarships: Established in 1976 by Dr. R. Gary Litchford, a member of the biology faculty, in memory of his wife, for scholarships to a senior premedical student and to a junior or senior member of the wrestling team.

Christine B. Little Nursing Scholarship: Established in 1997 by Mrs. Little, Class of 1982, who returned to school as an adult and received her nursing degree at age 57. Preference is given to adult junior and senior women returning to school to complete degree requirements in nursing.
Mr. and Mrs. Charles W. Loftin Scholarships: Established in 1983 by Amy Loftin in memory of her parents, Mr. and Mrs. Charles W. Loftin. The scholarships are awarded to outstanding students from the Department of Theatre and Speech.

Winston L. Massey Scholarship: Established in 1973 by the University of Chattanooga Foundation in honor of Massey, Guerry professor of mathematics, on the occasion of his retirement after 40 years of service to his alma mater, for an outstanding upperclassman majoring in mathematics.

Dr. William H. Masterson Memorial Scholarship: Established by the family of the eleventh president of the University of Chattanooga and first chancellor of UTC, this scholarship honors Dr. William H. Masterson who died March 3, 1983.


Amy Mildram Scholarship: Established for seniors in physical therapy in 1991 by friends and colleagues in honor of the widow of former UTC professor of philosophy and religion, Dr. Robert Mildram. Amy Mildram is a retired physical therapist with TC Thompson Children's Hospital and was an advocate of bringing a physical therapy program to UTC.

Burkett Miller Scholarships: Established in 1954 by a generous gift from Miller, a leading Chattanooga attorney and philanthropist, to aid needy and worthy students.

Miller/Schwartz Scholarship: Established in June 1991 by Eleanor Miller Schwartz, member of the Chancellor's Roundtable, and her husband, Dr. Harold Schwartz in honor of their parents, for students majoring in special education.

Paramedical Careers Scholarship of the Women's Auxiliary to the Chattanooga and Hamilton County Medical Society, Inc.: Endowed in 1987 after many years of annual funding, this scholarship provides financial assistance for students pursuing health-related careers.

Ruth Clark Perry Scholarship: Established in 1969 by Mrs. Leonora Miller Seids of Perry, Okla., in memory of her friend, UC dean of women from 1924 to 1943 and professor of mathematics from 1922 until her death in 1955, to be awarded to an upperclass woman majoring in mathematics.

Physical Therapy Scholarship: Established in 2000 by two anonymous alumni of UT Knoxville and Chattanooga and their daughter for the benefit of graduate students majoring in physical therapy.

Physical Therapy Alumni Scholarship: Established in 1994 by the faculty, friends, and alumni of the physical therapy program for students in the physical therapy program.

Chuck Pierce Scholarship: Established in 2000 by friends of the late Charles "Chuck" Pierce, son of Charles and Rickie Pierce, UTC alumni and active volunteers. Mr. Pierce served as Alumni Council president, and Mrs. Pierce was formerly on the faculty. Chuck was an outstanding Baylor School graduate and a Morehead Scholar at the University of North Carolina. His premature death occurred in 1999 at age 31. A sister, Lynne Pierce Mulligan, also survives him.

Oralia Preble-Niemi Foreign Language Scholarship: Established in 2003 by an anonymous donor to honor Dr. Preble-Niemi, professor and head of the Foreign Language and Literature Department at UTC. The scholarship is awarded to junior or higher students with preference given to non-native speakers of Spanish.

Murray Raney Chemistry Scholarship: Established in 1989 by W.R. Grace and Company in memory of Murray Raney, who died in 1966 and was a distinguished Chattanooga who gained worldwide fame among chemists for his invention of metal catalysts, the basis for the continuing activity of W.R. Grace and Company. To stimulate creative endeavors, this award goes to a chemistry major.

Dr. E. E. Reisman, Jr., Memorial Nursing Scholarship: Established in 1981 under the terms of the will of Dr. Reisman, well-known Chattanooga physician and longtime supporter of the University, and augmented at his death by a memorial gift from his family. The scholarship is to be awarded annually to an outstanding nursing student.

Arthur Rivituso Scholarship in Piano: Established in 1991 as a memorial to Arthur W. Rivituso, who retired and later died in 1991 after 22 years as a professor of piano and artist-in-residence, by his niece Carol Smith and other friends, colleagues and relatives for advanced piano students.

Dr. J. Eric Schonblom Scholarship: Established in 1997 by friends, colleagues, and family of Dr. Schonblom in honor of his retirement from the faculty of the College of Engineering and Computer Science. Dr. Schonblom held the title of UC Foundation Professor. The awards go to students majoring in engineering.

Edmonia J. Simmons Endowed Scholarship in Music: Established in 1991 by friends and colleagues of Mrs. Simmons, a distinguished musician and community leader, for music or music education majors with preference given to minority students.

Carol Smith Sanders Memorial Scholarship: Established in 1991 by friends, colleagues and family of Carol Smith Sanders, daughter of Judge Dixie Smith, '42, who earned her master's degree from UTC and at the time of her death was a behavior management specialist in Hamilton County Schools. This award goes to students in the master's program in special education.

Calvin U. Smith Jr./G. H. Miller Smith Scholarships: Established in 1965 by Mr. and Mrs. George Blackwell Smith in honor of their nephew, Calvin U. Smith, Jr. (1940-1963), and of their son, G.H.
Miller Smith (1921-1944), both gallant young Chattanoogans who died in the service of the armed forces the United States of America.

DeForest Spencer Scholarship: A 1915 graduate of the University of Chattanooga, DeForest Spencer established this scholarship endowment in 1986 to assist a needy student pursuing an undergraduate B.A. degree.

Peggy Stagmaier Art Award: Established in 2006 by UTC Art graduate Peggy Stagmaier. Academic performance and financial need are considered. Designated for educationally related expenses for deserving sophomores, juniors or seniors majoring in Art.

Iphigene Ochs Sulzberger Scholarship in American History: Funded in 1986 by Ruth Sulzberger Holmberg in honor of her mother, Iphigene Ochs Sulzberger, daughter of Adolph Ochs, former publisher of the Chattanooga Times and founder of the New York Times, provides scholarships for deserving full- or part-time students working toward a degree in American History or a related area.

Dr. Charles Robert Thomas Scholarship: Established under terms of the will of Dr. Thomas, well-loved Chattanooga physician who died in 1968, to assist needy students in pre-medicine.

Thomasson Premedical Scholarship: Established in 1979 by Mr. and Mrs. Eugene M. Thomasson to be awarded to a qualified and deserving undergraduate student who is pursuing premedical studies.

LaVerne Thompson Memorial Scholarship: Established in 1987 by Dr. Jack Thompson, professor and head of computer science, and his children in memory of his wife, a former UTC faculty member. Preference is given to female students majoring in computer science.

Marian Jones Tyte Scholarship: Marian Jones Tyte, a member of the Class of 1930 at the University of Chattanooga, had a strong interest as an undergraduate in theater and English. Her husband, The Rev. Wilbur H. Tyte, established the scholarship fund in his wife’s memory, to make it possible for an undergraduate or graduate student to complete a degree in either English or theater.

Van Henderson Journalism and Mass Communication Scholarship: Established in 2000 by members of the Chattanooga Press Association to honor the late Van Henderson, longtime Chattanooga newspaperman. Preference is given to junior and senior students majoring in communication and working toward careers in newspaper or magazine journalism.

Andy Walker, Jr., Award: Established in 2005 by the Walker family. The late Andy Walker, Jr. graduated from the University of Chattanooga in 1957. The award is made to an outstanding senior student in Finance.

James G. Ware Mathematics Education Award: Established in 1994 by Dr. James G. Ware, faculty member of the Department of Mathematics for 30 years, 22 of which were as head of the department, upon the occasion of his retirement

Jill Wheeler Memorial Scholarship: Established as a memorial to Jill Wheeler, UTC School of Nursing class of 1979, who was killed in an automobile accident in 1980. This endowment is funded by Jill’s parents, Mr. and Mrs. Jack M. Wheeler, and other friends and colleagues. The award goes to a senior nursing student.

Barbara and David Young III Endowment Fund: Established in 2004 by the Youngs. David Young is a 1979 graduate of UTC. The award is designated for full-time undergraduate or graduate accounting majors with a minimum 3.0 GPA. Preference given to students who are and will continue to be active contributors to civic and/or charitable causes and extracurricular activities at UTC.

Sally Young Scholarship: Established 2001 by Larry Young to memorialize his late wife, Sally Young, who was a UTC English professor. Awards consider academic performance and financial need and are made to a junior, senior, or graduate students majoring in English.

Special Qualification Scholars
Listed here are scholarships awarded by the University to students with special qualifications. These awards are typically given to those who live in a specific area, belong to a minority group, or are the children of the employees of a particular company.

Jimmy Jackson Memorial Scholarship
Established in 1995 by members of the UTC Alumni Council, other alumni, and friends of the University. The scholarship is awarded to a junior or senior who holds a 3.0 GPA and has demonstrated commitment to community or University service. Preference may be given to the dependent child of a UTC graduate.

James William (Bill) Barker Scholarship: Established in 1960 by friends of fraternity brothers of the Pi Kappa Alpha.

Alvin G. and Sally M. Beaman Scholarships: Established in 1990 by the Beamans, Nashvillians representing the Beaman Companies, at three UT campuses: Chattanooga, Knoxville, and Martin. Preference is given to the children or grandchildren of Beaman Bottling Company or Shelbyville Bottling employees or former employees. Awards are based on academic achievement and financial need.

M. W. Brabham Scholarship: Established in 1963 by the Brabham-Martin Bible Class of the Centenary Methodist Church in memory of its esteemed member, the longtime executive secretary of the Chattanooga Community Chest.

David M. Brammer Memorial Scholarship: Established in the name of the Sigma Chi fraternity brother who died in 1983, this scholarship was established with the contributions of friends and family and is available to any Sigma Chi fraternity member who holds a 3.0 GPA and who gives sufficient service to the local fraternity.
Miriam Ash Brown Memorial Scholarship: Established in 1997 by the estate of Miriam Ash Brown in honor of her grandchildren: Matthew Harrison Brown, Benton Andrew Savage, Louise Brown Botts, and Emily Lane Savage. Mrs. Brown's husband, Kenneth H. Brown, served on the UT Development Council, and a daughter and son-in-law were graduates. Kenneth Brown and his father founded Brown Stove Works, Inc. The award goes to juniors in the College of Business at either the Chattanooga or Knoxville campus who are residents of Bradley County and who have transferred from Cleveland State Community College, where the Browns' son-in-law was a member of the original faculty in business.


Brown Stove Works Inc. Scholarships: Established in 1997 by Brown Stove Works, Inc., of Cleveland in honor of its employees and in appreciation for their efforts in making these awards possible. The awards give first preference to employees and their descendants or transfer students from Cleveland State Community College and then residents of Bradley County, followed by Meigs, Polk, or McMinn counties.

Lebron Carver Memorial Scholarship: Established in 2007 with a bequest from the estate of Lebron Carver, a 1950 Alumnus. Scholarship awarded to students majoring in geology.

Woodrow and Margaret Catherman Scholarship: Established in 1990 from the estate of Woodrow Catherman. Awards are made to students from the Chattanooga, Knoxville, and Martin campuses who are graduates from a Sevier County, Tennessee, high school along with demonstrated successful academic performance and/or financial need.

Louise G. Currey Environmental Studies Scholarship: Established in 1990 by her children, Bradley Currey Jr., Louise Nicholls, Frederick Currey, Hal Currey and Robert Currey, and other friends and family. Mrs. Currey was one of the founders and a life trustee of the Nature Conservancy.

John B. and Becky R. Dethero Scholarship: Established in 1989 by Dethero, class of 1962, and his wife in their desire to provide educational opportunities to needy students. Preference is given to students who have participated in Career Beginnings at UTC.

Thomas O. Duff Scholarship: Established in 1956 by Thomas Duff, business and civic leader and patron and trustee of the University, to be augmented at his death by gifts from family and friends. Preference is to be given to students with learning disabilities.

Executive Women International (ASIST)/Jean Bradford Memorial Scholarship: Established in 1996 by the Chattanooga Chapter of Executive Women International (ASIST) in memory of former member Jean (Mrs. James) Bradford, who at the time of her death in December 1995 was the administrative aide of Chancellor Frederick W. Obear, this award assists women, particularly displaced homemakers and single mothers, returning to school in order to enhance their career opportunities.

Falk, Traylor, and Davis (FTD) Minority Scholarship: Established in 1993 by Grover Davis, a former board member and alumnus of Chattanooga City College, in honor of Dr. Horace Traylor, president of Chattanooga City/Zion College at the time of the merger with UT and UC and the first minority graduate of UTC, and the late Mary Weidner Falk, one of the founders of Zion College, where she served as registrar and business manager. Preference for the award is given to minority students who accept a moral obligation to repay the award to the endowment.

Fincannon Scholarship: Established in 1984 by Al Fincannon, this scholarship is awarded upon the recommendation of the UTC Scholarship Committee with preference given to widowed or previously married women.

W. Max and Margaret Finley Scholarship: UC alumnus W. Max Finley and his wife Margaret established this fund in 1986 for the benefit of adult students entering or reentering college as full- or part-time students working toward either undergraduate or graduate degrees. Preference is given to single parents, female students, students with declared majors in business, and students from Hamilton County and the greater Chattanooga area, including Georgia and northeast Alabama.

Asa Van Frazier Memorial Scholarship: Established in 1993 by Pauline W. Frazier and William Frazier in memory of their husband and father, who spent 37 years in the teaching profession in Hamilton County, and retired in 1975 as principal of Lakeside Elementary. Preference is given to students who are interested in teaching and who attend St. James A.M.E. Church.


Eleanor M. Hodges Scholarship: Established in 1988 by the president and secretary of Lawson Electric, Walter P. Hodges, in honor of his wife, Eleanor. The Hodgeses are parents of a 1978 UTC graduate. All other qualifications and considerations, including academic and financial, being equal, first consideration for this award is given to graduates of East Ridge High School.

Ida Mae "Dutch" Holland Scholarship: Originally begun by John H. "Hank" May and Josten's of Takoma Park, Md., in 1980, this scholarship was endowed in 1993 by members and friends of the Lambda Chi Alpha Fraternity Alumni Chapter in honor of the Zeta Phi Zeta Chapter housemother for 35 years. The award is given to active members of the UTC chapter based on scholarship and need.
John Earlon Kerr Scholarship: Established in 1959 with a bequest from Lillian Webb Kerr, longtime East Lake Grammar School teacher, in memory of her son, a student at Vanderbilt University at the time of his death in 1915.

Leba and Moses Lebovitz Scholarship: Established in 1989 by Moses Lebovitz, UC Class of '28, charter member of the UC Foundation, and chairman of the board of CBL, Inc., one of the largest developers of shopping centers in the United States, with preference given to Jewish students. Enhanced in 1994 to include extra provision for exchange of students between UTC and the University of Haifa, Israel.

Lookout Post 1289 Veterans of Foreign Wars Scholarship: Endowed in 1986 by the Lookout Post 1289, Veterans of Foreign Wars, this scholarship is intended primarily for veterans returning to school, students in the ROTC program, or students whose patriotism is strong.

Jack C. Marcellis Civil Engineering Scholarship: Established in 2003 by Nancy Wofford Marcellis in honor of her husband. Award is designated for a full time junior or senior with a minimum 3.0 GPA in the Civil Engineering Program.

Dr. Littleton H. Mason Memorial Scholarship: Established in 1989 by his widow, Ruth, and other friends in memory of Mason, assistant dean of students. Preference is given to minority students from low income families from Memphis.

Billy C. Perry, Jr., Memorial Scholarship: Established in 1990 by Billy Perry's fellow UTC cheerleading squad members and advisor Betty Tucker, this scholarship is given to entering freshmen who have been high school cheerleaders or team managers.

Sports Barn, Inc./Alex Guerry Memorial Scholarships: Established in 1991 by the stockholders and directors of the Sports Barn, Inc., to honor the founder and president of the Sports Barn, Inc., with preference given to students who are employees of the Sports Barn.

Mary Stanfill Home Economics 4-H Scholarship: Established in 1996 with a bequest from Ms. Stanfill, extension home economics agent in Centerville, TN, this award is given to home economics or human ecology majors at any of the UT campuses on the basis of academic achievement, leadership, and participation in 4-H Club activities and 4-H home economics projects.

Cerasi Temple Scholarship: Established in 2004 by Mike and Lynn Temple, a 1985 (B.S) and a 1988 (MBA) graduate of UTC, this award is designated for non-traditional students with a minimum 2.5 GPA, financial need, and who attended Hamilton County schools or lived in the Chattanooga area at least five years.

Wheland Foundry Environment Scholarship: Established in 1995 by Wheland Foundry for graduates of Chattanooga's Howard High School of Academics & Technology who major in environmental studies.

Earl and Rema (“Jackie”) Wright Scholarship: Established in 2006 to assist deserving full- or part-time adult students who are participants in the Educational Opportunity Center (EOC) program and/or the Adult Services Center and are working toward an undergraduate or graduate degree. These students are low income and are the first in their families to attend college. Participants reside in Hamilton, Marion and Sequatchie counties in Tennessee and Walker, Dade and Catoosa counties in Georgia.
Introduction
Students who are Tennessee residents pay maintenance fees to enroll in courses at UTC. Out-of-state students pay these fees in addition to a tuition charge. A student’s residential status is determined during the application and admission process, and this status, in most cases, is determined by residence of the student’s parent, parents, or legal guardian. Additional information regarding residency classification for the University of Tennessee system is available online at http://registrar.tennessee.edu/residency/resguide.shtml. For residency appeals, students should refer to the Admissions chapter of this catalog.

This chapter describes all financial charges, including student fees. The University of Tennessee Board of Trustees establishes all student fees and may change these without notice.

MOCS Express Statement
The Mocs Express statement combines fees, charges, fines and credits into one invoice. The University mails MOCS Express statements to students who register during the Priority Registration period. Students may access their MOCS EXPRESS STATEMENT online at www.utc.edu, click on “STUDENT INFORMATION” then “MY MOCS EXPRESS STATEMENT”. Students with a credit or a zero balance may confirm classes or pay fees at this site. Payments are also accepted by phone, mail, in person or with MasterCard and Visa at www.utc.edu, click on “MONEY MATTERS,” “PAY FEES,” and then “PAY FEES ONLINE.” Previous outstanding charges must be paid in order to confirm classes.

Cancellation for Non-Payment
Failure to pay fees or set confirmation of attendance with the Bursar’s Office by the published deadline results in automatic cancellation from all classes. This policy applies to all students, regardless of sources of funds, and includes those whose fees are billed, deferred, waived, or paid with personal funds, including financial aid and graduate assistantships. All students withdrawn from classes for non-payment or non-confirmation must re-register for classes and pay all appropriate fees, including late fees.

There is only one cancellation date each semester. Students who register after the cancellation date must pay all fees and risk receiving failing grades for all classes not dropped prior to the first day of classes in the semester. The deadlines for the 2009-2010 academic year are:
For fall 2009, the deadline is 5 p.m. on August 6, 2009;
For spring 2010, the deadline is 5 p.m. on December 11, 2009.

Prepayment Plan
Under the prepayment plan, students and/or parents may choose the academic year expenses they wish to prepay, including room, board, tuition, fees, and books, over a period of eight months, with the first installment due by May 10. The remaining seven monthly installments are payable on the tenth day of each succeeding month. Contact the Bursar’s Office for details. Phone: (423) 425-4781.

Deferred Payment Plan
A student who is in good financial standing with the University and has an anticipated source of funds may defer up to 50 percent of fees. A $10 extension fee and at least 50 percent of fees are due by the deadline date. The balance will be payable on the 45th calendar day of the term. Students must pay an additional $50 if the installment is not paid on or before the due date. Financial aid recipients must first apply their aid toward payment of fees, regardless of source of funds. This plan is not offered for the summer terms.

Refund Policy
General Refund Information
All refund periods are based on the official first day of classes for the University, as published in the Catalog and on the UTC website. Students must officially withdraw from courses to be eligible for potential refunds. No refund is due unless the charge for the remaining courses, plus the percentage charge for the courses dropped, is less than the maximum semester charge for tuition and maintenance fees.

All charges and refunds will be made to the nearest even dollar. All charges are subject to subsequent audit and verification. Errors will be corrected by appropriate additional charges or refunds.
Students who owe additional fees or fines will receive a statement of their accounts approximately six weeks after the beginning of the semester except summer.

Fall and Spring Semesters

<table>
<thead>
<tr>
<th></th>
<th>Drop* Charge</th>
<th>Drop* Refund</th>
<th>Withdrawal* Charge</th>
<th>Withdrawal* Refund</th>
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<tr>
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<td>100%</td>
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<td>10%</td>
<td>90%</td>
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<td>8-14 calendar days</td>
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<td>80%</td>
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<td>80%</td>
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<tr>
<td>15-21 calendar days</td>
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<tr>
<td>29 or more calendar days</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Drop - Courses dropped which do not result in complete withdrawal.

**Withdrawal - Complete withdrawal from all classes.

***Note: Only seven calendar days to drop with no charge.

Tuition and Maintenance Fees

The following fees were accurate for the 2008-09 academic year. Fees for academic year 2009-2010 were not yet set at the printing of this catalog. When new fees are set, they are available online at www.utc.edu/Administration/Bursar/fees.

In-state undergraduate/special student maintenance fees

Per Semester Hour $176
Maximum Charge $2,105

In-state graduate student maintenance fees

Per Semester Hour $281
Maximum Charge $2,525

Out-of-state undergraduate/special student tuition/maintenance fees

Per Semester Hour $616
Maximum Charge $7,385

Out-of-state graduate student tuition/maintenance fees

Per Semester Hour $867
Maximum Charge $7,805

Debt Service Fee

All students registered will be assessed a debt service fee.
Per Semester Hour $13
Maximum Charge $150

Program and Service Fee

All students registered will be assessed a program and service fee.
Per Semester Hour $8
Maximum Charge $95

Technology Fee

All students registered will be assessed a technology fee.
Per Semester Hour $12
Maximum Charge $100

Facilities Fee

All students registered will be assessed a facilities fee.
Per Semester $50

Athletic Fee

All students registered will be assessed an athletic fee.
Per Semester Hour $10
Maximum Charge $120

Wellness Fee

All students registered will be assessed a wellness fee.
Per Semester $25

Green Fee

All students registered will be assessed a green fee.
Per Semester $10

Late Fees

All students who register after the first official day of classes must pay a $50 late fee. All students with an accounts receivable balance 45 days into a term must pay a $50 late fee.

Fees for Audit Courses

Fees for auditing courses are the same as those for courses taken for credit. Auditors do not take examinations, receive credit or grades, and may or may not participate in the class activities as determined by the instructor.

Senior Citizens

Tennessee residents who become 65 years of age or older during the academic semester when they begin classes and who meet admission requirements may enroll for credit for a fee of $7.00 per semester hour to a maximum of $70 per semester.

Tennessee residents who become 60 years of age or older during the academic semester when they begin classes may audit classes on a "space available" basis at the University without paying a fee.

For fee information, call the Bursar's Office at (423) 425-4781.

Disabled Residents

Tennessee residents who are physician-certified with 100 percent total disability and meet admission requirements may enroll for credit for a fee of $7.00 per semester hour to a maximum of $70 per semester.

Tennessee residents who are physician-certified with 100 percent total disability may audit classes on a "space available" basis at the University without paying a fee.

For fee information call the Bursar's Office at (423) 425-4781.
Laboratory/Studio Fee
All students registered in certain laboratory or studio courses will be assessed a fee.
Per Course $25

Listener's Fee
Tennessee residents considering entering or returning to the University may "listen" in academic courses for a fee of $10 per course without additional obligations. Participation in this program is limited to two courses per semester for a maximum of two semesters. Only individuals who have not received a baccalaureate degree and who have not had any college courses in the previous five years may participate. For more information call the Bursar's Office at (423) 425-4781.

Music Fee
In addition to the credit hour rate, a music fee is assessed for instructional courses. The fee is due at the regular fee payment dates. The fees are:
Per one-half hour instruction $60
Per one hour instruction $120

Returned Check Charge
Any checks received by the University which fail to clear the bank will incur a service charge of $30. In addition to the service charge, a check written to cover tuition, dorm, and fees which fails to clear the bank will incur the appropriate late fee in effect at the time the student redeems the check. Check writing privileges will be revoked for those students writing three or more returned checks to the University.

Housing
Room rents vary per semester according to the accommodations available. A $25 nonrefundable housing application fee is required from students applying for housing. In addition, a $225 advance payment is required for fall semester. Fees not paid on regular fee payment dates will result in the loss of room assignment.

Dining Plans
All campus residents are required to participate during the fall and spring semesters in a dining membership plan regardless of whether or not they are currently enrolled in class. For complete information regarding available plans, contact Food Services at 425-4200 or visit Dining Services online at www.campusdish.com/en-us/CSS/UnivTennChat.

Orientation Fee
All freshmen must attend one orientation session. Parents may also attend an optional orientation. The fees for these orientation sessions are:
One Student $65
One Student and one parent $95
One Student and two parents $125

Parking
General parking decal (full year) $92
Reserved parking decal (per semester) $82
Reserved parking decal (summer) $56
Reserved parking decal (full year) $220
24 Hour Reserved parking decal (per semester) $92
24 Hour Reserved parking decal (summer) $62
24 Hour Reserved parking decal (full year) $246
UTC Place Parking (per semester) $200
UTC Place Parking (summer) $150
UTC Place Parking (full year) $550

Additional information about parking, including campus maps, parking regulations, the Mocs Express Shuttle schedule, and more, is available online at: www.utc.edu/Administration/ParkingServices.

Credit by Special Examination Fees
Payable for each proficiency or validation examination.
Undergraduate $64 per credit hour
Graduate $102 per credit hour

If You Owe the University Money
Holds are financial obligations to the University (library fines, old UC/UTC loans, parking fines, returned checks, accounts receivable, etc.) that the student must pay prior to registering for courses. Students may not register if there is a monetary hold in the account. In addition, students who incur financial obligations after registration must pay the charges by the cancellation deadline.

Unless the student officially drops a course or withdraws from the University, he or she must pay a percentage of the fees and tuition as listed on the MocsNet statement prior to the first official day of classes. Failure to attend classes is not evidence of the student's intention to drop the course or withdraw from the University.

According to Tennessee law, the University cannot release student transcripts if the student has a financial obligation to the University.
Student Services and Resources

Americans with Disabilities Act (ADA) and Disability Services
The University of Tennessee at Chattanooga is committed to complying with the Americans with Disabilities Act and assuring that no qualified individual is, by reason of disability, excluded from participation in or denied the benefits of any services, programs, or activities provided by the University.

The Office for Students with Disabilities (OSD) reviews each student's documentation under the guidelines of the Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973. ADA mandates that accommodations and adjustments be made in programs and activities in order to provide equal access to qualified persons with disabilities. OSD examines the documentation of each student's disability to protect the civil rights of the student. Individual determination of appropriate and reasonable accommodations is made specific to the functional limitations of the disability.

For more information, students are encouraged to contact OSD located at 110 Frist Hall or to call (423) 425-4006.

Advisement Center
Located in room 361 of the University Center, the staff of the Advisement Office help students in their academic growth and adjustment to university life. The staff provide academic advising and registration services for students who have not declared a major. In addition to course selection and registration, the staff provide students with information regarding student support services.

Adult Services
The Adult Services Center, located in 361 University Center, is open from 11 a.m. to 7 p.m. Monday through Thursday, 11 a.m. to 5 p.m. on Friday, and 10 a.m. to noon on Saturday for the convenience of UTC's non-traditional students. The Center provides individualized advisement, registration, fee collection, and other University services for non-traditional students.

Students who have received one bachelor's degree and desire to pursue a second bachelor's degree should apply for admission as post-baccalaureate students through the Adult Services Center. The admission process and evaluation of transcripts for those students are carried out in the Center. Questions regarding the pursuit of a second bachelor's degree should be directed to the Director of the Adult Services Center at (423) 425-4485.

Tutoring assistance is available in many 100- and 200-level courses in the Adult Services Center in the afternoon or early evening hours during the fall and spring semesters. Workshops and seminars related to educational opportunities and transitions are conducted for individuals who are currently enrolled or who are interested in either entering or returning to college.

Bookstore
The University Bookstore, located on the first floor of the University Center, is operated by Barnes & Noble College Bookstores. The Bookstore offers new and used textbooks, course packages, reference materials, and required supplies for classes. The UTC Bookstore also carries imprinted clothing, greeting cards, imprinted novelties and snacks. The general reference and reading area carries over 3,000 titles, including national bestsellers, that students and faculty can enjoy while relaxing in the cyber cafe with internet access.

Services provided include daily book buyback year round; prices are higher at the end of each semester during final exams week and fluctuate depending upon inventory needs of the bookstore for next semester. Books are bought at wholesale prices all other times during the semester. The bookstore is the official retailer for University graduation regalia (cap, gown, invitations, and class rings). Academically-priced computer software can be purchased by special order. Student pricing on Dell computers and online textbook ordering can be accessed through the bookstore at www.utc.bkstore.com. The Bookstore accepts MasterCard, Visa, American Express, Discover Card, Barnes & Noble gift cards, and the UTC Mocs Card. For more information, please contact the Bookstore at (423) 425-4107 or email bookstore@utc.edu.

Bus System (Mocs Express Shuttle)
In partnership with CARTA, Chattanooga's public transit provider, the Mocs Express Shuttle transports students around campus and to perimeter parking free. Additionally, a validated UTC ID card gains unlimited free access to downtown, Hamilton Place, Northgate and other CARTA routes. All Mocs Express Shuttle buses are wheelchair accessible. Call 425-4051 or 629-1473 for details. **Hours of Operation:** Every 6 minutes, 7:30 a.m. - 5:30 p.m. on class, reading and exam days during the Fall and Spring Semesters. For additional information on the shuttle, visit: www.utc.edu/Administration/ParkingServices.
Check Cashing Service
The Bursar's Office provides a check cashing service for up to $50 for students, staff, and faculty. (Only one check per person, per day may be cashed.) A validated UTC ID, or a current fee paid receipt and a valid driver's license, must be presented along with checks.

Copy and Mail Services
IKON manages the Copying/Printing Services and Mail Services throughout the University. Mail and copy services are located in the Administrative Building, 400 Palmetto St., Room 208, with a satellite center located on the first floor of the Lupton Library. UTC Graphics Services and Mail Services are open Monday through Friday, 7 a.m. to 6 p.m. Satellite copiers are located throughout the University.

Mail services include faculty, staff, and student mail pickup and delivery Monday through Friday as well as pickup and delivery of print jobs. The following services are available: fax service, overnight mail service, copying, color copies, booklet making, copy paper delivery, and special projects. Assistance for services can be obtained by contacting:

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<thead>
<tr>
<th>Service</th>
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</thead>
<tbody>
<tr>
<td>Lupton Library Graphics Center</td>
<td>(423) 425-1708</td>
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<tr>
<td>Lupton Library Graphics Center by fax</td>
<td>(423) 425-2226</td>
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<tr>
<td>Graphic Services Help Desk</td>
<td>(423) 425-4092</td>
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<tr>
<td>Graphic Services by fax</td>
<td>(423) 425-3349</td>
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<tr>
<td>Mail Services</td>
<td>(423) 421-4137</td>
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Computer Network and Acceptable Use Practices: Privileges and Responsibilities
Students are expected to read, understand, and follow UTC's "Acceptable Use Practices" policy. The following is not an all-inclusive list but rather a summary of common examples. The full description of Acceptable Use Practices for UTC is available online at: www.utc.edu/Administration/WalkerTeaching ResourceCenter/AUP/

- Disrupting network access for others, whether deliberately or unintentionally. Examples: infected computers flooding the network with spam or viruses, P2P file-sharing applications that consume more than a fair share of network resources, improperly configured network devices.
- Using technology resources to violate any State or federal law including copyright and license agreements. Examples: illegally downloading, storing, and/or sharing copyrighted materials, viewing child pornography, theft of confidential information.
- Transmitting abusive, threatening, or harassing messages, chain letters, spam, or other communications prohibited by law or University policy.
- Unauthorized attempts to scan or gain access to systems, accounts, network traffic or information not intended for you.

Violations may result in termination of access, disciplinary review, expulsion, and possible legal action. If you receive notice of an AUP violation, follow the instructions in the notice or contact the Computer Help Desk at 425-4000 as soon as possible.

Safe Computing
Students are advised to keep computers safe from viruses and spyware by following these guidelines.

- Keep Windows updated by visiting windowsupdate.microsoft.com
- Have an up-to-date antivirus.
- Be careful where you click. Never open e-mail attachments you weren't expecting. Don't click on pop-up ads or install things you don't really need.
- Run spyware removers/blockers regularly.
- Avoid P2P file sharing. Almost all "free" music and file-sharing applications install spyware and viruses.
- Be careful who you let use your computer. Roommates, friends, and relatives may click or install things they should not.
- Don't share your usernames or passwords with anyone.

Students who believe their computer is infected may call the Help Desk at 425-4000 for assistance. If necessary, students may opt to make an appointment to bring PCs to the Help Desk in the UC Computer Lab where staff members will guide users through the reformat or disinfection process. Students should plan to be present with the computer and be an active participant in the process, which typically takes around two hours.

Continuing Education
The Division of Continuing Education and Public Service provides high quality, lifelong learning opportunities to individuals seeking personal growth or professional development programs, workshops, certificates, and/or college degrees to students who are located off-campus. Detailed information on Continuing Education and its programs is available online at www.utc.edu/ContinuingEducation.

Off-campus and Distance Learning Credit Courses
To meet the needs of individuals who wish to complete degree programs at off-campus locations, balanced schedules of credit offerings are presented at numerous locations including Cleveland, Knoxville and Chattanooga. Instruction includes both on-site and distance learning via real-time, two-way interactive telecourses, and online delivery via the Internet. Persons interested in receiving off-campus instruction should contact the Division of Continuing Education for further information at (423) 425-4344.

Professional Development
To meet the needs of individuals and groups seeking professional development learning experiences, the division offers a variety of professional development programs in both public and customized formats. The professional development programs carry Continuing Education Units (CEUs), and the Division maintains individual transcripts and issues certificates.
Community Outreach
To extend University resources to the community, the Division offers personal development programs for all ages, including Youth University, Elderscholars, and courses in art, literature, foreign languages, recreation, money management, and many other areas.

The Division coordinates the admission and advisement of local high school students participating in the Tennessee Dual Enrollment program. For more information, call (423) 425-4444 and ask about our Dual Enrollment program.

Meeting Management and Video Production
This service offers a top quality learning environment and a wide variety of program planning and implementation services.

- Fifteen+ meeting rooms with seating from 10 to 450
- Flexible seating arrangements
- Event/conference management services
- Teleconferencing and satellite downlink
- Catering services to meet all your needs
- Registration services
- Video production services

Cooperative Education Internships
The Cooperative Education Program provides students with an opportunity to: (1) explore career goals while working with skilled and knowledgeable professionals, (2) enhance employment opportunities at graduation by providing career-related work experience while students are still in college, (3) help defray college expenses, and (4) gain college credit (in some departments). Co-op students work with such diverse and innovative companies as Alco Chemical, Decosimo CPA, Evergreen Financial Services, Microsoft, TVA, Merck, NASA, and Shaw Industries, as well as a number of local and regional firms who have developed Co-op Education programs.

Cooperative Education is an optional educational program that combines a student’s academic study and paid major-related work experience. The UTC Office of Cooperative Education offers three basic modes of student participation: (1) alternating Co-op, (2) parallel Co-op, and (3) the internship. The two Co-op plans offer students the opportunity to work multi-semesters. Students choosing the alternating plan alternate semesters of full-time study with semesters of full-time work. The parallel plan allows students to attend classes while working with local employers for up to 25 hours a week. The Co-op Office also works with students to help find full-time or part-time summer paid internships.

To be eligible, students must (1) be enrolled at UTC, (2) have completed freshman course requirements in their major, and (3) have a institutional cumulative GPA of 2.50 (2.75 for business majors). After placement, students must maintain a 2.0 GPA, complete all assigned work periods, and register for a non-credit class that certifies them as a UTC co-op student. The program is offered to students in all UTC curricula. For more information, contact the Co-op Office, 326 University Center, (423) 425-4735, or check out our website: www.utc.edu/Administration/CooperativeEducation.

Counseling Center
The Counseling and Career Planning Center offers a variety of services to students. These services include personal, vocational, academic counseling, and crisis intervention for individuals and groups. Consultation services, workshops and other programs are developed and available for the University community.

The staff or the Center includes professionally trained counselors and a psychologist who have achieved appropriate certification and/or licensure at the state and national levels. Graduate students work under the supervision of the Center’s professional staff, and are given responsibilities commensurate with their training.

Issues for which students receive counseling include finding a major, relationship difficulties, roommate issues, difficulty in classes, adjusting to college, family issues, depression, anxiety, and other mental health concerns. Students may walk into the Center for their first appointment during the hours of 9:00 a.m. to Noon, and 1:00 p.m. to 3:30 p.m., Monday through Friday. If a student is experiencing a crisis or emergency, he or she may be seen at any time during business hours, or after hours call campus security to reach the counselor on call.

Services of the Counseling and Career Planning Center are confidential. The services are free to students with the exception of career, learning, or mental health assessment instruments. The need for such assessments may be discussed with a counselor during the first visit. Students may contact the Center by phone at (423) 425-4438, or come to the Center in room 338 of the University Center.

Dining Services
UTC is pleased to offer a palate-pleasing menu covering a wide range of tastes. Offerings include home cooked food, gourmet and classic sandwiches, pizza, a large variety of salad options, grilled foods, pasta, wraps, soups, pastries, gourmet coffee and more. Subway, Quizno’s and Chick-Fil-A are also available.

The University Center food court located in the new University Center is open for breakfast, lunch and dinner seven days a week when school is in session. Campus Crossroads, located next the the UTC Lupton Library, is open for lunch and late evening hours during the week. Java City, located in Fletcher Hall, offers gourmet coffee, smoothies and pastries. Convenience stores are located at UTC Place and in the University Center.

Aramark Campus Services manages the food services on UTC’s campus. Aramark operates facilities in various locations with a variety of hours on the campus. Multiple meal membership plans are available. Individuals living in campus housing are required to participate in a minimum meal membership plan. For more information please contact Aramark at (423) 425-4200.

Email
The University of Tennessee at Chattanooga adopts email as an official means of communication with students.

Each student, upon enrolling, is issued a UTC email account with an address on the utc.edu domain. This is the account used for University business and official University communications to students. Students are expected to regularly check their UTC accounts for University communications. Students may use the UTC account for personal communication at their discretion.
UTC accounts remain the property of the State of Tennessee. The University reserves the right to disable accounts after graduation or other severance from the University.

The expanding reliance on electronic communication among students, faculty, staff, and administration at UTC is motivated by the convenience, speed, cost-effectiveness, and environmental advantages of using email rather than printed communication. Because of this increasing reliance and acceptance of electronic communication, email is considered an official means for communication.

Implementation of these guidelines ensures that students have access to this critical form of communication. These guidelines seek to ensure that all students can access email as the need arises.

These student email guidelines regard the following aspects of email as an official means of communication: University use of email; assignment of student email addresses; and student use of and responsibilities associated with UTC email.

1. University use of email
   Email is an official means for communication within UTC. Some communications may only be made by email. Therefore, the University has the right to send communications to all students via email and the right to expect that those communications will be received and read in a timely fashion.

2. Assignment of student email addresses
   UTC will assign all students an official University email address. It is to this official address that the University will send email communications; this official address will be the address listed in the University’s records database for that student.

3. Expectations regarding student use of email
   Students are expected to check their official email address on a frequent and consistent basis in order to stay current with University communications. The University provides a limited amount of storage space so students are expected to manage (read, delete, file, etc.) their accounts accordingly. The campus recommends checking email several times a week at a minimum, in recognition that certain communications may be time-critical.

4. Educational uses of email
   Faculty expect that students’ official email addresses are being accessed, and faculty may use email for their courses accordingly. Faculty members determine how email will be used in their classes. Faculty may have email requirements and expectations that they specify in the course syllabus.

5. Appropriate use of student email
   Email is not appropriate for transmitting sensitive or confidential information. All use of email will be consistent with the Administrative Guidelines Statement on Use of Electronic Email and UTC’s Acceptable Use Practices. Confidentiality regarding student records is protected under the Family Educational Rights and Privacy Act of 1974 (FERPA). All University use of email will be consistent with FERPA guidelines.

The Office of the Assistant Vice Chancellor for Information Technology will review these guidelines as needed. Changes will be authorized by the approval of the Information Technology Coordinating Council and the Chancellor’s Executive Council. Students with questions or comments about these guidelines should contact the UTC Help Desk at (423) 425-4000.

Exchange Programs
The University offers a wide range of opportunities for students to study abroad while earning academic credit. Through the University’s membership in the International Student Exchange Program (ISEP) and the Council on International Educational Exchange (CIEE), UTC students may participate in special exchange programs of a semester or more throughout the world. UTC’s membership in the Cooperative Center for Study Abroad (CCSA) allows our students to study in countries where the English language is dominantly spoken: Australia, Belize, England, Ireland, Kenya, Scotland, South Africa and New Zealand. Classes in CCSA are taught by UTC faculty and faculty from other CCSA member colleges and universities. UTC also offers students several exchange opportunities with foreign universities who have signed a bilateral exchange agreement with UTC, including Masaryk University in Brno, Czech Republic; Haifa University in Israel; Lulea University in Sweden; Kangnung National University in South Korea; and Nagoya University of Foreign Studies in Japan. Many students have also found programs outside of UTC’s consortium agreements in which to participate and have been to Madagascar, China, Costa Rica, Italy, Morocco, Slovenia, Argentina, Spain and many other countries.

Students will be required to register for a non-credit class that certifies them as participants in the UTC Study Abroad program. There is a placement fee required of all students who plan to study abroad. Interested students should contact UTC’s Office of International Exchange Programs by visiting 326 University Center, or calling (423) 425-4735.

Normally, nontraditional credit will not apply toward the last 24 hours of residency. However, students who have completed their last 24 hours of traditional course work at UTC prior to participation in the UTC Study Abroad program need not petition for an exception to the final 24-hour residency requirement.

Health Services
University Health Services (UHS) is a partnership between UTC, the Erlanger Health System, the UT College of Medicine Chattanooga (UTCOMC) and the UT Family Practice Center (UTFP). Office hours are 8:30 a.m.-5:00 p.m., Monday through Friday. For after hours emergencies call the UTFP office number (778-8837). The scope of services includes office visits for general illnesses, allergy injections, flu immunizations, hepatitis B immunizations, TB skin testing, physical exams, women’s health, lab services, educational programs, counseling, and referrals. All currently enrolled University students are eligible for health services. Payment for any deductible and copayments are expected at the time of service by means of cash, check, credit card or Mocs Card.

The university recommends that students obtain separate hospitalization and medical insurance. Information about a health insurance policy is available through the university and covering a schedule of expenses for surgery and hospitalization
is available in Student Health. All international students are required to enroll in the insurance program. For other information concerning UHS or to schedule an appointment, please call (423) 778-9303 or visit www.utc.edu/uhhs.

**Housing**

Applications for housing are online at www.utc.edu/housing. Contracts are offered for the academic year (August to May). Cancellation of a contract once the room is occupied requires approval from the Housing Office and is subject to additional charges and penalties as stated in the contract.

The University offers a program of differentiated housing which allows students the option of living in facilities with different types of programming, supervision, and visitation. Further information concerning the details of these plans is available from the Housing Office and on the Housing Office website.

**Information Technology (IT)**

The mission of the Information Technology Division is to provide students, faculty, and staff with information technology services that are available, reliable, responsive, cost effective, and delivered in a proactive and courteous manner.

The University provides both general-purpose computer labs and departmental labs. All buildings and dorms on the campus have high-speed Internet access and many have wireless capabilities. Students, faculty and staff have accounts and networked storage for e-mail, documents, and personal web pages. The Help Desk supplies technical support including troubleshooting of hardware and software and assistance in connecting to the campus network. Audiovisual technology is provided through permanent classroom installations and equipment delivery upon request. For more information on technology services, visit http://itd.utc.edu.

**ID Cards** (See Mocs Card)

**Insurance**

University Health Services is a partnership between UTC, the Erlanger Health System, the UT College of Medicine Chattanooga (UTCOMC) and the UT Family Practice Center (UTFP). Office hours are 8:30 a.m.-5:00 p.m., Monday through Friday. For after hours emergencies call the UTFP office number (778-8837). The scope of services includes office visits for general illnesses, allergy injections, flu immunizations, hepatitis B immunizations, TB skin testing, physical exams, women's health, lab services, educational programs, counseling, and referrals. All currently enrolled University students are eligible for health services. Payment for any deductible and copayments are expected at the time of service by means of cash, check, credit card or Mocs Card.

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**Library**

Theresa Liedtka, Professor and Dean, UTC Lupton Library

The Lupton Library is at the center of teaching, learning, and research activities for the students, faculty, and staff of UTC. If you need quality journal articles, scholarly books, research assistance for a paper, wireless access for your personal laptop, or a place where your group can work together, then the Library is for you! The Library is open over 90 hours a week in the semester and has 30 librarians and library specialists available to help you succeed in research and curricula endeavors.

**Library Homepage**

Information about the Lupton Library can be found at www.lib.utc.edu. Our web site serves as an information portal. You can access many full-text resources from the site and learn about services and policy information. On our home page you will find links to search our collections of movies, music CDs, and books, a convenient link to our current hours, the latest library newsletter and more. Current happenings at the library are often featured on the banner at the top of our homepage so you’ll always know the latest events. Be sure to check out our homepage links to a wealth of features that will enrich your library experience.

**Library Services**

**Information Services:**

At our 1st floor Research Desk, our librarians help students to:
- identify useful articles, books, or web sites for your research,
- make an appointment with you for an in-depth research consultation,
- provide you a subject guide to resources that identify quality resources in the Library on a topic you need,
- respond to your email requests for assistance, submit questions at www.lib.utc.edu/forms/contact_us.html,
- teach a class on research methodology at the request of your professor.

**Access and Borrowing Services:**

At our 1st floor Circulation Desk, a student with a Mocs Card can:
- check out books for the length of the current semester,
- check out CDs, DVDs, or videos for 7 days,
- check out a laptop for up to 3 hours of use,
- check out a group study room for 3 hours of use,
- renew your materials in person, phone (423-425-4501), or online at http://www.lib.utc.edu/renew-items.html,
- borrow a course reserve item,
- pick up an interlibrary loan,
- obtain a TBR borrower card,
- place a "search" request for an item that is missing from the shelf,
- pay a fine or fee by check, cash, or Mocs Card.

**The Library Building:**

The Library Building is equipped with 75 public computers for student use. The entire building is also wireless enabled, and there is ample space for both group and individual study. There is also a small eating area available on the 1st floor of the Library.
Library Materials
The Library maintains a wealth of information resources for your use. The collection contains over 500,000 books, 100 databases to identify journal articles, 40,000 electronic and print journal subscriptions (many full-text), and just over 15,000 audiovisual items. Our total holdings add up to over 1.9 million physical pieces of material and more electronic pages than you can count.

Databases and Indexes: Databases help you find specific articles within journals. To access the Library's database and find journal articles go to: www.lib.utc.edu/databases. Here you will find a list of online resource tools grouped by UTC departments such as psychology, nursing, or history, to name just a few. For your convenience, current students and faculty can access these electronic resources from on or off campus locations, 24 hours a day, 7 days week.

Books, Videos, and CDs: If you are interested in the books, music, or films owned by the Library, check out the easy search link provided on the library homepage that allows you to search just that specific collection. Your search will tell you whether the item is checked out or available and its floor location in the library.

Journals and Magazines: To access our journal holdings, go to: www.lib.utc.edu/fulltext. In addition to an alphabetical list, you will find a subject grouping of our journals which makes for easy browsing. Current students and faculty will appreciate their ability to access these electronic resources from on or off campus locations, 24 hours a day, 7 days week.

Special Collections:
The Lupton Library houses its rare and unique books and manuscripts in an area called Special Collections. Here you will find information about the history of UTC, personal papers of alumni and faculty, as well as many rare and valuable books (some of which go back to Shakespeare's time). Information about special collections can be found at: www.lib.utc.edu/services/special_collections.

Reserve Materials: Your professors may place items "on reserve" in the Library for use by students in their classes. Many of these items are available electronically, while others are shelved behind the Circulation Desk on the 1st floor. To find an item on course reserve, go to the library homepage and click on the Course Reserve link in the "FIND" section. This will take you to a simple search by title, professor, or course number. If the article or item is available electronically you will be able to click on a link that will access a pdf to read online or print immediately.

Interlibrary Loan: The Interlibrary Loan Department will borrow books and journal articles not owned by UTC, free of charge, from other libraries, for current students and faculty. Simply fill out the request form at http://illiad.lib.utc.edu/. In addition, students may borrow books in person from other universities in the UT or Tennessee Board of Regents system. A list of participating schools may be found at: www.lib.utc.edu/services/circulation/borrowing/TBR-ULTlist.html. The library's Circulation Desk will issue a TBR card for students who wish to borrow books in person from a participating TBR school.

Mocs Card
The University provides each student with an official University ID card, the Mocs Card. This card is used to gain admission to athletic events, to check out books from the library, to obtain special rates and privileges at many University functions, and to indicate the individual’s right to use University facilities. Mocs Cards can also be used as a debit card at the following locations:

- All Food Service Facilities; Boling Mini-Mart
- Bookstore
- Computer Labs
- Go Print Stations
- Graphic Services and Mail Room
- Laundry Facilities
- Parking Garage and Parking Services
- UTC Student Health Center
- Select copy and vending machine locations

A student’s account can be managed online through ManageMyID by registering at www.utc.edu/mocs_card. A debit card account balance can be activated by depositing cash into the Value Port machine located next to Food Services in the University Center and in the Library. Also, deposits can be made in the form of cash, check, Viss or Mastercard in the Bursar's Office, 274 Fletcher Hall.

A student's initial Mocs Card is intended to last throughout the entire stay at UTC. Lost or stolen cards should be reported immediately through ManageMyID. The Mocs Card Office is located in the University Center, ground floor, Room 141. The telephone number is (423) 425-2218 or (423) 425-4109; fax (423) 425-4795. UTC is not liable for any loss of funds due to misuse or theft of a Mocs Card. Replacement cards (lost, broken, or damaged) are made at the Mocs Card Office for a cost of $15 to be paid at the Bursar's Office. Once a replacement card is made, previous cards cannot be reactivated under any circumstances. No fee is charged for the initial card or for the initial use of the debit card system. A $15 service fee is applied to Mocs Card refunds.

Placement Services
Located in the University Center, the Placement and Student Employment Center assists degree candidates, alumni, and students in securing full- and part-time employment. The service is available year round.

Security
The University is committed to making the campus a safe environment for its citizens. Each year UTC publishes the Campus Safety and Law Enforcement Handbook which includes campus crime statistics for the three most recent calendar years as well as various campus policies concerning law enforcement, the reporting of criminal activity, and crime prevention programs. Prospective students, current students and employees may receive a copy of the report by visiting: www.utc.edu/PublicSafety or by writing to:

UTC Department of Public Safe Dept. 3954
615 McCallie Avenue
Chattanooga, TN 37403

The UTC Police Department is located at 400 Palmetto Street.
Phone: (423) 425-4357
Southeast Center for the Arts

The Southeast Center for Education in the Arts (SCEA) provides innovative professional development programs in arts education and arts integration to enhance teaching and deepen learning. The goal is to establish comprehensive arts education as an integral component of basic education for all students. SCEA's professional development programs create exciting opportunities for personal and professional discovery, nurturing the artist within and fostering the artistry of teaching.

Building on its seminal work in discipline-based arts education, SCEA has evolved incorporating emerging theories and methodologies in interdisciplinary education, placing it at the cutting edge of current practice in arts integration. SCEA's approach employs concept-based curriculum design to facilitate the unique learning opportunities fostered at the nexus of disciplines.

As a professional development provider, SCEA collaborates with schools and organizations across the country providing consulting services, demonstrating integrated instruction, and crafting custom, site-specific programs tailored to the needs and resources of distinct communities. Personnel travel nationwide and internationally teaching classes, conducting workshops, working on committees, and serving as consultants and writers for professional organizations and state education departments.

The Southeast Center for Education in the Arts fosters unique collaborations among people and institutions, significantly impacting local, state, and national education policy and practice. The Tennessee Arts Commission awarded SCEA its Governor's Arts Leadership Award for nurturing creative inquiry into teaching and learning.

Student Government Association

The Student Government Association (SGA) at UTC is an active and vital campus organization. SGA provides funding to student organizations, serves as a link between the student body and the administration, enacts legislation concerning current campus issues, and provides other valuable functions and services for the students at UTC. The SGA is described in detail in the "Organizations" section of this catalog.

Student Handbooks

Distributed at the beginning of each academic year, the Student Handbook provides detailed information on student services and serves as a student/faculty directory. It also contains information on the Student Government Association and specific rules for the purpose of regulating campus life. These rules are stated in the Honor Code, Student Conduct Code, and other codes regulating groups.

Student Newspaper

The University Echo serves the University community not only as a ready source of campus news and other information of interest but also as the medium through which both student and faculty opinions can be presented, discussed, and recorded. Published weekly under the editorship of students, the Echo is supported by the University and is distributed free to all students. Interested students may apply for positions on the staff in reporting, editorial (news, features, sports writing, copy reading, etc.), business (advertising, sales, bookkeeping, etc.), or layout/design capacities by coming by the Echo offices in the University Center. The Echo also welcomes individual student letters.

Student Tickets-Athletic Events

A validated Mocs ID card with a picture provides admission to the regular season home football, basketball, and wrestling events. These unreserved seats are in the student section and available on a first-come-first-served basis. There is a limited number of seats in the student section.

A student may purchase a guest ticket for the student section at a discount price to each home football and basketball game.

Student Support Services

The Division of Student Support Services, is a federally funded TRIO program that provides academic support to eligible students. Program services and activities are designed to increase the retention and graduation rates of participants. Students with low income, first generation college students (both of whose parents did not complete a baccalaureate degree), or students who have a documented disability may be eligible for participation. There is no charge to students for the following services and activities:

- Peer Tutorials - The Peer Tutorial program provides additional assistance outside the classroom to students who have difficulty grasping specific course skills. The subjects for which assistance is offered are core courses taken by freshmen and sophomore students. Students are scheduled to work with a Peer Tutor on a weekly basis throughout the semester.
- Career Counseling - This service helps students determine which careers are of particular interest to them and how to meet the University requirements for their major choice.
- Academic Counseling - The project's Academic Counseling model identifies deficiencies that may impede students' success at UTC. Each student receives a diagnostic profile of his/her needs which includes a prescribed program of services and activities designed to eliminate or minimize deficiencies.
- Financial Support - The program provides financial support to program participants in the form of Grant Aid Awards, Scholarships, a Book Loan Program, opportunities for employment, free use of program resources, and costs paid for approved events. The program also provides information on additional financial resources to help students finance their bachelor's degree and studies at the graduate level.
- Graduate School Advising - The goal of this service is to inspire qualified students to obtain a graduate or professional degree. The program also offers graduate or professional school entrance examination study techniques and assistance with the application process.
- Cultural Enrichment Activities - Students are given free tickets to local and regional cultural enrichment events.
- Peer Mentoring - This service provides opportunities for freshmen to build relationships with successful upperclass students (Peer Mentor). Students are matched with a Peer Mentor according to academic major and/or career interest.
Students may apply for admission by picking up an application in 216 Frist Hall or by contacting staff at (423) 425-5235. Applicants are selected based on availability of space in the program. For additional information, visit www.utc.edu/Administration/StudentSupportServices/.

Transcripts

Transcripts of a student's record are released only with the student's written authorization. Requests should be made to the Records Office and in advance of the date the transcripts are needed. The processing of transcripts may take as long as two weeks at the beginning or end of a term. Transcript request forms are available in the Records Office, 109 Race Hall, and online at www.utc.edu/Administration/Records/forms.php.

Transcripts are not released for students who have an indebtedness of any type to the University.

University Center

The Division of Student Development invites students, University and Chattanooga communities to the University Center (UC). The University Center is a 200,000+ square foot facility serving as the hub of activity on the campus. It is located at the "big arch" entry way, and it houses a 100-station student microcomputer lab; the University Echo, student newspaper; Student Government Association offices; 600-seat commons area; Student Development offices; meeting spaces; and a 300-seat auditorium. Food, coffee, snacks, books, UTC logo clothing and wireless internet provide ways for students to connect to the University outside of the academic classroom. The offices of Placement and Student Employment, Counseling and Career Development, Advisement and Adult Services, Cooperative Education and International Programs, and Admission tours are located in the University Center. As a part of the University's total commitment to students, the University Center and Student Life staffs provide culturally diverse, social, and recreational activity programs aimed at enhancing the educational experiences of students towards life long learning.

University Honors Program

Each year the University Honors (UHON) Program admits 30 to 40 freshmen. This prestigious program offers to members an atmosphere that nurtures their intellects, sense of social responsibility, and drive to lead. The goal is to foster a community of scholars who enjoy each other's company, benefit from each other's work, and provide the University with new ideas and ways to excellence.

To achieve this goal, the Program provides Honors students with a specialized general education curriculum tailored to their talents and needs; opportunities for social, University, and community service; personal advisement; priority registration; an exclusive reading room and computer lab; and membership in a highly visible and respected group of students. Most Honors students receive a full four-year scholarship.

Applicants to the UHON Program should have a record of outstanding achievement and promise. Continuance is reviewed each semester and is contingent upon the student's academic performance. All UHON students are obligated to complete Departmental Honors. Interested high school seniors should submit a UHON application by December 15. For more information and a current application write to: University Honors Program, Dept. 1101, 202 Guerry Hall, The University of Tennessee at Chattanooga, Chattanooga, TN 37403; call (423) 425-4128; or visit the program's web site at: www.utc.edu/Administration/UniversityHonors.

Upward Bound

Upward Bound is a pre-college, federally funded U.S. Department of Education/TRIO program for students who have the ability to complete a program of post-secondary education, but who may not achieve this ambition because of constraints imposed by family income levels and the lack of knowledge about the college admissions process. The program provides supplemental academic assistance, educational and career guidance, and cultural enrichment activities. The goal of the program is to help students acquire the prerequisite skills, motivation and knowledge to enter and complete a college or university. Students enrolled in the ninth, tenth or eleventh grade at Brainerd High School, Howard School of Academics and Technology or East Ridge High school, with a recommendation from their high school counselor or other school officials, will be considered for the program. For more information and to request an application, call (423) 425-4691 or write to:

Upward Bound Program Dept. 5005
2 Stagmaier Hall
The University of Tennessee at Chattanooga
Chattanooga, TN 37403.

WUTC

WUTC is the public radio station licensed to The University of Tennessee at Chattanooga. Operating at 88.1 FM, it provides a 24-hour-a-day broadcasting service. WUTC is an eclectic music and informational programming source for this area. WUTC is the National Public Radio Station for the tri-state region.
Involvement in the University community is central for many students to getting the most from a college experience. The co-curricular aspect of a university-level education provides opportunities for growth and development that complement and enhance a student's in-class learning. UTC provides many opportunities to become involved in campus life through over 120 active student clubs and organizations. All of the student organizations listed on the following pages have specific purposes, goals and/or functions. Also, each organization sponsors many programs, activities and social functions every year. Many of these activities have become a traditional part of the activities calendar including the Greek Show, Homecoming, Student Government Association events, ACE movies, lectures, art shows, and recitals. Even with the many in existence, new and experimental programs are also scheduled yearly, particularly under the auspices of the Association for Campus Entertainment. Through a highly diversified program, the individual student has many choices of interests and activities.

**Student Government Association**
The Student Government Association (SGA) at UTC is an active and vital campus organization. SGA provides funding to student organizations, gives initial approval to new student organizations, serves as a link between the student body and the administration, enacts legislation concerning current campus issues, and provides other valuable functions and services for the students at UTC. In addition, the SGA recommends students to serve on faculty committees including, but not limited to, parking, curriculum, scholarship, and admissions. Student members have both a voice and a vote on these committees. Student Government may sometimes act as a complaint board or as an information referral for students. SGA also provides a major portion of the entertainment on campus including concerts, dances, and movies. Every student is a member of SGA and is represented on the Student Senate by 27 senators who are elected by academic schools or colleges. There are three executive officers: President, Vice President, and Treasurer. Each is elected from the student body at large. The SGA Secretary is appointed. Fourteen senators are elected during the fall semester and 13 during the spring elections. To be eligible to run for an SGA senate seat a student must have and maintain an institutional cumulative GPA of 2.00, be currently enrolled and taking 12 semester hours (undergraduate) or nine semester hours (graduate), have completed at least 12 hours of class work at UTC and not be on disciplinary probation. To be eligible to serve as an officer of the SGA, one must meet this requirement plus additional conditions specified in the SGA constitution.

All interested students are welcome to attend the weekly SGA meetings. Students who wish to become involved in SGA are advised to go to the Office of the Vice Chancellor of Student Development, 306 University Center, or the SGA offices, University Center.

**Fraternities and Sororities**
The University of Tennessee at Chattanooga has nine national fraternity and nine national sorority chapters presently active campus. Specific rules and regulations concerning these organizations are available in The Student Handbook.

**Sororities**—National sororities having chapters at UTC are Alpha Delta Pi, Alpha Kappa Alpha, Chi Omega, Delta Sigma Theta, Kappa Delta, Sigma Gamma Rho, Sigma Kappa and Zeta Phi Beta. The Panhellenic Council and NPHC are the governing bodies for all sororities on campus. It fosters cooperation, goodwill, and friendliness among sororities and non-sorority groups, plans recruitment activities, and administers regulations governing sororities. The National Panhellenic Council provides action strategies on matters of mutual concern.

**Fraternities**—National fraternities with active chapters on campus are Alpha Phi Alpha, Kappa Sigma, Lambda Chi Alpha, Phi Beta Sigma, Phi Delta Theta, Phi Mu Alpha, Pi Kappa Alpha, and Sigma Chi. The Interfraternity Council (IFC) and NPHC regulate affairs for the fraternities on campus. It establishes and administers rules governing rushing, pledging, and initiations of fraternities and encourages cooperation and harmony among its members.

**Academic and Interest Clubs**
Academic and interest clubs are numerous and varied on the UTC campus. They range from the Art Club and Fellowship of Christian Athletes to the Rowing Club. Many varied fields of study, professions, and interests are represented. Each year several new organizations are added to adequately reflect student interests and needs. If you do not find the one you are looking for, you can begin a new club yourself. Students are advised to con-
sult with interested faculty members or members of the Student Development staff for help in getting a new group started.

Membership in departmental and interest clubs is typically open to all interested students. Information regarding a particular group can be obtained from the faculty/staff advisor or through the Student Development Office. Also, watch the campus bulletin boards for notices concerning meetings and other programs. Rules and regulations regarding meeting, membership and more are available in The Student Handbook. Additionally, The Student Handbook contains a list of faculty sponsors/advisors for these academic and special interest clubs.

Honor Societies
Honor societies recognize service, leadership, or academic achievement. Although these groups are often identified by Greek letters, they are different in nature from social fraternities and sororities. Although some restrict membership to upper-class students, a few recognize students as early as the second semester at UTC. Information regarding a particular group can be obtained from the faculty/staff advisor or through the Student Development Office.

Major Campus Organizations
The following campus organizations are open to all interested students and are large, active, and have been well established on the campus for many years. Membership information can be obtained through the faculty/staff advisor or through the Student Development Office. The Student Handbook contains a list of faculty sponsors/advisors for these organizations.

The Association for Campus Entertainment is THE programming body for the campus! ACE sponsors events like Welcome Week movies, comedians, outdoor concert series, caricature artists, personalized novelties, Homecoming Lip Sync and Spring Fest, and our annual Casino Night. ACE meets every Wednesday at 4:30 in the University Center. Visit online at www.utc.edu/dos/ace for more information.

The Black Student Association is organized to promote a better interracial relationship between students on the campus, to become better involved in social and academic activities of the University, and to act as a medium between members of the organization and other organizations on campus.

The International Student Association's purpose is to augment friendly communication among people of different cultures and to help international students adjust, while extending its services to the community.

Service Organizations
Interested students may become "tapped" into one of the service organizations whose members volunteer their services for University and community functions. Members are chosen on the basis of service, leadership, and loyalty. The Student Handbook contains a list of faculty sponsors/advisors for these academic and special interest clubs.

Circle K is an international college organization sponsored by the Kiwanis International to promote service projects on campus and in the community.

Mortar Board is a college senior honor society whose main purpose is service to the campus community. Mortar Board members aim to support the ideals of the University, to advance a spirit of scholarship, to recognize and encourage leadership, and to provide service.

Rotaract Club is an international organization sponsored by the Rotary Club. The purpose of the organization is to develop leadership on campus and to promote service.

The Student Alumni Council is composed of 40 members who work closely with the Chancellor and the Director of Alumni Programs to promote the interests, ideas, and goals of our University. SAC strives to instill in all students a sense of continuing responsibility to UTC.

The Student Orientation Board assists in orientation programs for new students and other programs of the Advisement and Orientation Office.

Religious Organizations
The religious life of the University is represented by both centers and organizations presenting a varied program of worship and community service.

CRU: Campus Crusade for Christ - CRU was started in 2007 at UTC and meets on Thursday nights in the Grote Hall Auditorium at 7:00. Our desire is to help students ponder and grow in a relationship with Christ. To Learn more go to www.chattanoogacr.u.com.

The G.A.P. Ministry (an acronym for God's Action Plan) is a campus ministry committed to sharing the love of Jesus Christ, providing an atmosphere of worship and spiritual revelation where college students can discover who they are by becoming closer to God. Get in The G.A.P. through our weekly Bible studies, small groups, community service projects, mentoring programs and Christian leadership training. For more information please email our campus minister, Michael Douglas at mdouglas@utcgap.com.

The House: University Ministries of Chattanooga: Our mission is to bring college age people in the Chattanooga area to a deeper knowledge and love of Jesus Christ, and to equip people for ministry. Our worship service meets at The Vine, the worship center on the corner of Oak and Houston, every Tuesday night at 8:00. We serve lunch on Tuesdays at The Hub, 650 McCallie Avenue (in the basement of First Christian Church). Small group Bible studies are led by our staff and alumni. Concerts, cookouts, retreats, mission trips, service projects are all a part of what we do. We are supported by a number of local churches, and our students come from a number of different church backgrounds. Please see our website at www.thehouseutc.org, or call our office at (423) 752-9407.

The Baptist Collegiate Ministry is located at 540 Vine Street, across from the Boling Apartments. Our center is open each day from 8:00 a.m. until 10:30 p.m. Anyone looking for friendship, fun and encouragement is invited to participate regardless of denominational or religious affiliation. Consider joining one of our “Family Groups” that meet each week for encouragement, Bible study and fellowship. We also provide a drop-in lunch each Wednesday (11:00-12:30) provided by area churches and have worship each Thursday evening at 8:00. All programming is planned and led by students for students. Contact the campus
The Jewish Student Union is the liaison between the Jewish community and the students and faculty. Social, cultural, religious and educational activities are open to anyone in the University community. The Rabbi of B'Nai Zion Congregation is available to respond to questions regarding the practices and philosophy of Judaism and to aid the needs of Jewish students. B'nai Zion Congregation is located at 114 McBrien Road, and the telephone number is 894-8900. Mizpah Congregation is available for responding to the needs of Jewish students on the UTC campus. Mizpah Congregation is located at 923 McCallie Avenue. Please contact Rabbi Bill S. Tepper at (423) 267-9771 or rabbi@mizpahcongregation.org for further information.

The Episcopal University Ministry and Student Center is located on the 2nd floor, Suite N2 at 661 Douglas Street. Contact Rev. Bob Leopold, University Chaplain at 266-8195 for counseling and other information.

The Catholic Student Center (Newman Center) serves students in the Chattanooga area. At the core of its ministry is the 6:00 PM. Sunday Eucharist. Activities include study groups, guest speakers, a folk group, retreats, Wednesday lunches, and other planned social events and monthly suppers prepared by the students. Contact Bill Leahy or Fr. Mike Creson at the Center, located at 514 Palmetto Street adjacent to the UTC campus.

The Christian Student Center is sponsored by the area Churches of Christ for the benefit of all students, faculty and staff. This Center is located at 669 Houston Street, near the Arena and Boling Apartments. Facilities offer a comfortable place for relaxation, study, or recreation. Emphasis is upon fellowship through devotions and Bible classes. The Christian Student Center is open daily from 9:00 A.M. to 9:00 P.M. The Center serves lunches on Monday, Wednesday and Thursday, and supper on Tuesday evenings. Contact Jerry Cox at 267-4488 for more information.

The Reformed University Fellowship (RUF) is the campus ministry of the Presbyterian Church in American (PCA). There is a large Group Bible Study that meets every week on Thursday nights at 8:00 in the University Center. In addition, students have the opportunity to participate in small group Bible studies throughout the week as well as various social events and conferences during the semester. Contact RUF campus minister, Jason Little, at 648-7934 or 595-3755 for more information.

The United Methodist Campus Ministry is housed in the Wesley Center at 607 Douglas Street. They provide opportunities for friendship, intellectual and spiritual growth, worship, and community service through a broad range of activities. Weekly lunches are served on Wednesdays by various local churches. The campus minister leads discussion groups on topics of current interest such as Bible study, preparation for marriage, personal relationships, social problems, and Christian thought. A leadership team plans and coordinates all the student-oriented regular activities as well as special events such as retreats, service projects, fund raising, and parties. The center is open from 9:00 A.M. until 5:00 PM. Monday through Friday and at nights and on weekends as announced. The United Methodist campus minister is Keith Moore (266-3691).

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Organizations and Activities

Basketball, racquetball, softball, swimming, tennis, track, volleyball, wrestling, table tennis and indoor soccer. The Intramural Office is located in the Aquatic and Recreation Center. Office hours are 1-5 p.m., Monday-Thursday. The telephone number is 425-4213.

Bands, Orchestra, and Choral Activities

Various opportunities are open for students who wish to use and to develop their musical abilities. The Chattanooga Singers, the Chamber Singers, Women’s Chorale, Men’s Chorus, Opera Theater, and summers only Master Chorale are open to all students. An audition is required to participate in the Chamber Singers, Opera Theater, and the Master Chorale. Instrumentalists may participate in the UTC Symphony Orchestra, Symphonic Band, Marching Band, Pep Band, and the Jazz Ensembles. An audition is required to participate in the Symphony Orchestra and the Jazz Bands. Small ensembles, such as the Percussion Ensemble, Tuba Euphonium Ensemble, and Chamber Winds are available for advanced students. An audition may be required.

Music scholarships (Performance Grants) are available to all qualified UTC students, regardless of major. Applicants audition for the Music faculty, and recipients are required to participate in the appropriate ensemble for their instrument or voice. Recipients may also be required to enroll in applied instruction. Interested students should contact the Department of Music at 425-4601, or visit www.utc.edu/music.

Mocs Athletics, Mocs Cards, and Athletic Event Information

The UTC Athletics program owns a proud and outstanding tradition in its 100-plus year existence. Admission to UTC athletic events is free to currently enrolled UTC students. All UTC students must obtain a Mocs Card which is used throughout their time at UTC. This card must be used to obtain free admission into football, men’s and women’s basketball, volleyball, soccer, wrestling, and softball games. Admission is to the student section and there are no reserved seats, as students take these on a first-come first-served basis. Students should have their Mocs Card made at the UTC ID Card office currently located in the University Center. Evening students may make arrangements to get their Mocs Card by calling 425-2218.
Academic Regulations

Degrees, Major, Concentration, Minor
The University offers undergraduate programs of study leading to a baccalaureate or Bachelor's degree. A Bachelor's degree is the entire program of study including general education and major course requirements, and elective courses. Some baccalaureate degrees and some majors require a minor.

A major is the student's primary program of study and typically includes courses from a single discipline or a set of similar disciplines. Some majors require that students choose a concentration within the major. A concentration is a group of courses emphasizing one specialized area of study within a major.

Some majors require that students complete a minor as part of the graduation requirements. A minor is a secondary subject area of interest but not a subdivision of the major subject area. Students must complete all academic requirements, including those for the major and minor, from the same catalog year.

Declaring a Major
The University encourages students to declare a major before completing 42 credit hours. Students may declare a major by completing a form available in the Records Office, 109 Race Hall, or submit a request online at www.utc.edu/Administration/Records/forms.php.

Catalog Effective Dates
The catalog in effect at the student's time of entry or reentry determines the requirements for the degree. Catalogs are valid for 10 years. Consequently, students must complete the requirements in accordance with a valid catalog. Students may also elect:

a) the current catalog at the time of reentry to UTC,
b) the catalog in effect when selecting a new major, or
c) a catalog reflecting a revised curriculum.

Transfer students must fulfill the degree requirements published in the catalog in effect at the time of entry to UTC but may elect to use the catalog in effect at the time of their first entry into college or first entry to UTC. Transfer students must complete the degree requirements in accordance with a valid catalog.

To request a change in catalog year, students must submit the Catalog Year Change Request form to the Records Office, 109 Race Hall. The form can be accessed through the UTC website at: www.utc.edu/Administration/Records/forms.php.

A student seeking the recommendation of The University of Tennessee at Chattanooga for initial teacher licensure or endorsement must satisfy the current UTC approved program requirements on file with the Tennessee Department of Education at the time of application for licensure.

Registration Classification
Students are classified as full time if they are registered for 12 credit hours or more. Students registered for 6 to 11 credit hours are classified as half-time students. Students with less than 6 credit hours are considered less than half-time.

Registration Limits and Excess Hours
Students may register for 20 or fewer credit hours each spring and fall semester without prior approval of the Petitions Committee.

Summer registration limits are as follows:
- 7 hours in any 5-week session
- 10 hours in any 7-week session
- 10 hours in any overlapping 5-week and 7-week sessions
- 20 hours in the entire summer term

Written consent of the advisor is required to register for a total of 17 to 20 credit hours in the summer. Exceptions to these restrictions must advance approval from the Petitions Committee.

Students requesting approval of the Petitions Committee to register for excess hours for a given semester must submit the petition to the Records Office no later than one week prior to the first day of class for each semester or summer term. The petition form can be accessed through the UTC website at www.utc.edu/Administration/Records/forms.

Drop/Add Policy
Students are responsible for processing their course registrations, additions, and drops. Students who register must pay fees unless they drop the courses before the first day of classes.

Failure to attend classes is not evidence of the student’s intent to drop classes or withdraw from the University. A student who does not attend classes will remain on the class rosters and will receive grades for these courses. Registration and drop dates for each specific term can be found on the University's online calendar.
Grades
The instructor of record for each course assigns each student a course grade that indicates the student’s academic performance in the course. Course grades may not be changed after the instructor reports the grade to the Records Office except in cases of computational error or for removal of an incomplete. Students may not perform additional work, revise a paper, repeat an exam, or complete other assignments after the instructor reports the final grade in order to receive a change of grade.

The student must be enrolled in the course for the semester to receive a grade. Grades can only be issued for work completed during the semester.

The following table presents grades, their numerical value used for the calculation of GPA, and their relation to the student’s performance.

<table>
<thead>
<tr>
<th>Quality</th>
<th>Grade Points Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A .............. 4 .............. superior performance in the course.</td>
<td></td>
</tr>
<tr>
<td>B .............. 3 .............. commendable performance in the essentials of the course.</td>
<td></td>
</tr>
<tr>
<td>C .............. 2 .............. acceptable performance in the essentials of the course.</td>
<td></td>
</tr>
<tr>
<td>D .............. 1 .............. marginal performance below the acceptable standards of university work.</td>
<td></td>
</tr>
<tr>
<td>F .............. 0 .............. unqualified failure and the necessity for repeating the course to obtain credit.</td>
<td></td>
</tr>
<tr>
<td>S .. Not Included .. satisfactory/no credit basis. The hours are not computed in the grade point average.</td>
<td></td>
</tr>
<tr>
<td>AU .. Not Included .. audited course in which the student attends at least 75 percent of the class sessions.</td>
<td></td>
</tr>
<tr>
<td>NA .. Not Included .. audited course in which the student attends less than 75 percent of the class sessions.</td>
<td></td>
</tr>
<tr>
<td>NC .. Not Included .. failure to complete the requirements in satisfactory/no credit courses. The attempted hours are not computed in the grade point average.</td>
<td></td>
</tr>
<tr>
<td>NR .. Not Included .. a temporary administrative note that the instructor of record had not submitted a course grade. The NR is not computed in the grade point average.</td>
<td></td>
</tr>
<tr>
<td>I .. Not Included .. an interim grade given to a student whose work has been of passing quality and who has valid reason for not completing some requirement of the course. Removal of an Incomplete must be submitted by the instructor to the Records Office no later than the due date published in the Academic Calendar, or the Incomplete will become an F. The Incomplete grade will not be computed in the grade point average during the interim. Any student called to active duty in the Armed Forces of the United States may, with the permission of the instructor, be given an indefinite incomplete. The incomplete may be made up at any time.</td>
<td></td>
</tr>
<tr>
<td>IP .. Not Included .. an interim grade for departmental honors courses numbered 495r, indicating work in progress. It must be removed by the end of the next regular semester, or the In Progress becomes an F. The IP will not be computed in the grade point average during the interim.</td>
<td></td>
</tr>
<tr>
<td>W .. Not Included .. official withdrawal from one or more courses after the first two weeks of classes and up to the last six class weeks before final examinations. Comparable deadlines apply to each of the summer terms.</td>
<td></td>
</tr>
<tr>
<td>WF .. Not Included .. for students who are receiving Title IV financial aid and who have stopped attending UTC classes without withdrawing officially. The WF is the equivalent of F for all academic purposes. The grade of F, as submitted by the instructor, will be changed to WF by the Records Office. The last day of class attendance will be obtained from the instructor and will be used to determine change in enrollment status. The change in enrollment status will be communicated to the U.S. Department of Education as required. The grade of F will be reflected on transcripts and on the report of academic progress. The WF will be on the academic record for internal use only.</td>
<td></td>
</tr>
</tbody>
</table>

Grade Reports
Students may review their semester grades online through the secure Student Information link in their MocsNet account. To access the Student Information link, students must have the secure identification number (SID). Grades are posted to the MocsNet account upon completion of the end of semester grade processing period and are usually available to students by Friday afternoon before Commencement.

Grades for the individual summer terms are usually available within 5 days after the end of the respective term.

Grade Point Average
The grade point average (GPA) is the total number of quality points divided by the total number of attempted credit hours, including hours for which the student received an F. The GPA does not include credit hours for courses in which grades of S, NC, I, and W have been earned. (Institutional credit is not included in the calculation of grade point averages for graduation or for honors.) Grade point averages are not rounded.

How to Compute Grade Point Average (GPA)
Standard GPA Calculation:

1. Multiply the grade value for each course taken by the credit hours for that course. The product of this multiplication will be the quality points. Total the quality points and the credit hours.
2. Divide the total quality points by the total attempted hours.
3. Do not include the hours for S, or NC or I grades.
Example:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grade Value</th>
<th>(Multiply)</th>
<th>Credit Hours Attempted</th>
<th>(Equals)</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 121</td>
<td>A=4</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>12</td>
</tr>
<tr>
<td>ENGL 121</td>
<td>B=3</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>9</td>
</tr>
<tr>
<td>GEOL 111</td>
<td>C=2</td>
<td>x</td>
<td>4</td>
<td>=</td>
<td>8</td>
</tr>
<tr>
<td>HHP 134</td>
<td>D=1</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>F=0</td>
<td>x</td>
<td>3</td>
<td>=</td>
<td>0</td>
</tr>
</tbody>
</table>

Totals: 16 32

Divide 32 (Quality Points Column) by 16 (Credit Hours Attempted Column) to determine GPA: 32/16 = 2.00 GPA.

Grade Point Average Definitions

- **Institutional Semester**: includes the most recent UTC and/or transfer work added to a student's academic record (excludes developmental course work).
- **Institutional Cumulative**: includes all UTC and transfer work—cumulative meaning more than one semester (excludes developmental course work).
- **Transfer Semester**: Includes the most recent transfer work added to a student’s academic record.
- **Transfer Cumulative**: Includes all transfer work only—cumulative meaning more than one semester.
- **Overall Semester**: Includes the most recent UTC, transfer, and developmental course work added to a student’s academic record.
- **Overall Cumulative**: Includes all UTC, transfer, and developmental course work—cumulative meaning more than one semester.
- **UTC Only Semester**: Includes the most recent UTC course work completed by the student.
- **UTC Only Cumulative**: Includes all UTC course work—cumulative meaning more than one semester.

Continuation standards are based upon Institutional GPA for all students.

Courses Included and Excluded in GPA and Degree Requirements

**Institutional Credit**

The University assigns institutional credit to all developmental courses in reading (EDUC 105), mathematics (MATH 105, 106), study skills (USTU 100), study skills lab (PSY 100, SOC 199), and writing (ENGL 105, 106). Some students must complete these courses in addition to the degree requirements.

Institutional credit does not apply to the hours required for graduation, major requirements, general education requirements, or electives. Institutional credit is not included in the calculation of grade point averages for graduation or honors. The University calculates overall semester and overall cumulative grade point averages that includes developmental studies for financial aid purposes.

**Developmental Studies**

Freshman students who are required or who volunteer to enroll in developmental studies courses should successfully complete the required courses within the first 42 attempted hours counting both institutional and regular credit. Transfer students should complete required developmental courses within 30 attempted hours following initial enrollment at UTC.

To exit the developmental studies program, students must have a grade of C or above in each required developmental studies courses.

**Academic Standards**

**Continuation Standards**

Students will be in good standing if they maintain a minimum institutional cumulative GPA of 2.0 in all attempted hours, excluding developmental courses.

**Probation**

Students on probation who do not enroll for one or more semesters and return with no transfer work are readmitted on probation.

Students on probation who do not enroll for one or more semesters and return with transfer work will have the transfer work evaluated and the appropriate standing based upon institutional GPA will be applied.

**Suspension**

Students on suspension who do not enroll for one or more semesters and return with no transfer work will be admitted on probation.

Students who return after their period of suspension with transfer work must earn at least a 2.0 transfer GPA on all hours attempted in order to be eligible for automatic readmission to UTC. Students who are denied admission because the GPA on transfer work does not meet the required 2.0 transfer GPA must apply for readmission through the Admissions Committee. If readmitted, students will be on probation regardless of the institutional cumulative GPA.

**Dismissal**

Students who were dismissed and return with or without transfer work must appeal for readmission through the Admissions Committee. Students who receive approval for readmission will be admitted on probation.

**Academic Probation**

The University classifies a student as on academic probation when the institutional cumulative GPA is less than 2.0. A student on academic probation may enroll in courses for the subsequent semester. If the student's institutional cumulative GPA for the subsequent semester is 2.0 or better, the student is reclassified as in good standing. If the student's institutional cumulative GPA remains below 2.0, but the student earns at least a 2.0 institutional semester GPA, the probation status will be extended for another semester. If the student does not earn a 2.0 institutional semester GPA their status is changed to academic suspension. If the student has been previously suspended they will be dismissed.
Academic Suspension
A student classified as on academic suspension cannot enroll at the university for one semester from the time he or she is suspended. The complete summer sessions, or the entire summer, constitute one semester for this policy. A student who wishes to resume an education at UTC after the suspension must complete the undergraduate admissions process outlined in the “Enrolling at UTC” section of this catalog.

A student who is suspended from another institution of higher education may not enroll at UTC until one semester after the suspension date.

A previously suspended student who is readmitted is placed on academic probation regardless of the institutional cumulative grade point average at the time of readmission. If the student's institutional cumulative GPA for the subsequent semester is 2.0 or better, the student is reclassified as in good standing. If the student's institutional cumulative GPA remains below 2.0, but the student earns at least a 2.0 institutional semester GPA, the probation status will be extended for another semester. A student who fails to achieve either of these requirements will be dismissed for an indefinite period and may not apply for consideration for readmission for one calendar year.

A suspended student who enrolls in other colleges or in correspondence courses during their semester of suspension must earn at least a 2.0 average on all hours attempted during this period in order to be eligible for automatic readmission to UTC. A student not meeting the 2.0 requirement must apply for readmission through the Admissions Committee.

Dismissal
Students who have been dismissed for academic reasons may not enroll at the University for one calendar year from the time of dismissal. In order to appeal for reentry after one calendar year, they must explain in the supplemental readmission form why they can now achieve the grades necessary to meet UTC’s continuation standards. Students who have been dismissed from another institution of higher education may not enroll at UTC until one calendar year after the dismissal date.

Appeals from Suspension and Dismissal
Although the University believes it to be in the best interests of students who have been suspended or dismissed to remain out of school for a reasonable period, it also recognizes that in unexpected circumstances (e.g., incapacitating injury or serious illness of a family member) students may fall behind in their studies through no fault of their own. Students with extenuating circumstances may submit appeals for reentry prior to sitting out the required suspension or dismissal period. Suspension and dismissal appeals are due in the Records Office, 109 Race Hall, no later than one week (seven calendar days) prior to the first day of classes in any semester or summer term. The Petitions Committee will consider appeals for readmission, but it should be understood that exceptions to the suspension and dismissal period will be rare.

Honor Code
The Honor Code expresses the University’s expectation that students behave in an honest and responsible manner in all matters within the University community, and that education is a cooperative enterprise between student and teacher and among fellow students. Dishonesty violates and weakens this relation and lessens the value of the student’s education. Violation of the honor code may be recorded on the student’s academic record. The Student Handbook presents the Honor Code, and describes the Honor Court and its procedures.

Plagiarism
Plagiarism occurs when a person presents words, ideas, patterns of ideas, data, and other intellectual or creative work as the product of his or her effort. Plagiarism is a violation of the University’s Honor Code and can lead to specific penalties including classification on disciplinary probation, a failing grade for the course, or suspension or dismissal from the University. Each student assumes full responsibility for understanding the concept of plagiarism and the University’s policies.

The University encourages all its students to learn more about plagiarism and methods to appropriately present the work of others. Students should refer to the Student Handbook or to www.utc.edu/Administration/StudentDevelopment/handbook/academics.pdf to review the University’s Honor code and treatment of accusations of plagiarism.

Grade Appeal Process
Preamble
It is the prerogative and responsibility of each member of the faculty to determine the final grade for each student according to criteria clearly defined and explained in the syllabus.

Whenever a student feels that his or her rights and interests have been seriously jeopardized by way of unfair, arbitrary, or malicious exercise of faculty grading prerogatives and desires to appeal the grade, the following appeal procedures must be followed. (It is recognized that the following time frames are maximal, and that in cases where a failing grade prevents a student from continuing in the course, the appeals procedure can be accelerated.)

1. Conversation with the Instructor
The student who desires an appeal must seek an appointment with the faculty member who awarded the grade within five working days of the day when the final course grades were posted. The purpose of this appointment is to request clarification of the basis for the evaluation. If the student is unable to locate the faculty member personally, the request may be presented to the head of the department in which the course is offered. During these conversations, the student shall have access to all his or her exams and papers that have not previously been returned to the student for the period covered by the grade. Provision of material returned to the student is the responsibility of the student. A faculty member who chooses not to return papers to the student should keep graded exams and papers for a minimum of the next regular semester following the completion of a term. If the complaint is not resolved by way of such discussions and the student is still convinced that the grade is arbitrary or unjust, a formal appeal may be made to the Faculty Grade Appeals Committee.

2. Appeal to the Faculty Grade Appeals Committee
Within five working days of the conversation with the faculty member who awarded the grade (or the department head, if nec-
A. Procedure
Upon receipt of a formal appeal, the head of the department (or the dean, if the department head is the faculty member whose grade is being appealed) involved shall notify the faculty member who awarded the grade and shall immediately appoint two members of the department faculty to serve as observers at the appeals hearing and as informational resources for the Faculty Grade Appeals Committee. The head shall forward those names, and the written appeal, together with all relevant material and information concerning the case, to the dean of the college or school. The dean shall then meet with the student to counsel the student and discuss the appeals process. If the student wishes to continue with his or her appeal the dean, with the cooperation of the Committee chair, will call, as soon as possible, a meeting of the Faculty Grade Appeals Committee.

B. Composition
The Faculty Grade Appeals Committee shall consist of three (3) faculty members and two (2) alternate faculty members (who can be called on if one of the three regular members is unavailable or is in the same department as the appealing student) elected annually by the Faculty Senate. In addition, two (2) faculty members shall be selected at the time of an appeal by the head of the department (or dean of the appropriate college) in which the appealed course is offered to serve as observers at the appeals hearing and as informational resources for the Committee. These faculty are invited to answer questions asked them of the Committee, but otherwise are observers only, and will be excused before deliberations begin. The student may also invite up to two observers, but they are to be observers only. The dean of the academic unit involved shall convene the meeting but the Committee chair shall run the hearing. Should the dean be the course professor involved in the appeal, the Provost will serve in place of the dean. The dean shall not vote on an appeal except in cases of a tie vote. A quorum for this committee will consist of three (3) members of the Grade Appeals Committee.

C. Responsibilities of the Committee, Department Head and Dean
1. The responsibility of the Grade Appeals Committee is to hear undergraduate student appeals whenever students feel that their rights have been seriously jeopardized by way of unfair, arbitrary, or malicious exercise of faculty grading prerogatives and desire to appeal the grade. The committee reviews grades after a student who is appealing has followed the current published procedures.
2. As soon as possible after the complete appeal is received in the Dean’s office, the dean shall inquire of the student and the faculty member involved whether either desires a hearing before the committee. If no hearing is requested within 5 business days, the committee shall determine the appeal and issue its ruling on the basis of the record. If either party requests a hearing within 5 business days, such a hearing shall be held within 10 working days of the request, at which time both the student and the faculty member shall be afforded the opportunity to present further evidence. Within five working days after the hearing, the committee shall, on the basis of all the material before it, determine the appeal and issue its ruling as it deems appropriate, either upholding the grade or requesting the faculty member to change it accordingly. As soon as possible after this ruling is made, the Dean (or Provost, if appropriate) shall notify the faculty member and the student about the Committee's ruling, by email and hard copy. Either party shall have the right to appeal the committee's decision to the Chancellor of the University.

D. Grade Appeals Committee Guidelines
If a student appeals a grade to the Grade Appeals Committee, the following guidelines will be used in the appeal process:
1. The burden of proof in the appeal lies with the student. Instructors should maintain, however, documents related to the assignment of grades for a period of at least one semester to facilitate the investigation of improperly assigned grades. If requested, instructors shall make copies of all relevant documents available to the student, following FERPA guidelines. If the student requests the hearing but fails to appear at the hearing without sufficient cause the grade appeal will be denied and cannot be refiled.
2. Grade appeals may be warranted in the case of deviations from the syllabus. This constraint should not be interpreted to mean that instructors may not change grading criteria during the course of the semester, as long as all students in the class are notified of these changes in a timely manner. Events may necessitate such changes.
3. Grade appeals should never be based upon a student’s individual needs or circumstances; students do not have the right to appeal a grade because of their health, anxiety, family circumstances or other such circumstances. Grades should only be based upon student performance.
4. Instructors have a right to set standards for a course consistent with department parameters including the number and types of exams, amount of outside work required, attendance policies, class discussion requirements, exam time limits or any other grading criteria. It is the responsibility of the instructor to clearly outline these standards in the syllabus. Students may not use the issue of an instructor’s standards (e.g., “an instructor was too hard”) as the basis for a grade appeal.
5. Students may not use the grade appeal procedure as a bargaining mechanism. Grade change recommendations will be based on already completed course work.
6. Student claims of unjust assignment of grades based upon the perception that an instructor did not like or was biased against the student must still stand the burden of objective proof. If proof can be provided that the instructor was biased or disliked a student, then the possibility of arbitrary or capricious assignment of grades may result in a successful appeal.
7. The outcome of a grade appeal is a recommendation only. If the Grade Appeal Committee finds with the student, the instructor may request the committee to explain its decision in writing. If the instructor refuses to change the grade, a copy of the committee's rationale shall be provided to all administrators who are part of the appeals process. The student may appeal to the Chancellor.
3. Appeal to the Chancellor
Within five working days of the decision of the Faculty Grade Appeals Committee, the student or the faculty member may present, in writing, a request for review by the Chancellor of the University. In such event, the Chancellor shall immediately request the complete record of the case from the Faculty Grade Appeals Committee and shall make a decision on the basis of the record. The Chancellor has the ultimate authority on this campus to decide whether the grade will be changed and to effect such a change. In the event that a decision of the committee against the student is upheld by the Chancellor, that decision shall be final. If the Chancellor upholds a decision of the Faculty Grade Appeals Committee against the faculty member, the faculty member shall be requested to change the grade in accordance with the committee’s ruling.

Course Repeat and Grade Replacement Policy
Students may repeat any UTC or transfer course.

1. Provided prerequisites are met, students may replace a total of three grades of C or lower. The first three grades in one or more subjects may be replaced; the total number of replaced grades cannot exceed three. Developmental studies courses (institutional credit) will be included in the grade replacement limit, but grades of S, NC, and W will not count in the allotted number of replacement grades.

2. All grades, except the three replaced grades, will be used in the grade point average computation.

3. In any repeated course, excluding “r” courses, a student forfeits the first earned hours, if any. Previous grades and credit do not count; only the last grade counts.

4. Courses in which grades of A or B were earned cannot be repeated except for “r” courses. If an A or B is repeated, the repetition will be changed from credit to audit. An exception is made for registered nurses who are required by the School of Nursing to repeat specified science courses (Biology 208, 210, Chemistry 121 and 122) that were originally completed 10 years or more prior to the students’ admission to the nursing major at UTC.

5. For a transfer student, a “course” is interpreted as any course listed separately in an individual term on the transcript, regardless of the number of such courses needed to equate to a UTC course.

6. When a student is repeating more than one course in a term and is nearing the permissible limit of three replacement grades, the following order will determine replacements: 4 hour Fs, 3 hour Fs, 2 hour Fs; 4 hour Ds, 3 hour Ds, 2 hour Ds; 1 hour Fs, 1 hour D; 4 hour Cs, 3 hour Cs, 2 hour Cs, 1 hour Cs. In the case of a tie, a grade in a course within the student’s major will be replaced first.

Withdrawals

Exception to the Withdrawal Policy
A student experiencing a serious illness, injury, or unusually difficult personal circumstances may request an exception to the withdrawal policy by submitting documentation of these circumstances to the Registrar. The student will receive a W for all courses for which withdrawal is approved. Requests for exemptions must be submitted in writing within one calendar year of the end of the semester in question.

Failure to Withdraw from Classes
Failure to attend scheduled class meetings is not evidence of the student’s intent to withdraw from a course. Students wishing to withdraw from courses must withdraw online or submit a Registration Drop/Add form to First Place during the official drop period. Students cannot withdraw from a course either online or in the Records Office after the official last day to withdraw for the semester or summer term. Failure to withdraw officially from any course will result in a grade of F if the student has not successfully completed the assigned work.

Students who are receiving Title IV financial aid and have stopped attending UTC classes without withdrawing officially will have their change in enrollment status reported to the U.S. Department of Education as required. The grade of F will be changed to WF by the Records Office for internal use only. The WF will be the equivalent of F for all academic purposes.

Academic Recognition and Honor Societies
The University recognizes scholarly achievement in a number of ways.

Dean’s List
The dean’s list includes the names of all students who achieve an institutional semester GPA of at least 3.2 with a registration of a minimum of six graded hours or more each semester. Developmental courses do not count toward the determination of GPA for graduation or honors.

General University Graduation Honors
To be eligible for Latin honors at UTC, students must have a minimum of 60 earned hours at UTC. The University grants
graduation honors to students with distinguished academic records. The graduation honors are:

cum laude granted when the student's cumulative UTC GPA at the end of the final semester is 3.5.

magna cum laude granted when the student's cumulative UTC GPA at the end of the final semester is 3.7.

summa cum laude granted when the student's cumulative UTC GPA at the end of the final semester is 3.9 or higher.

Graduation honors will be inscribed on the diplomas. Institutional credit will not be counted in the grade point average for graduation or honors. Grade point averages are not rounded. These standards apply to all undergraduate degree candidates, regardless of the catalog under which they entered.

Honors Societies
Academic achievement, either in general or in specific fields, is recognized by a number of organizations:

Alpha, the scholastic honor society of The University of Tennessee at Chattanooga, elects to membership seniors who have maintained a very high scholastic average (3.75 or higher). Election is by vote of the faculty members of Alpha. Alpha Lambda Delta, national honor society for women and men, elects to membership those freshmen who have a 3.5 institutional cumulative average on at least 12 graded hours in the first semester or an institutional cumulative average of 3.5 at the end of the freshman year. Golden Key, is a national honor society for all juniors and seniors, either full or part time, who have been at UTC for one year and who have maintained at least a 3.3 institutional cumulative grade point average. Mortar Board, a national honor society for senior women and men, elects to membership those who at the end of their junior year have a minimum institutional cumulative grade point average of 3.0 and who have demonstrated outstanding ability in leadership, scholarship, and service to the University. Phi Eta Sigma, national honor society for men and women, elects to membership those freshmen who have a 3.5 institutional cumulative average on at least 12 graded hours in the first semester or an institutional cumulative average of 3.5 at the end of the freshman year.

Honor societies in specific areas include:
Alpha Kappa Delta (sociology)
Alpha Mu Alpha (marketing)
Beta Alpha Psi (accounting)
Beta Beta Beta (biology)
Beta Gamma Sigma (business)
Delta Omicron (music)
Delta Tau Omega (geology)
Financial Management Association (finance)
Gamma Sigma Epsilon (chemistry)
Kappa Delta Pi (education)
Kappa Omicron Phi (home economics)
Kappa Tau Alpha (communication)

Lambda Alpha Epsilon (criminal justice)
Lambda Iota Tau (literature)
Omicron Delta Epsilon (economics)
Phi Alpha Theta (history)
Pi Delta Phi (French)
Pi Gamma Mu (social sciences)
Pi Mu Epsilon (mathematics)
Pi Sigma Alpha (political science)
Psi Chi (psychology)
Scabbard and Blade (military science)
Sigma Delta Pi (Spanish)
Sigma Iota Epsilon (business management)
Sigma Pi Sigma (physics)
Sigma Theta Tau (nursing)
Sigma Xi (sciences)
Tau Beta Pi (engineering)
Upsilon Pi Epsilon (computer science)

Departmental Honors
The Departmental Honors Program allows exceptional students to receive special recognition for their academic achievements. Departmental honors is bestowed upon students who have maintained high academic standards in their course work, completed an acceptable two-semester, four-hour thesis project, and passed an oral examination. Graduation with departmental honors is recorded on the academic record and on the diploma. The departmental thesis project allows each honors candidate to deepen knowledge and increase skills in a particular discipline. Typical thesis projects include original research or literary analysis, scientific experimentation, or artistic expression. Admission to departmental thesis requires an institutional cumulative grade point average of 3.2 and a grade point average of 3.5 in the major. Any student with an institutional cumulative grade point average of 3.5 and a grade point average of 3.75 in the major may become a candidate for highest honors. The requisite GPA is required at the time of graduation for a student to be awarded Departmental Honors.

Application for departmental honors is usually made during the third semester before graduation. Forms and a full accounting of procedures and policies can be found in the current Departmental Honors Handbook, obtainable from the Director of University Honors, 202 Guerry Hall, or online at www.utc.edu/Administration/DepartmentalHonors/.

Enrolling in Graduate Courses
A senior who is within 30 credit hours of completing requirements for the bachelor's degree at The University of Tennessee at Chattanooga may apply for admission to graduate courses if the applicant has an institutional cumulative grade point average of 3.0 (B) or higher and is recommended by the head of his or her major department. Subject to the approval of the director of the Graduate School, a student may earn up to nine credit hours of graduate credit prior to completing the bachelor's degree. Such approval must be obtained each semester by completing the special application form which is available in the Graduate School Office. Courses taken for graduate credit may not be applied toward an undergraduate degree.
Degree and Graduation Requirements

Introduction
This chapter reviews the requirements for undergraduate degrees. The requirements for each major are presented in separate sections of the Catalog. Students should review with care the degree requirements listed in this section as well as the requirements for the major(s) and minor(s) they wish to complete.

Undergraduate Degrees
The University offers undergraduate programs that lead to the degrees of Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Bachelor of Science in Electrical Engineering, Bachelor of Science in Mechanical Engineering, Bachelor of Science in Nursing, and Bachelor of Social Work. Majors offered within these degrees are as follows. Specific requirements for these degrees are outlined in the appropriate colleges and divisions in the following chapters.

Applied Mathematics (B.S.)
  Concentrations: Actuarial Science, General
Art (B.A.)
  Concentrations: Graphic Design, Painting and Drawing, 3-D
Art Education (B.S.)
Biology (B.S.)
  Concentrations: General, Ecology, Molecular, Organismal, Preprofessional
Business Administration (B.S.)
Chemistry (B.A.)
  Concentrations: Chemistry, Biochemistry
Communication (B.A.)
Computer Science (B.S.)
  Concentrations: Computer Engineering, Information Security and Assurance, Software Systems, Scientific Applications
Criminal Justice (B.S.)
Early Childhood (B.S.)
  Concentrations: Child and Family Studies, Early Childhood Education
Economics (B.A. and B.S.)
Electrical Engineering (B.S.E.E.)

Engineering (B.S.E.)
  Concentrations: Chemical, Civil, Environmental, Industrial
Engineering Technology Management (B.S.)
  Concentrations: Construction Management, Engineering Management
English and American Language and Literature (B.A.)
  Concentration: Writing
Environmental Science (B.S.)
  Concentrations: Biology, Chemistry, Engineering Science, Geographic and Cartographic Sciences, Geology, Mathematics, Sociology-Anthropology
Exceptional Learning K-12 (B.S.)
Foreign Languages (B.A.)
  Concentrations: French, Greek and Latin, Latin, Spanish
Foreign Language Education (B.S.)
  Concentrations: French, Greek, Latin, Spanish
Geology (B.S.)
  Concentrations: Geology, Environmental Geology
Health and Human Performance (B.S.)
History (B.A.)
Humanities (B.A.)
  Concentrations: International Studies, Women’s Studies
Interior Design (B.S.)
Legal Assistant Studies (B.S.)
  Concentrations: Legal Assistant Studies, Social Science
Mathematics (B.A.)
Mechanical Engineering (B.S.M.E.)
Middle Grades Education (B.S.)
  Concentrations: English, Mathematics, Natural Sciences, Social Sciences
Music (B.A.)
Music (B.M.)
  Concentrations: Instrumental Performance, Theory and Composition, Vocal Performance
Music Education (B.M.)
  Concentrations: Instrumental, Vocal Music
Nursing (B.S.N.)
Philosophy and Religion (B.A.)
  Concentrations: Philosophy, Religious Studies, Combined
Physics (B.S.)
Political Science (B.S.)
  Concentrations: American Studies, International and Comparative
Studies, Legal Studies, Public Policy and Administration, Public Administration and Nonprofit Management
Psychology (B.A. and B.S.)
Rehabilitation Science (B.S.)
  Concentrations: Occupational Therapy, Physical Therapy
Secondary English (B.S.)
Secondary Mathematics (B.S.)
Secondary Natural Sciences (B.S.)
  Concentrations: Biology, Chemistry, Earth and Space Science, Physics
Secondary Social Sciences (B.S.)
  Concentrations: Economics, Geography, History, Political Science
Social Work (B.S.W.)
Sociology and Anthropology (B.A. and B.S.)
  Concentrations: Anthropology, Sociology
Theatre (B.A.)
Theatre Education K-12 (B.S.)

Minors are currently available in the following areas:
Africana Studies
Anthropology
Art History
Asian Studies
Athletics Coaching
Biology
Business Administration
Chemistry
Classics
Communication
Computer Science
Criminal Justice
Drama
Economics
Education
English: Literature, Writing, Creative Writing
Entrepreneurship
Environmental Science
Exercise Science
Food and Nutrition
French
Geographic Information Science
Geography
Geology
Greek
History
Humanities
International Studies
Latin
Latin American Studies
Leisure Studies
Legal Assistant Studies
Mathematics
Music: Composition, History, Performance
Philosophy
Physics
Political Science
Promotion
Psychology
Public Administration and Nonprofit Management
Religious Studies
Sociology
Spanish
Speech
Theatre
Women's Studies

Requirements for the Bachelor's Degree

University Requirements
To receive a bachelor's degree from the University of Tennessee at Chattanooga, students must complete the requirements listed below. Some degree programs have additional requirements. The following chapters list the specific requirements for each undergraduate major. Students should review with care the degree requirements listed in this chapter as well as the requirements for the major(s) and minor(s) they wish to complete.

Completion of the Bachelor's degree requires that students complete the following 12 requirements:

1. Complete all degree requirements (majors and minors) within the same valid catalog year and complete all major and related curriculum requirements outlined in the valid catalog year for the specific major(s).

Major Requirements
Students must complete the requirements specified by their major(s) including study in related areas as specified by the department, within a valid catalog year.

Foreign Language Requirement
The B.A. degree requires completion of the second college year in one foreign language. The faculty of the Department of Foreign Languages encourages students to begin or to continue foreign language study during their first year at the University or upon declaring a major that includes a foreign language requirement.

Students whose native language is not English pursuing a B.A. degree will fulfill the foreign language requirement by meeting the English requirements for foreign students. The courses are: English 161, 162, 121 and 122. Students testing out of English 161 and 162 will fulfill this requirement upon successful completion of English 121 and 122.

Developmental Requirements
Students required to take any of developmental courses must complete these courses in addition to courses required for specific degrees. Although students may be required to complete developmental courses, the credit earned in these courses does not apply to the hours required for graduation, major requirements, general education requirements, or electives. These courses do count toward full-time enrollment, however. Moreover, the grades earned in these courses are not included in the calculation of the grade point averages for graduation or honors.

Minor Requirements
All students seeking the B.A. degree in the College of Arts and Sciences must complete the requirements for a minor in the same valid catalog year as the major(s). Students completing the requirements for two majors satisfy the requirement for a minor. For students seeking the B.A. as a second degree, the previously completed major will satisfy the minor requirement.

Students may complete an established minor requiring a minimum of 18 credit hours with at least 8 credit hours at the 300/400 level. Students must earn a GPA of 2.0 for courses
4. Complete at least 25 percent of the minimum credit hours under the direction of UTC faculty.

5. Complete 60 credit hours at an accredited senior (4-year) institution.
   Students who have attended a junior or community college must complete at least 60 credit hours at a four year college or university with the last 24 credit hours completed at UTC.

6. Complete the last 24 credit hours at UTC.
   The last 24 credit hours must be completed at UTC. With prior approval by the Department Head of the student’s major department, one course completed at another University of Tennessee campus may be counted as part of the last 24 credit hours.

Non-traditional Credit Limitations
Nontraditional credit will not apply toward the last 24 credit hours of residency. Students who have completed 24 credit hours of traditional course work at UTC and have not yet attempted the last 24 credit hours may petition to apply a maximum of 12 credit hours of these types of credit toward the last 24 credit hours.

Pre-professional and Combined Program Residency Requirements
Students in combined or pre-professional programs must complete the last 24 credit hours of undergraduate study at The University of Tennessee at Chattanooga before entering the professional or combined program. Students can only transfer credit hours from the professional program to fulfill the degree; other transfer coursework will require a petition for an exception to the last 24 credit hour residency requirement.

7. Complete at least 39 credit hours at the 300-400 level.
   Students must complete at least 39 credit hours at the 300-400 level unless otherwise specified by the major.

8. Complete a minimum of 12 credit hours at the 300-400 level in the UTC major department(s) or program(s) offering the degree.

9. Earn a minimum of a 2.0 institutional cumulative GPA unless otherwise specified by the major, a minimum 2.0 GPA for all work attempted at UTC, and a minimum 2.0 GPA for all credit hours attempted in the major(s) unless otherwise specified.

10. Complete senior exit exam(s).
    Students must participate in evaluative procedures, which may include examinations in general education, the major field of study, or both.

11. File an application for degree with the Records Office.
    Students are responsible for applying for graduation with the Records Office according to the published deadlines. Students who neglect to file an application by the published deadline must apply for the subsequent graduation ceremony. The applicable deadlines are:
    • Spring Graduation Ceremony - October 15
    • Summer Graduation Ceremony - March 15
    • Fall Graduation Ceremony - June 15
    Students are eligible to participate in graduation ceremonies upon completion of all requirements for the degree. Students with extenuating circumstances may appeal in writing to the University Registrar for special permission to participate in graduation ceremonies without having fulfilled all requirements for the degree. Students participating in the graduation ceremonies will not receive the degree until they have fulfilled all degree requirements.
The staff of the Records Office certify students as eligible for graduation. Once the degree has been conferred, the student's academic record, including grades for courses within the degree, cannot be changed.

12. Satisfy all financial obligations to the University.
In accordance with State law, the University will not release official transcripts or diplomas to students who have financial obligations to the University.

Special Degree Options
The University allows students to pursue special degree options, such as a second Bachelor's degree. This section describes the regulations for these options.

Second Bachelor's Degrees
Students may earn a second bachelor's degree by simultaneously completing the requirements for more than one bachelor's degree (e.g., B.A. and B.S.). Students may also earn a second bachelor's degree after graduating by enrolling for a second post-baccalaureate degree.

Simultaneous Second Degree Requirements
Students may receive a second bachelor's degree provided under the following conditions:

1. Students must complete the specific requirements for both degrees.
2. The curriculum for the second degree must include at least 25 percent of the minimum credit hours required for the degree not applied to the first degree. These credit hours must consist of courses taken at UTC. A GPA of at least 2.0 is required in these courses.
3. The additional credit hours beyond the first degree shall include a minimum of 12 credit hours taken at UTC in the major department of the second bachelor's degree. A GPA of at least 2.00 is required in these courses.

Changes to Academic Record after Degree Conferral
Once a baccalaureate degree has been awarded, the institutional cumulative grade point average at the time the degree is posted is locked. No changes are made to course work completed prior to the posting of the degree to change the institutional cumulative grade point average at graduation. Subsequent course work and grades earned are calculated into the continuing institutional grade point average.

Course work completed as part of the first degree may be repeated but the subsequent grade will not replace the initial grade. Both courses and grades will be reflected on the record and both will be calculated into the continuing institutional cumulative grade point average.

Course work which repeats credit (earned hours) applied toward the first degree does not count toward the required 30 additional hours in residence for a subsequent degree. Students may repeat course work in the second degree for which they did not earn hours in the first degree. Students may repeat course work in the second degree for which they did not earn hours in the first degree. Students may also repeat credit (earned hours) from the first degree to satisfy a grade prerequisite requirement in the second degree.

Double Major Requirements
Students simultaneously completing a double major must fulfill all requirements for both majors.

General Education Requirements
The general education requirements described below were approved by the faculty to become effective for new students who entered in Fall 1999 and thereafter. Anyone who changes to the 1999 or later catalog must meet all these requirements. Courses are continually being reviewed to meet the criteria for general education certification.

Philosophy and Goals
The UTC faculty believes that this curriculum can expand our students' fundamental knowledge, abilities, and aesthetic sensibilities, leading to a social awareness essential for individual and societal development.

Proficiencies (Goals)
Graduates of The University of Tennessee at Chattanooga should have the knowledge and ability to:

- Think analytically, logically, creatively, reflectively, and sensitively about the human condition;
• Think analytically, logically, creatively, and reflectively about natural and abstract structures;
• Collect, process, interpret, and use quantitative and qualitative information using up-to-date methods, to define and defend viewpoints, solve problems, and make decisions;
• Communicate effectively, especially in speech and in writing; engage in civil debate; and collaborate on common tasks;
• Incorporate into their world views a comparative, historical, and global perspective on the diversity of the human experience, including the complex factors that shape individuals, societies, civilizations and knowledge.

Categories of Study
The curriculum outlined in the following categories provides a reasoned plan to achieve this purpose. It is comprised of courses both outside and within students' majors; includes the key disciplines developed by human beings to pursue knowledge of themselves and the universe; and maintains a balance between specific essential courses and sets of courses which provide flexibility for individual interests.

The general education categories are described below, along with lists of courses that currently meet the criteria for these categories. Students should check the schedule of classes on the UTC Website for the most complete list of courses being offered for the coming semester. Also, students should check major requirements before choosing courses, since specific courses in each category are often required for a particular major.

UTC courses that have not been certified for the General Education curriculum may not be used to satisfy any General Education requirement. Consequently, student petitions seeking credit for non-certified UTC courses will not be accepted by the First Place Office, the Records Office, or the General Education committee.

1. RC: Rhetoric and Composition I and II
(6 credit hours)
All students must complete Rhetoric and Composition I and II, with grades of C or better, within the first 42 attempted credit hours of college work.

Rhetoric and Composition I (3 credit hours)
An intensive writing course designed to develop skills essential for effective communication. Students will be sensitized to the structure, beauty, and complexities of Standard American English as they refine their abilities to write logically and clearly. This course must be completed with a grade of C or above. Prerequisite: appropriate placement level.

Rhetoric and Composition II (3 credit hours)
A more advanced writing and oral communication course, emphasizing the composition of extended and persuasive essays and research papers, and the use of computers to gather and prepare information. This course must be completed with a grade of C or above. Prerequisite: English 121 with a grade of C or above or appropriate placement level.

RC - Approved Rhetoric and Composition Courses:
• Rhetoric and Composition I: English 121, University Honors 101
• Rhetoric and Composition II: English 122, University Honors 102

2. Mathematics and Statistics
(6 credit hours; one three-credit hour course in mathematics, one three-credit hour course in statistics)
The purpose of this category is to develop the ability to use abstract and deductive reasoning, to think logically and creatively about mathematical and statistical problems, and to be able to interpret, develop, and use some mathematical or statistical models of real world and abstract phenomena. Courses in this category emphasize the use of mathematics as a powerful language in many disciplines and its significant role in human development. All students must complete the mathematics requirement within the first 60 attempted credit hours of college work.

MA - Approved Mathematics Courses:
• Mathematics: 123, 131, 136, 144, 145, 151/152, 216

ST - Approved Statistics Courses:
• Biology 216
• Business Management 211
• Engineering 222
• Health and Human Performance 401
• Public Administration and Nonprofit Management 205
• Mathematics 210, 307, 408
• Psychology 201/204
• Sociology 250

3. Natural Sciences
(7 or 8 credit hours; two courses in the natural sciences, with at least one four-credit hour course that includes a laboratory component)
The purpose of studying the natural sciences is to participate in the systematic ways in which human beings analyze the physical universe, to appreciate the achievements of the human mind in comprehending the universe, and to understand the significant role of the natural sciences in human development. Courses in this category emphasize empirical studies of matter, energy, living systems, natural processes, and related phenomena, and examine science in the context of human culture.

SL - Approved Natural Sciences Lab Courses:
• Astronomy 101/181, 102/182
• Biology 119, 121, 122, 210
• Chemistry 119, 121/123, 122/124, 125,
• Environmental Science 150, 151
• General Science 111/181
• Geology 111/181, 112/182
• Physics 103/183, 104/184, 119, 230/280, 231/281

NS - Approved Natural Sciences Non-Lab Courses:
• Astronomy 101
• Biology 110
• Chemistry 111
• Engineering 211
4. Humanities and Fine Arts (6 credit hours, with at least 3 credit hours in the fine arts)

Humanities courses are designed to acquaint students with historical, literary, philosophical, religious, and political experience and traditions, with special attention to the methods and techniques of the humanities disciplines. Fine arts courses are designed to heighten perception, appreciation, and enjoyment of music, theatre, and the visual arts, and may include studio experience in addition to historical studies.

HU - Approved Courses in the Humanities:
- Classics 396
- Computer Science 385
- English 131, 133, 211, 212, 213, 214, 219, 257, 307 (formerly 207), 331, 335
- History 203, 204
- Humanities 219, 257, 335
- Philosophy 201, 221, 325, 425
- Religion 103, 110, 213, 221, 222, 236
- University Honors 214

FA - Approved Courses in the Fine Arts:
- Art 111, 214, 215, 301
- Music 111, 317, 320
- Theatre and Speech 111, 113, 115, 255, 257, 280, 457
- University Honors 103, 104, 105, 106

5. Cultures and Civilizations (9 credit hours, to be fulfilled by completing either Option A or Option B)

Option A: two courses in western humanities and one course in non-western cultures and civilizations.

Western Humanities I and II (6 credit hours)
An historical approach to the great ideas, events, modes of thinking, and creations of the western world. The first course in this sequence will focus on developments from Antiquity through c. 1600; the second, from c. 1600 to the present. Both courses are designed to deepen historical perspective and offer opportunities to experience the power of literature and wrestle with issues of the human spirit. A set of primary texts common to all sections will serve as the focus for each course.

WH - Approved Western Humanities Courses:
- Classics I
- English 113, 203
- Philosophy 101, 113
- University Honors 101

Option B: (One course in each of the three world civilization periods.

WC: World Civilizations I, II and III (9 credit hours)
An historical approach to significant or characteristic events, practices, and creations from world cultures and civilizations. The first course (I) focuses on the ancient world through c. 1000; the second (II) from c. 1000 to c. 1800; the third (III) from c. 1800 to the present. All three courses include important aspects of both Western and nonwestern history and civilization, and integrate the study of the humanities and fine arts. These courses are designed to deepen historical perspective and increase cross-cultural understanding.

WC - Approved World Civilizations Courses:
- World Civilization I: History 103
- World Civilization II: History 104
- World Civilization III: History 105

6. Behavioral and Social Sciences (6 credit hours; two courses to be taken in two different disciplines, unless special courses are required in the major)

The purpose of courses in the social and behavioral sciences is to explore the nature of human beings and how they function as individuals, as citizens, and as members of groups. These courses emphasize the theories, principles, methods, and empirical results of the social and behavioral sciences and assess the impact of scientific research on society.
SS - Approved Courses in Behavioral and Social Sciences:
- Anthropology 152, 211
- Communication 320
- Criminal Justice 110, 295
- Early Childhood 340
- Economics 101, 102
- Geography 104
- Health and Human Performance 407
- Political Science 101, 102, 103
- Psychology 101, 241
- Social Work 210
- Sociology 125, 151, 215
- University Honors 315, 317r
- Women’s Studies 200

Transfer Articulation Exceptions to General Education Requirements
The UTC General Education Committee recommends that courses specifically meeting common general education category requirements at Tennessee public institutions satisfy the comparable general education category requirements when transferring to UTC. Required competencies including laboratory science and unmet category requirements must still be satisfied.

1. The transfer module includes two courses in mathematics, a category which presumably includes courses in statistics. UTC requires one course in mathematics and one in statistics. Students who transfer two mathematics courses which meet the general education requirement at their original institution must be given credit for meeting UTC requirements in mathematics and statistics, though they may also need to take statistics to meet the requirements of their major.

2. The TBR general education core includes six credit hours in history and nine in humanities and fine arts. The transfer module includes 15 credit hours in history, humanities, and fine arts without mandating a distribution of courses. Students who have taken general education courses in history, humanities, and fine arts at other public colleges and universities in Tennessee must accordingly be given credit for them as meeting our requirements in Cultures and Civilizations/Humanities and Fine Arts even if these courses are not distributed as the UTC requirements specify. Any 15 credit hours in history, humanities, and fine arts must be accepted as meeting our General Education requirements.
Special Academic Programs

Pre-Professional Programs

Combined Programs
The University of Tennessee at Chattanooga offers both three- and four-year programs leading to the bachelor’s degree for students preparing for study in certain professional areas. In the four-year program, the degree is granted upon completion of 120 semester hours, which include both the general education requirements and major and elective hours. Under the combined programs, a student may receive the bachelor’s degree from UTC after completing three years of required coursework (or at least 84 hours of undergraduate study) and the first year of professional school. The combined programs available include the bachelor’s degree for students preparing for the study of medicine, dentistry, medical technology, or physical therapy.

Before entering a professional school, the student in a combined program must have completed all of the course work required for the bachelor’s degree except for the first year of the professional program. The requirements in general education and in a major must be completed as a part of this program. While transfer work may be accepted, at least the last 24 semester hours of the three-year undergraduate program must be earned at UTC.

The student is responsible for having a transcript of the first year’s work at a professional school sent to the University and for filing application for the bachelor’s degree.

Occupational Therapy
Students who wish to receive the B.S. degree in Rehabilitation Science with a concentration Occupational Therapy (OT) will complete the elective hours for a total of 102 hours at UTC. Admission to UTC does not assure acceptance into the program. The student must follow the application procedures for admission to the Occupational Therapy Program at the University of Tennessee Health Science Center in Memphis. After the students are accepted into the University of Tennessee Health Science Center’s (UTHSC) Occupational Therapy program, the Chattanooga students continue to be enrolled at UTC for one semester of their senior year. For the second semester of the senior year, students are officially enrolled at UTHSC but continue to attend classes on the UTC campus.

The pre-occupational therapy students apply for admission into the UTHSC Occupational Therapy program by February of the junior year (see UTHSC’s website at www.utmem.edu for admission requirements into the Masters of Occupational Therapy program). The admission requirements for the B.S. in Rehabilitation Science: Occupational Therapy is to be accepted into UTHSC’s OT program. Students will then move from pre-OT status to the B.S. in Rehabilitation Science concentration in OT status. The student will be informed of their acceptance into the OT program by the end of the Spring semester, which assures a smooth transition to register for fall classes offered at UTC.

The student enters UTC as a freshman or transfer to complete prerequisites for the professional program in occupational therapy. The last 24 of the 92 hours of prerequisite course work must be completed in resident courses at UTC. If elective hours are transferred in after completing the 92 hours, the student must petition residency requirements. The student applies for acceptance into the OT program after completing the prerequisites (92 semester hours) and other requirements for admission into the Masters of Occupational Therapy program at UTHSC. The OT student is required to be enrolled at UTC for the fall semester and take Physical Therapy 410, Human Gross Anatomy. The student completes all the required prerequisites and one semester of required PHYT 410 at UTC, followed by one semester of 18 hours in 400-level course work in the occupational therapy program at UTHSC. The 18 hours of course work taken through UTHSC’s OT program are then transferred back to UTC to complete the degree requirements. The student is awarded the B.S. in Rehabilitation Science with a concentration in Occupational Therapy from UTC provided all other requirements toward the degree have been successfully completed.

The OT student continues to attend UTHSC to complete the requirements for a Masters of Occupational Therapy. This requires an additional 57 hours of course work, the student attends UTHSC for an additional two (2) calendar years beyond the first professional year. This includes an additional 42 semester credit hours of course work and 480 hours of clinical experiences or 15 semester credit hours.

Preparation for Health Professions
Students wishing to enter dentistry, medicine, or other health fields such as cytotechnology, dental hygiene, medical technology, pharmacy, or veterinary medicine may complete their pre-professional training at UTC before going to professional school.

The various curricula available at The University of Tennessee at Chattanooga have been prepared with the cooperation of The University of Tennessee, Memphis, and include the specific
requirements for admission to the respective colleges of the health science units there. The veterinary medicine program is offered at The University of Tennessee, Knoxville.

In general, these same programs will also meet the minimum admission requirements to other professional colleges offering degrees in these health sciences. Students wishing to prepare for professional institutions other than The University of Tennessee, Memphis, should consult the catalogs of those schools to determine the specific preparation required for admission. In all cases, final decision for admission rests with the college involved.

Dentistry
Although applicants may be admitted to the College of Dentistry of The University of Tennessee, Memphis, with a minimum of 90 semester hours in academic subjects, preference is given to those who have already completed a baccalaureate. Admissions requirements include 6 hours of English composition, 8 hours of general biology, 8 hours of general chemistry, 8 hours of organic chemistry, and 8 hours of general physics. Upper level biology courses (selected from cellular biology, comparative anatomy, embryology, genetics, histology, microbiology, and physiology) are recommended. A minimum grade point average of 2.5 in all required subjects attempted and in cumulative coursework is normally required for admission. For general electives, courses in calculus, foreign language, literature, biochemistry, social sciences, and behavioral sciences are suggested.

A student in a combined program who is working toward a bachelor's degree from The University of Tennessee at Chattanooga must complete at least 98 hours, including all general education requirements, as well as requirements for a specific major offered by UTC before entering the College of Dentistry. After the successful completion of the first year at the College of Dentistry, the student will be awarded the bachelor's degree from UTC.

Pre-Medical Technology
A student working toward the B.S. in biology degree with a pre-medical technology focus must complete all of the requirements of the degree outlined on pages 74 and 75, as well as specific requirements of the Preprofessional Concentration on page 75. During the senior year of the program, a student will be advised to apply for a certified one-year clinical program in medical technology. Realize that for most medical technology clinical programs students should have completed undergraduate courses in microbiology, immunology, and biochemistry (UTC courses offered that cover these topics are BIOL 311, BIOL 412, and CHEM 466, respectively, and are outlined as part of the Preprofessional Concentration course offerings).

Options for clinical sites include programs throughout Tennessee, Georgia and Alabama. Clinical programs in other areas of the USA might also consider UTC graduates on a case-by-case basis. Be sure to obtain a detailed description of the prerequisites for any clinical program you may consider no later than the second semester of your junior year, particularly for any clinical programs not located in the southeast USA. This will help you and your advisor map out your final year of courses at UTC so that you will have time to complete any unique course requirements of that clinical program. Applications for clinical programs must be submitted during the fall of your senior year for admittance to the clinical program beginning the next summer.

Medicine
Although most students now earn a bachelor's degree before admission to a college of medicine, some may be accepted with only three years of undergraduate work. Minimum requirements for admission to the College of Medicine of The University of Tennessee, Memphis, include:

- 16 hours of chemistry (8 hours of general and analytical and 8 hours of organic)
- 8 hours of physics (mechanics, heat, light, sound, electricity, and magnetism)
- 8 hours of biology including zoology
- 6 hours of English composition

Strongly recommended additional courses include advanced chemistry (analytical, physical, or biochemistry or chemical instrumentation) advanced biology (cellular biology, embryology, molecular biology, or genetics) calculus, behavioral and social sciences as well as computer science, languages, literature, philosophy, history, and etymology.

A total of 90 semester hours is required for admission if a student is not working toward a bachelor's degree from The University of Tennessee at Chattanooga. A degree candidate must complete 98 hours, including all general education requirements as well as requirements for a specific major offered by UTC. The last 24 of the 98 hours must be completed in resident courses at UTC.

Pre-Veterinary Medicine
Although no combined degree program is available in the veterinary medicine field, students at The University of Tennessee at Chattanooga may complete all of the courses required for admission to the College of Veterinary Medicine at The University of Tennessee, Knoxville. Because of the competition for admission to this field as well as to other health fields, students are advised to complete an undergraduate degree program in a major that will offer alternative career opportunities. The following pre-veterinary medicine courses are required:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 121, 122</td>
<td>12</td>
</tr>
<tr>
<td>Humanities and Social Sciences&lt;sup&gt;1&lt;/sup&gt;</td>
<td>18</td>
</tr>
<tr>
<td>Mathematics 131, 136 or 151/152, 161/162</td>
<td>6-8</td>
</tr>
<tr>
<td>Physics 103/183, 104/184</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 121/123, 122/124</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 351/353, 352/354</td>
<td>8</td>
</tr>
<tr>
<td>Biology 121, 122</td>
<td>8</td>
</tr>
<tr>
<td>Biology 325</td>
<td>3</td>
</tr>
<tr>
<td>Biology 328</td>
<td>4</td>
</tr>
</tbody>
</table>

TOTAL 72-74

<sup>1</sup>May include, for example, courses in English, literature, speech, music, art, philosophy, religion, language, history, economics, anthropology, political science, psychology, sociology and geography.

<sup>2</sup>Biology 311 may be approved only if Biology 328 is not offered)
Allied Health Fields
Students planning to enter one of the other health fields can satisfy the minimum admission requirements for the respective units of The University of Tennessee, Memphis, by completing one of the following programs. These programs by themselves do not lead to a degree from The University of Tennessee at Chattanooga. Students wishing to do so, however, may count any of these courses completed at The University of Tennessee at Chattanooga as a part of the total hours required for a baccalaureate degree if they decide to continue toward a major offered by UTC.

Cytotechnology
Three years of preparation (90 semester hours) are required for admission to this program at The University of Tennessee, Memphis. The program of study must include the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 121, 122 and 2 additional English courses</td>
<td>6</td>
</tr>
<tr>
<td>Biology 121, 122</td>
<td>8</td>
</tr>
<tr>
<td>Biology 311</td>
<td>4</td>
</tr>
<tr>
<td>Biology 330 and 428</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 121/123, 122/124</td>
<td>8</td>
</tr>
<tr>
<td>Advanced science (analytical chemistry, organic chemistry, embryology, comparative anatomy, genetics, and physiology)</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics (preferably 131)</td>
<td>3</td>
</tr>
<tr>
<td>Social science</td>
<td>12</td>
</tr>
<tr>
<td>Electives Courses in human anatomy and physiology, physics, English, speech, mathematics, organic chemistry, and social sciences strongly recommended. A total of 16 hours must be in upper level courses. A year of American history in either high school or college is required for the degree program at UT, Memphis.</td>
<td>27</td>
</tr>
</tbody>
</table>

TOTAL 72-74

Pre-Dental Hygiene
Students may be admitted to the Dental Hygiene program of The University of Tennessee, Memphis, upon completion of 64 semester hours including the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 121, 122</td>
<td>8</td>
</tr>
<tr>
<td>Biology 191, 208</td>
<td>8</td>
</tr>
<tr>
<td>Biology 210 or 311</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 121/123, 122/124</td>
<td>8</td>
</tr>
<tr>
<td>English 121, 122 and 1 additional English course</td>
<td>9</td>
</tr>
<tr>
<td>Psychology 101 and 1 additional psychology course</td>
<td>6</td>
</tr>
<tr>
<td>Sociology 151 and 1 additional sociology course</td>
<td>6</td>
</tr>
<tr>
<td>One course from Theatre and Speech 107, 108, 109, 309</td>
<td>9</td>
</tr>
<tr>
<td>Electives Courses in mathematics and social sciences strongly recommended. Mathematics, organic chemistry, and social sciences strongly recommended. A year of American history in either high school or college is required for the degree program at UT, Memphis.</td>
<td>12</td>
</tr>
</tbody>
</table>

TOTAL 64

Pre-Pharmacy
Students may be admitted to the School of Pharmacy of The University of Tennessee, Memphis, upon completion of 67 semester hours, excluding physical education or military science, which include the following courses or their equivalents:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 121, 122</td>
<td>8</td>
</tr>
<tr>
<td>Biology 311 (Microbiology)</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 121/123, 122/124</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 351/353, 352/354</td>
<td>8</td>
</tr>
<tr>
<td>Physics 103/183, 104/184</td>
<td>8</td>
</tr>
<tr>
<td>Mathematics 136 or 151/152</td>
<td>3-4</td>
</tr>
<tr>
<td>English 121, 122</td>
<td>12</td>
</tr>
<tr>
<td>Communication of Speech</td>
<td>3</td>
</tr>
<tr>
<td>Two humanities courses</td>
<td>6</td>
</tr>
<tr>
<td>Two social sciences</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
</tbody>
</table>

A year of American history in either high school or college is required for the degree program at UT, Memphis.

TOTAL 67
College of Arts and Sciences
Professor Herbert Burhenn, Dean

Anthropology
See Sociology, Anthropology, and Geography.

Art
UC Foundation Professor Matt Greenwell, Head

The Department of Art, an accredited member of the National Association of Schools of Art and Design, enrolls students in one of three four-year degree options:

• Bachelor of Fine Arts with concentrations in Graphic Design, Painting and Drawing, or 3D
• Bachelor of Science in Art Education
• Bachelor of Arts

Selection of an area of study is based on an individual's professional objectives; however, each program in the department follows a carefully structured and sequential curriculum. It is the intent of the department to have available facilities and resources appropriate for the level of professional preparation of its degree options.

The department also offers a minor in Art History, opportunities for study abroad through CCSA, and an M.B.A. prep Business Minor.

The Art Department reserves the right to keep one example of the work of each student in each course.

Admission to the Art Program
Students entering UTC who intend to pursue the B.S. in Art Education or the B.F.A. in a studio concentration must enroll as Pre-Majors in Art. To be considered for admission into the B.S. or B.F.A. program, students must have a 2.5 GPA for all art courses completed at UTC as determined at the close of the fall semester prior to review, and must enroll in Art 200r, Sophomore Review. It should not be assumed that a high grade point average in the major itself assures a satisfactory grade for Art 200r.

Sophomore Review
Art 200r, Sophomore Review, is required of all B.S. and B.F.A. candidates and takes place in the spring semester of the sophomore year of a student's matriculation within the program. The review is a formal assessment of the student's studio performance and oral competency as it pertains to the student's designated degree and concentration. It is intended to provide students with an assessment of their potential for success in the intended area of study early enough to allow them to make a program change should that be advisable. In addition to the portfolio review, the student's overall academic record will be evaluated for quality and seriousness of purpose. A history of excessive absences, significant lack of participation, withdrawals, or incompletes may result in denial of progression. Students will receive a Satisfactory or No Credit grade for Art 200r at the determination of the Sophomore Review Committee.

Students who do not satisfactorily complete the review will be unable to enroll in upper division course work (300 and 400 level) in the department except by special permission of the Department Head. Students will have only one opportunity to reapply for admission into the B.S. or the B.F.A. in a chosen concentration by retaking Art 200r.

Prerequisites for enrollment in Art 200r, Sophomore Review, are Art 101, 102, 105 and 106 and:
• for admission into the B.S. Art Education: 3 hours from Art 205, 207 or 233
• for admission into the B.F.A. Graphic Design: Art 260
• for admission into the B.F.A. Painting and Drawing: Art 207
• for admission into the B.F.A. 3D: Art 244

Corequisites for enrollment in Art 200r, Sophomore Review, are
• for admission into the B.S. Art Education: 3 hours from Art 203 or 204
• for admission into the B.F.A. Graphic Design: Art 271
• for admission into the B.F.A. Painting and Drawing: Art 208
• for admission into the B.F.A. 3D: Art 344

Transfer Students
Transfer students who intend to pursue the B.S. in Art Education or the B.F.A. in a studio concentration must enroll as Pre-Majors in Art. In order to be admitted into the B.S. or the B.F.A., students transferring from another institution must take or have equivalent credit for Art 101, 102, 105 and 106, and must complete Art 200r at UTC. Except by special permission of the Department Head, transfer credits will not be accepted for the following courses (students must enroll in the following courses at UTC as pre- and co-requisites for the Sophomore Review):
• for admission into the B.S. Art Education: 3 hours from Art 205, 207 or 233 and 3 hours from Art 203 or 244
• for admission into the B.F.A. Graphic Design: Art 260 and 271
• for admission into the B.F.A. Painting and Drawing: Art 207 and 208
• for admission into the B.F.A. 3D: Art 233 and 244
Independent Study
Opportunities for students seeking credit for independent study courses exist among the University’s various departments; however, in conformance with published standards by the National Association of Schools of Art and Design, UTC’s Department of Art outlines the following criteria for such course credit:

- Courses listed as ART 498: Individual Studies are those that specify independent study credit, and are conducted on a tutorial basis between a faculty director and a student.
- Registration for these courses requires, as a prerequisite to registration, the completion of the University’s Individual Studies/Research Contract, drawn up and signed by the student and faculty director, approved by the department head, and submitted to the Records Office. This contract outlines objectives, content and scope; specific requirements; grading criteria; and frequency of meetings between student and faculty director.
- Only on rare occasion does the department allow for substitution of independent study courses for required course work. In such instances, these courses must follow the content, scope, depth, and learning expectations of the courses for which substitution is anticipated.

Art (B.F.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Art 214*, 215* (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major and Related Courses
One course from English 276, 277, 278, 279, 300, 410, 413; Art 495; Communication 231, 333
One course from Theatre and Speech 109, 110, 209, 210; University Honors 214
3 hours art including:
Art 101, 102, 104, 105, 106, 200r, 205, 491
Art 214# and 215#
6 hours art history from Art 314, 315, 414, 416, 419
Remaining elective hours in art to total 83

Student must complete one area of concentration as follows:

Major and Related Courses

One course from English 276, 277, 278, 279, 300, 410, 413; Art 495; Communication 231, 333

One course from Theatre and Speech 109, 110, 209, 210; University Honors 214

42 hours art including:

Art 101, 102, 105, 106, 207, 233, 244 and 3 hours from Art 281, 305 or 306

Art 214/ and 215#

3 hours from 205, 208, 260, 281, 303r, 305, 306

3 hours art history from 314, 315, 414, 416, 419

6 hours in studio electives from 320/400 level

Participation in senior art exhibition.

2.0 average in all art courses.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

4512 - HISTORY OF ART MINOR

18 hours including Art 214, 215; 12 hours selected from Art 314, 315, 351, 414, 416, 419.

Minimum 2.0 average in the minor.

ART COURSES

101 Visual Studies I: Form in Two Dimensions (3)

Visual elements, principles, and factors of organization as they apply to two dimensional design. Fall semester. Studio hours 6. Corequisite: Art 105 or approval of department head. Laboratory/studio course fee will be assessed.

102 Visual Studies II: Form in Three Dimensions (3)

Studio experience with visual and tactile components of three dimensional design. Basic problems involving relief, mass, freestanding form, and principles and factors of 3-D organization. Spring semester. Studio hours 6. Prerequisite: Art 101 or approval of department head. Laboratory/studio course fee will be assessed.

103 Introduction to Art Education (3)

Examination of a broad range of historical and philosophical issues in art education. Designed to help the student discover values in art education. Lectures, readings, reports, and discussion. On demand.

104 Visual Studies III: Color Theory and Fundamentals (3)

An introduction to color perception and to the principles of color application on a two-dimensional plane. Basic theoretical systems, harmonic systems, pigment and color mixing, color interaction; historical, psychological and symbolic implications. Spring semester. Studio hours 6. Prerequisite: Art 101 or approval of department head. Laboratory/studio course fee will be assessed.

105 Drawing I (3)

Introduction to drawing and pictorial composition using basic drawing media in black and white. Primary emphasis on line, form, value, texture, space, shape, and one-point and multiple-point perspective. Fall semester. Studio hours 6. Corequisite: Art 101 or approval of department head. Laboratory/studio course fee will be assessed.

106 Drawing II (3)

Continuing work in drawing with the introduction of color media in pictorial composition. Primary emphasis on analytical skills, cognitive development, development of critical skills, and the exploration of alternative techniques and media. Study of human anatomy. Drawing from the nude model. Spring semester. Studio hours 6. Prerequisite: Art 105 or approval of department head. Laboratory/studio course fee will be assessed.

111 Introduction to Art (3)

Designed to heighten perception, appreciation, and enjoyment of the visual arts of the western world, this course examines selected works representative of a broad range of functions, forms, styles, and art historical intentions from prehistoric to present day. Consideration of the formal elements, design principles, and technical factors of significance in the production of works. Every semester. For the non-art major.

198r Special Projects (1-4)

Every semester. Prerequisite: approval of department head. For individual projects, student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

200r Portfolio Review (0)

Participation in a portfolio review of individual student work for the sophomore and transfer student. Written and oral presentation required. The review process will be used to evaluate an individual’s studio progress and assist in the identification of an area of concentration. Spring Semester. Evaluated on a satisfactory/unsatisfactory basis. Prerequisites: Art 101, 102, 105, 106.

203 Introduction to Printmaking (3)

Survey of printmaking history and processes. Limited studio experience in basic techniques of relief, intaglio, lithography and screen printing. Spring semester. Studio hours 6. Prerequisites: Art 101 and 106 or approval of department head. Laboratory/studio course fee will be assessed.

205, 206 Drawing III, IV (3, 3)

Figure, landscape, and still life subjects approached from the stand point of their compositional and expressive possibilities. Experimentation with various media. Study of human anatomy. Drawing from the nude model. Art 205 fall semester; Art 206 spring semester. Prerequisites: Art 106. Courses are sequential for art majors; Art 205 is prerequisite to Art 206. Art 206 is required for the B.S. and B.A. degrees. Laboratory/studio course fee will be assessed.

207, 208 Painting I, II (3, 3)

Painting of still life, landscape, and abstract compositions in oil emphasizing color relationships and composition as essential means of pictorial expression. Art 207 fall semester; Art 208 spring semester. Painting from the nude model. Prerequisites: Art 101, 105, 106. Courses are sequential for art majors; Art 207 is prerequisite to Art 208.

214 The History of Western Art from Prehistoric through Medieval (3)

Designed to heighten perception, appreciation, and enjoyment of the visual arts of the western world, this course examines selected works representative of a broad range of functions, forms, styles, and artistic intentions. The visual arts of the Prehistoric, Ancient Near Eastern, Egyptian, Greek, Roman, Early Christian, Byzantine, Romanesque, and Gothic periods will be introduced. The art historical development, formal elements, design principles, and technical factors of significance in the production of works. Fall semester. Prerequisite: English 122 or University Honors 120, or approval of department head.

215 The History of Western Art from the Renaissance to the Present (3)

Designed to heighten perception, appreciation, and enjoyment of the visual arts of the western world, this course examines selected works representative of a broad range of functions, forms, styles, and artistic intentions. The art of the Renaissance, Baroque, Rococo, and Romantic periods, and of the various movements of the modern era in the 19th and 20th Century are the focus of this survey. Consideration of the formal elements, design principles, and technical factors of significance in the production of works of this period. Emphasis will be placed on the relationship of art and society. Spring semester. Prerequisite: Art 214.

233 Sculpture I (3)

Emphasis on basic sculpture processes and materials associated with mold making, casting, carving, and fabrication (construction). Fall semester. Studio hours 6. Prerequisite: Art 102. Laboratory/studio course fee will be assessed.

244 Ceramics I (3)

Problems in the hand methods of forming clay and use of the potter’s wheel. Study of form, color, and texture with a concern for basic ceramic technology. On demand. Studio hours 6. Prerequisites: Art 102 or approval of department head. Laboratory/studio course fee will be assessed.

260 Visual Literacy for Graphic Design (3)

An introduction to formal and theoretical concepts in graphic design focusing on observation, visual research, critical analysis and the creation of meaning.
Introduction to a variety of design related computer hardware and software. Fall semester. Studio hours 6. Prerequisites: Art 101, 106. Laboratory/studio course fee will be assessed.

271 Typography I (3)
An introduction to typography as a means of visual communication. Emphasis on uniting aesthetics with visual clarity. Applied problems concerning the organization of textual information, with particular emphasis on composition. Spring semester. Studio hours 6. Prerequisite: Art 260. Laboratory/studio course fee will be assessed.

281 Photography I (3)
Introduction to black and white photography as an art form with emphasis on composition. Basic camera operation, film processing, and darkroom printing. Adjustable lens camera required. Every semester. Studio hours 6. Prerequisite: Art 101 or approval of department head. Laboratory/studio course fee will be assessed.

301 Art Structure (3)
An exploration of the visual arts to enhance critical perception and appreciation of art with experiences in describing, analyzing and comparing various examples. Includes studio experiences in painting, drawing, sculpture, and other media as well as written work in art history and contemporary theory and criticism. Every semester. For the non-art major. Laboratory/studio course fee will be assessed.

303r Watercolor (3)
Basic techniques in transparent watercolor with emphasis on materials, process, and composition. Fall semester. Studio hours 6. Laboratory/studio course fee will be assessed.

305 Printmaking: Intaglio (3)
Work in single and multi-color intaglio processes, including line etching, acquatint, and photo-intaglio. Fall semester. Studio hours 6. Prerequisites: Art 203. Laboratory/studio course fee will be assessed.

306 Printmaking: Lithography (3)
Work in single and multi-color lithography using hand-drawn and photographic methods. Fall semester. Studio hours 6. Prerequisites: Art 203. Laboratory/studio course fee will be assessed.

307, 308 Painting III, IV (3, 3)
Figure, still life, and landscape composition in oil, watercolor, acrylic, and mixed media. Problems in analytical study and creative interpretation. Art 307 fall semester; Art 308 spring semester. Studio hours 6. Prerequisites: Art 200, 208. Courses are sequential for Art majors; Art 307 is prerequisite to Art 308. Laboratory/studio course fee will be assessed.

312 Figure Painting (3)
Study and analysis of the human form from the standpoint of its compositional, expressive, and theoretical possibilities. Instruction in media and painting techniques unique to the human figure. Painting from the nude model. Fall semester. Studio hours 6. Prerequisite: Art 200, 208. Laboratory/studio course fee will be assessed.

314 The History of Modern Architecture (3)
American architecture from the late 18th century to the present. Begins with the French "Visionary" architects, proceeds to the British Arts and Crafts Movement, German Expressionism, American Period revivals, and International Style. Also covers Art Nouveau, Art Deco, Frank Lloyd Wright and the Prairie School, progressive architecture in Holland, Italy, and Japan, and advent of Post Modernism. Emphasis on the relationship between architectural and sociopolitical scenes of the modern world. Fall semester alternate years. Prerequisite: Art 215.

315 History of Modern Painting and Sculpture (3)
A survey of the last 100 years of western painting and sculpture from Post-Impression to Post-Modernism. Fall semester alternate years. Prerequisite: Art 215.

323, 324 Materials and Procedures in Art Education (3, 3)
Exploratory activities designed to acquaint the prospective teacher of art with a representative range of art materials, art history methodology, and aesthetic criticism appropriate for the elementary and secondary classroom. On demand. Laboratory/studio course fee will be assessed.

336 Sculpture II (3)
Work in sculpture with emphasis on development of skills and 3-D media introduced in Sculpture I. Spring semester. Studio hours 6. Prerequisites: Art 200, 233. Laboratory/studio course fee will be assessed.

337, 338 Three Dimensional Studio I, II (3, 3)
Development and exploration of contemporary concepts and media in 3-D studio areas. On demand. Studio hours 6. Prerequisites: Art 200, 233, 244. Courses are sequential; Art 337 is prerequisite to Art 338. Laboratory/studio course fee will be assessed.

344 Ceramics II (3)
Development of student's individual style through use of design elements and technical skill. Kiln use and general laboratory techniques. On demand. Studio hours 6. Prerequisite: Art 244. Laboratory/studio course fee will be assessed.

345 Ceramic Materials for the Studio (3)
Investigation of ceramic materials and development of clay bodies and glazes for the ceramist. First, introduction to ceramic materials followed by development of clay bodies and glazes for specific studio applications. On demand. Studio hours 6. Prerequisite: Art 344. Laboratory/studio course fee will be assessed.

351 Design History (3)
Historic and contemporary design and design issues are examined through presentations, discussions, readings and writings. An emphasis on the relationship between historical design trends and contemporary design practice and ideology. Spring semester. This course will not fulfill the upper-division art history requirement. Prerequisites: Art 214, 260.

361 Processes and Materials for Graphic Design (3)
Investigation of the concept and application of design through commercial formats including print and web media. Organization, craftsmanship, and visual aesthetics are emphasized. Spring semester. Studio hours 6. Prerequisites: Art 371 or 380. Corequisite: Art 481. Laboratory/studio course fee will be assessed.

371 Typography II (3)
A continued study in theoretical and applied issues of typography, focusing on creative and innovative use of type selection and specification. Typography as visual communication. Fall semester. Studio hours 6. Prerequisites: Art 200, 271. Laboratory/studio course fee will be assessed.

380 Photography for Graphic Design (3)
A consideration of the photographic image in visual communication. Emphasis on reproduction and manipulation of the image to effect meaning. Fall semester. Studio hours 6. Prerequisites: Art 200, 260, 281. Laboratory/studio course fee will be assessed.

381 Photography II (3)
Introduction to the principles and theory of color photography. Techniques covered are color film processing, color printing, digital output, and applied technology. Exploration of media for creative expression. On demand. Studio hours 6. Prerequisite: Art 281. Laboratory/studio course fee will be assessed.

401 Visual Arts Internship (3)
Practical experience in a professional environment to provide individuals with the opportunity to be supervised in art-related agencies. These would include, but not be limited to, advertising and media industries, art museum operation, gallery management, etc. Every semester. Prerequisites: Art 200 and approval of department head during the preceding semester.

405, 406 Drawing V, VI (3, 3)
Individual problems in the application of drawing techniques and styles. Continued exploration of life drawing from the human figure. Drawing from the nude model. Courses are sequential fall and spring semester. Studio hours 6. Prerequisites: Art 200, 206. Courses are sequential for Art majors; Art 405 is prerequisite to Art 406. Laboratory/studio course fee will be assessed.

407, 408 Painting V, VI (3, 3)
Development of individual style in painting through selected media, conceptual intent, and compositional approaches. Courses are sequential fall and spring semester. Studio hours 6. Prerequisite: Art 308. Courses are sequential for Art majors; Art 407 is prerequisite to Art 408. Laboratory/studio course fee will be assessed.
409 Senior Studio in Painting and/or Drawing (3)
Selected problem in painting or drawing to further the development of a student’s aesthetic, and which culminates in a body of work of exhibition quality. On demand. **Studio hours 6. Corequisite: Art 408. Laboratory/studio course fee will be assessed.**

410 Photo Printmaking (3)
This course integrates photographic imagery with the printmaking processes of etching and lithography methods. Emphasis is placed on technical skills, further development of personal imagery, and exploration of photographic imagery. On demand. **Studio hours 6. Prerequisite: Art 200, 203, and 305 or 306. Laboratory/studio course fee will be assessed.**

411 The Artist’s Books (3)
This course introduces book making as a printed art form. Emphasis is placed on experimentation with a wide range of media to create a number of handmade books. The printmaking methods will include such techniques as intaglio, relief, photo-etching, photo-lithography and monoprint. On demand. **Studio hours 6. Prerequisite: Art 200, 203, and 305 or 306. Laboratory/studio course fee will be assessed.**

414 Major Trends in American Art (3)
The visual arts of the United States including the arts of the European settlers and the first generation Americans of the Colonial Period, the great portraitists of the Revolution and the 19th century, the 19th century landscapists, the pioneer modernists of the early 20th century, and the regionalists of the 1930’s. Culminates with the first American style to achieve international significance, the New York School, and the resultant dominance of American art in the world today. Spring semester. **Prerequisite: Art 215.**

416 Cultural Identity in Contemporary Art (3)
This course examines the basis of identity in contemporary art. Much of the art of the last half of the twentieth century has explored the politics of identity in challenging several cultural icons. This course will investigate how contemporary artists respond to the challenge of investigating and articulating these concepts. On demand. **Prerequisite: Art 215.**

419r Art History: Special Topics (3)
Advanced study in art history. This course is designated for special art history topics that are not offered on a regular basis. On demand. **Prerequisite: Art 215.**

420r Art Studio: Special Topics (3)
Advanced study in studio art. This course is designated for special studio art topics that are not offered on a regular basis. On demand. **Laboratory/studio course fee will be assessed.**

437, 438 Three Dimensional Studio III, IV (3, 3)
Directed study of student-selected 3-D problems and processes with primary focus on nontraditional forms. On demand. **Studio hours 6. Prerequisite: Art 338. Courses are sequential; Art 437 is prerequisite to Art 438. Laboratory/studio course fee will be assessed.**

439 Advanced Three Dimensional Studio (3)
Directed study of student-selected 3-D problems and processes with emphasis on development of personal aesthetic. On demand. **Studio hours 6. Prerequisite or Corequisite: Art 437. Laboratory/studio course fee will be assessed.**

440 Senior Studio in Sculpture (3)
Selected problems in the 3-D area to further the development of a student’s aesthetic, and which culminates in a body of work of exhibition quality. On demand. **Studio hours 6. Prerequisite: Art 439. Laboratory/studio course fee will be assessed.**

465, 466 Graphic Design Workshop I, II (3, 3)
Advanced study in graphic design focusing on theoretical and applied problems. Emphasis on formal, intellectual, aesthetic and pragmatic issues. Fall and Spring semesters. **Studio hours 6. Courses are sequential; Art 465 is prerequisite to Art 466. Laboratory/studio course fee will be assessed.**

468r Ceramics: Special Topics (3)
Group studies at the upper level using ceramic media. Emphasis on development of advanced technical skills necessary to solving studio problems. On demand. **Studio hours 6. Prerequisite: Art 200, 344, or approval of department head. Laboratory/studio course fee will be assessed.**

471 Type III: Publication Design (3)
Design problems specific to the concerns of publication design. Emphasis on information sequencing, hierarchy, context, and the relationship of form to content. Spring semester. **Studio hours 6. Prerequisite: Art 371. Laboratory/studio course fee will be assessed.**

481 Professional Practices in Graphic Design (3)
Design problems specific to the concerns of professional practice. Emphasis on client work, budgeting, planning, presentation and teamwork. Work leading to significant portfolio development. Spring semester. **Studio hours 6. Corequisite: Art 361. Laboratory/studio course fee will be assessed.**

490r Seminar in Art Education (3)
Emphasis on contemporary issues in art education. On demand.

491 Professional Preparation for the Visual Artist (3)
Professional protocol for the studio artist. Students will write analytically about their work and that of others. Grantwriting, application processes for graduate school admission. Preparation of professional portfolios, culminating in the Senior Exhibition. Spring semester. **Prerequisite: One course selected from Art 407 or 439 or 465.**

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
Every semester. **Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.**

498r Individual Studies (1-4)
Every semester. **Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.**

499r Group Studies (1-4)
Every semester.

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**Biological and Environmental Sciences**

**Professor John Tucker, Head**

The Department of Biological and Environmental Sciences offers two majors: a B.S. in Biology and a B.S. in Environmental Science. The course requirements are listed below.

Students are urged to consider attendance at the institutions affiliated with UTC’s Department of Biological and Environmental Sciences that offer field course experience in the life sciences: Gulf Coast Research Laboratory, Ocean Springs, Mississippi, offering courses in marine biology; and Highlands Biological Station, Highlands, North Carolina, offering courses related to the biology and ecology of the Southern Appalachians.

Preprofessional programs in dentistry, medical technology, medicine, cytotechnology, dental hygiene, pharmacy, and veterinary medicine are described in the Preprofessional Programs section of the catalog.
Biology (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: Biology 216* (4 hours) or Mathematics 210 (3 hours) Students who have taken Engineering 222, HHP 401, Mathematics 307, 408, Psychology 201 or Sociology 250 and subsequently changed their major to Biology will have satisfied this requirement.

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major and Related Courses

English 278 (required within the first 60 hours) or Biology 495. Students who have taken English 276, 277 or 279 and subsequently changed their major to Biology will have satisfied this requirement.

Foreign Language through the first college year in one foreign language or the equivalent through placement exam. Students with documented evidence that English is their second language as determined by the department head will have satisfied this requirement.

Biology courses:
- Botany (select 1 course) - 207, 351, 352
- Zoology (select 1 course) - 312, 313, 320, 330, 342, 402, 403, 408, 445, 456, 457, 458 (Courses offered in Botany and Zoology at Gulf Coast Research Laboratory may be substituted. Approval of the department head required.)
- Cell and Physiology (select 1 course) - 311, 323, 428, 460

Recommended elective: Classics 300

Recommended, Premedical technology - BIOL 311, BIOL 412

2128 - Ecology

Physics 103/183, 104/184 or Geology 111/181, 112/182 (Physics 103/183, 104/184 recommended for prospective graduate students)

Biology courses:
- Botany (select 1 course) - 207, 351, 352
- Zoology (select 1 course) - 312, 313, 320, 330, 342, 402, 403, 408, 445, 456, 457, 458 (Courses offered in Botany and Zoology at Gulf Coast Research Laboratory may be substituted. Approval of the department head required.)
- Cell and Physiology (select 1 course) - 311, 323, 428, 460, 463

Recommended electives: Geography 221, Geology 123

2129 - Organismal Biology

Mathematics: 144, 145 and 151/152 recommended for prospective graduate students.

Physics: 103/183, 104/184 or Geology 111/181,112/182 (Physics 103/183, 104/184 recommended for prospective graduate students)

Biology courses:
- Botany and Zoology (select 4 courses) - 207, 312, 313, 320, 342, 351, 352, 403, 408, 445, 456, 457, 458 (A minimum of one botany and one zoology course must be taken. Courses offered in Botany and Zoology at Gulf Coast Research Laboratory or Highlands Biological Station may be substituted. Approval of the department head required.)
- Cell and Physiology (select 1 course) - 311, 323, 428, 460, 463

Recommended elective: Chemistry 466

2130 - Molecular Biology

Mathematics 144, 145 and 151/152 recommended for prospective graduate students.

Chemistry 466, Physics 103/183 and Physics 104/184

Biology courses:
- Botany (select 1 course) - 207, 351, 352
- Zoology (select 1 course) - 312, 313, 320, 330, 342, 402, 403, 408, 445, 456, 457, 458
- Cell and Physiology (select 1 course) - 304, 311, 323, 401, 404, 412, 420, 428, 460, 463

Recommended elective: Chemistry 341

4520 - BIOLOGY MINOR

The Biology Department offers a minor requiring 20 hours of biology including Biology 121, 122 and eight hours at the 300 level or above. Minimum 2.0 average in the minor.

Environmental Science (B.S.)

The environmental science major consists of two parts: 1) a core curriculum required of all majors and 2) a concentration of study in one of the following areas: biology, chemistry, engineering, geology, geography, mathematics, or sociology/anthropology. Environmental science courses are described below; all other required courses are described in the listings of other departments named.
### General Education (see pages 69-72 for list of approved courses)

### Mathematical and Environmental Sciences

#### Mathematics

- One approved mathematics course (3 hours); related course noted below will apply
- Students who have taken Eng 222, HHP 401, Mathematics 307, 408, Psychology 201 or Sociology 250 and subsequently changed their major to Environmental Science will have satisfied this requirement.

#### Statistics

- Biology 216 (4 hours) or Mathematics 210 (3 hours)
- Students who have taken Engineering 222, HHP 401, Mathematics 307, 408, Psychology 201 or Sociology 250 and subsequently changed their major to Environmental Science will have satisfied this requirement.

#### Environmental Science

- Three courses from Biology 207 and any 300-400 level Biology courses (totaling at least 9 credit hours)
- Mathematics 161/162, 212, 245

#### Physics

- One approved human sciences and fine arts course, one from fine arts and one from either (6 hours)

### Coursed Required for Minors

- Minimum of 39 hours of 300 and 400 level courses.
- Each Environmental Science major must also complete the requirements for one of the following concentrations:

#### 2331 - Biology

- Biology 121, 122
- Chemistry 121/123, 122/124, 341, 351/353
- Three courses from Biology 207 and any 300-400 level Biology courses (totaling at least 9 credit hours)
- Two courses from Environmental Science 406, 440, 460 or Environmental Science/Geography 225

#### 2333 - Chemistry

- Biology 121, 122
- Chemistry 121/123, 122/124, 341, 342, 351/353, 352/354
- Environmental Science 225 (226 recommended)
- Physics 103/183, 104/184

#### 2335 - Engineering Science

- Chemistry 121/123, 122/124, 351/353
- Engineering 103/113, 104, 185, 211, 224
- Environmental Engineering 331 and 437
- Mathematics 161/162, 212, 245

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### 2336 - Geographic and Cartographic Sciences

- Geography 101, 103
- One course from Geology 108, Geography 206, astronomy 101/181, or Environmental Science/Geology 225/226
- Three courses from Geography 303, 304, 305, 306, 307
- Biology 416, Computer Science 150, Geology 111/181
- Environmental Science 340; ESC/Geography 465, 466, 492

### 2337 - Geology

- Chemistry 121/123, 122/124
- Geography 101 or Geology 108
- Geography 206 (499 recommended)
- Geology 111/181, 112/182, 341, 342, and 9 additional hours from 225, 407, 436, 445, 454, or 496. These hours are additional to any Geology hours taken as part of the 30 hours required of all ESC majors.

### 2339 - Mathematics

- Mathematics 161/162, 212, 245, 300, 308, 350, 407, 408, 412
- Two courses from 414, 424, 428, 440, 445, 460 or 470

### 2343 - Sociology-Anthropology

- Sociology 151, 314, 414
- Anthropology 152 or 208
- Anthropology 302 or Sociology 312
- Additional 15 hours from Anthropology 211, 335, 356, 410, and Sociology 219, 302, 305, 317, 331, 340, 415 and Communication 410 (minimum 9 hours selected from these additional courses at 300-400 level)
- One two-semester sequence from biology, chemistry, engineering, geology, physics.

### ENVIRONMENTAL SCIENCE MINORS

#### 4554 - Environmental Science

- 20 hours including Environmental Science 150, 151 and 12 hours environmental science courses at the 300-level or above.
- Minimum 2.0 average in the minor.

#### 4565 - Geographic Information Science

- 18 hours including Computer Science 150; Geography 221; Mathematics 136; Environmental Science/Geography 465, 466; Environmental Science 492
- Minimum 2.0 average in courses attempted for the minor.

### BIOLOGY COURSES (BIOL)

#### 110 Conservation of Biodiversity (3)

- An introduction to systematic ways in which the human mind comprehends the natural world; emphasis on studies of living systems, natural processes, and related phenomena including evolution, population biology, ecosystem properties, biomes, extinction, human overpopulation, deforestation, global climate change, preservation of species, conservation ethics and economics, public policy, and sustainability. Lecture 3 hours. Credits not allowed toward the Biology and Environmental Science majors if the student has previously completed Biology 122 or Environmental Science 151. May be registered as Chemistry 119 or Physics 119. Credit allowed in only one of these three courses. Laboratory/studio course fee will be assessed.

#### 119 Light and Life (4)

- Examines the methods of investigation that lead to our understanding of light and its role in nature and human development. Lecture 3 hours, laboratory 2 hours. Prerequisite: Math Placement level 20. Credit not allowed toward the chemistry, physics, geology, biology or environmental science majors. May be registered as Chemistry 119 or Physics 119. Credit allowed in only one of the three courses. Laboratory/studio course fee will be assessed.
121 Principles of Biology I (4)
An introduction to systematic ways in which the human mind comprehends the natural world; emphasis on studies of living systems, natural processes, and related phenomena including methods of the biologist, Darwin's evolutionary theory, role of organic molecules in biological systems, structure and function of the cell, cellular division, Mendelian inheritance, molecular genetics, physiology of digestion, respiration and fluid regulation, and animal behavior. Lecture 3 hours, laboratory 2 hours. Prerequisite: UTC Math Placement Level 20 or Math 106 with a grade of C or better or Math ACT score of 22 or above. Laboratory/studio course fee will be assessed.

122 Principles of Biology II (4)
An introduction to systematic ways in which the human mind comprehends the natural world; emphasis on studies of living systems, natural processes, and related phenomena including modern evolutionary theory, photosynthesis, cellular respiration, the survey of kingdoms, ecology, and nervous and hormone control on effectors. Lecture 3 hours, laboratory 2 hours. Prerequisite: 121 with a grade of C or better. Laboratory/studio course fee will be assessed.

191 Functional Human Anatomy (4)
The structure of the human body as seen in its various levels of organization: cellular, tissue, organ, and system. Lecture 3 hours, laboratory 2 hours. Prerequisite: approval of instructor. Laboratory/studio course fee may be assessed.

199E Special Projects (1-4)
On demand. Maximum credit 4 hours. Prerequisite: approval of instructor. Laboratory/studio course fee may be assessed.

207 Plant Morphology (4)
A study of the form, reproductive processes, and evolutionary relationships of the principal nonvascular and vascular plant groups. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

208 Human Physiology (4)
Studies of the physiological functions of the human body. Lecture 3 hours, laboratory 2 hours. Corequisites: Biology 208 laboratory; Chemistry 121/123. Laboratory/studio course fee will be assessed.

210 Microbiology and Health (4)
Microorganisms as related to disease, immunity, food preservation, and sanitation. Lecture 3 hours, laboratory 2 hours. Prerequisite: Chemistry 121/123 or equivalent. Laboratory/studio course fee will be assessed.

216 Biostatistics (4)
An introduction to statistical methods used by researchers in the biological and behavioral sciences including descriptive statistics, hypothesis testing, analysis of variance, regression and correlation, and several nonparametric techniques. Lecture 3 hours and laboratory 2 hours. Prerequisites: UTC Math Placement Level 30 or Math 131 with a minimum grade of C, and Computer Science 110 with a minimum grade of C.

251 Economic Botany (3)
An introduction to the origins, history, diversity and importance of plants in the human experience. History of the domestication of important crops and the impact of plants on the quality of human life covered. Ethnobotany and the impacts of agriculture and exotic plants will be discussed as they relate to the future of the world's supply of food, fiber, medicines and other plant products. Prerequisite: Biology 122 with a minimum grade of C or equivalent.

304 Plant Physiology (4)
Vascular plant structure and function emphasizing physiological activities, such as photosynthesis, water relations, mineral nutrition, and hormonal action. Lecture 3 hours, laboratory 2 hours. Prerequisites: Biology 122 with a minimum grade of C, Chemistry 122/124 or equivalent. Pre- or Corequisite: Chemistry 351/353. Laboratory/studio course fee will be assessed.

306 Ecology (3)
The community concept with reference to structure, energy, cycles, and populations; the distribution of plants and animals with analyses of the factors involved. Prerequisite: Biology 122 or Environmental Science 151 or equivalent with a minimum grade of C, or approval of instructor. Corequisite: Biology 306 for General Biology and Ecology concentrations, and Environmental Science majors.

307 Ecology Laboratory (1)
Field application of ecological principles. Lecture 2 hours. Field trips. Prerequisite: Biology 122 or Environmental Science 151 or equivalent with a minimum grade of C. Corequisite: Biology 306. Laboratory/studio course fee will be assessed.

311 Principles of Microbiology (4)
Morphology and physiology of microorganisms. Lecture 2 hours, laboratory 4 hours. Credit not allowed in both Biology 210 and 311. Prerequisites: Biology 122 with a minimum grade of C, Chemistry 122/124 or equivalent. Laboratory/studio course fee will be assessed.

312 Invertebrate Zoology (4)
A survey of the invertebrate phyla up to the chordates with an emphasis on their evolution, morphology, and physiological adaptations. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

313 Comparative Vertebrate Zoology (4)
The biology of the phylum Chordata, in particular the vertebrates, with an emphasis on their systematics, structural evolution, and functional morphology. Laboratory dissection of the shark, salamander, and cat. Lecture 2 hours, laboratory 4 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

315 Evolution (3)
Evidences of evolution; mechanism of natural selection; role of genetic factors in the diversity of populations; origin of races, species and higher categories; adaptation and behavior; recognition of evolutionary relationships; significance of evolution to the human species. Prerequisite: Biology 122 or equivalent with a minimum grade of C.

320 Animal Behavior (4)
The principles of animal behavior emphasizing the proximate mechanisms of behavior. Topics include behavioral genetics, ontogeny, learning, perception, communication, and play. Lecture 3 hours, laboratory 2 hours. Prerequisites: Biology 122 with a minimum grade of C or approval of the instructor. Laboratory/studio course fee will be assessed.

323 Introductory Animal Physiology (4)
A detailed analysis of selected aspects of animal physiology. For students whose primary interest is biological science. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 122 with a minimum grade of C, Chemistry 122/124 or equivalent. Corequisite (Molecular Concentration majors only): Biology 326.

325 Genetics (3)
Principles of classical (Mendelian), molecular, and population genetics including patterns of inheritance, genetic code and regulation of protein synthesis, recombinant DNA techniques, and evolution of the genome at the population and molecular levels. Prerequisites: Biology 122 with a minimum grade of C, Chemistry 122/124 or equivalent. Corequisite (Molecular Concentration majors only): Biology 326.

326 Genetics Laboratory (1)
Investigations in classical, molecular, and population genetics. Laboratory 2 hours. Pre- or Corequisite: Biology 325. Laboratory/studio course fee will be assessed.

330 Histology (4)
Structure of animal tissues and organ levels with emphasis on recognition, origin, and function of mammalian tissues. Lecture 2 hours, laboratory 4 hours. Prerequisites: Biology 122 with a minimum grade of C, Chemistry 122/124 or equivalent or approval of the instructor. Biology 191 or 313 recommended, Chemistry 352/354 recommended. Laboratory/studio course fee will be assessed.
342 Entomology (4)
Principles of entomology including the morphology, development, taxonomy, ecology, and importance of insects. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

351 Mycology (4)
An introduction to the Kingdom Fungi: Mushrooms, molds, and yeasts. Morphology, life histories, classification, genetics, physiology, development, ecology, medical and economic importance of fungi. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

352 Taxonomy of Vascular Plants (4)
Speciation; breeding systems; pollination systems; edible and poisonous plants; and origin of flowering plants. Laboratories emphasize identification of flowering plants, conifers, and ferns. Some field work required. Lecture 2 hours, laboratory 4 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C. Laboratory/studio course fee will be assessed.

401 Microbial Ecology (4)
A study of microorganisms in their natural environment with regard to microbial evolution, growth, interactions, dispersal mechanisms, ecological significance, and biotechnology applications. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 311 and Chemistry 351, or approval of instructor. Laboratory/studio course fee will be assessed.

403 Developmental Vertebrate Embryology (4)
Current developmental processes and concepts drawn from selected invertebrate studies, but with major emphasis on experimentation in higher vertebrates. Laboratory explores vertebrate development through embryological slides, films and experimentation. Lecture 2 hours, laboratory 4 hours. Prerequisite: Biology 325; Biology 313 recommended. Pre-or Corequisite: Chemistry 352/354. Laboratory/studio course fee will be assessed.

404 Bioremediation (4)
A study of the potential use of biological systems in the remediation of areas contaminated with toxic pollutants. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 311 and Chemistry 351, or approval of instructor. Laboratory/studio course fee will be assessed.

406 Limnology and Reservoir Ecology (3)
Chemical, physical, and biological processes in lake and reservoir systems (nutrient budgets and cycling, hydrodynamics, phytoplankton/zooplankton/benthic dynamics, and physical similarities and differences in lakes and reservoirs). Lecture 2 hours, laboratory 2 hours. Prerequisites: general chemistry, general biology, ecology, junior standing; general physics recommended. May be registered as Environmental Science 406. Credit not allowed in both Biology and Environmental Science 406. Laboratory/studio course fee will be assessed.

408 Parasites of Man (4)
Life cycles, ecology, and physiology of the parasites of human beings including the diseases caused by these parasites. Lecture 2 hours, laboratory 4 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C, or approval of instructor. Laboratory/studio course fee will be assessed.

412 Immunology (3)
Interactions between mammalian immune system cells and foreign substances. Emphasis on immunological disorders. Prerequisite: Biology 210 or 311.

416 Biogeography (3)
A study of the distribution of plants and animals from a climatic and historical perspective. Prerequisite: Biology 122 or Environmental Science 150 with a minimum grade of C and junior standing.

420 Molecular Genetics (4)
An in-depth analysis of fundamental cellular flow of information from DNA to RNA to protein. Emphasis is on how these processes have been harnessed in the laboratory resulting in technologies such as DNA cloning and sequencing, the polymerase chain reaction (PCR), genetic testing, gene therapy, genetic engineering and DNA forensics. Lecture 3 hours, laboratory 2 hours. Prerequisites: Biology 325 and 326. Conquisite: Biology 420 laboratory. Laboratory/studio course fee will be assessed.

428 Cellular Biology (4)
An exploration of life's basic unit: morphological and chemical organization of cells, cell biochemistry, life cycles, cellular reproduction and cell regulation, bioenergetics, cellular respiration, photosynthesis, cell molecular genetics, cell signaling and communication, cancer; immune response. Lecture 3 hours, laboratory 2 hours. Prerequisites: Biology 325, Chemistry 352/354. Laboratory/studio course fee will be assessed.

434 Human Development and Disease (4)
The study of genetic, physiological, environmental and interactive variables that influence human development from gametogenesis to birth. Students should acquire an understanding of how development occurs in humans and the relationship between abnormal developmental processes and human disease states. Laboratory explores human development through the use of embryological slides, models, and applied techniques. Lecture 3 hours, laboratory 2 hours. Prerequisites: Biology 325 with a minimum grade of C; Biology 313 recommended. Pre- or corequisites: Chemistry 352/354. Laboratory/studio course fee will be assessed.

435 Environmental and Ecological Genetics (3)
An integration of ecology, genetics, and evolutionary biology with emphasis on applications of genetic concepts in three major areas: molecular analysis, developmental and population genetics. Contemporary approaches to studying evolution in natural populations will be presented. Includes case studies and journal readings to examine evolutionary effects of ecological interactions among organisms. Prerequisites: junior standing and Biology 325 or approval of instructor. May be registered as Environmental Science 435. Credit not allowed in both Biology and Environmental Science 435.

440 Tropical Marine Ecology (4)
An examination of tropical marine habitats at the species, population and ecosystem levels with particular emphasis on seagrass beds, coral reefs, mangrove forests, tidal rivers and lakes, and the intertidal zone. The required field components is a one-week experience at a field station in the Caribbean. Lecture 2 hours, laboratory/field experience 4 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C, or Environmental Science 151 or equivalent with a grade of C. Laboratory/studio course fee will be assessed.

445 Herpetology (4)
The biology of amphibians and non-avian reptiles with a strong emphasis on morphology, physiology, diversity, distribution, taxonomy, ecology, evolution and ethology. Laboratory includes problem solving and an in-depth approach to the identification of regional and global diversity as well as dissections, demonstrations and field trips. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 122 with a minimum grade of C and at least one 300-400 level course from Biology or Environmental Science with a minimum grade of C; junior standing. Laboratory/studio course fee will be assessed.

450 Systematics (3)
Principles of systematic biology including contemporary systematic philosophies, problems of species and speciation, taxonomic characters and interpretation, construction of evolutionary trees, higher categories and classification, nomenclature, taxonomic collections and procedures of identification. Prerequisites: Biology 122 or equivalent with a minimum grade of C.

456 Ichthyology (4)
The biology of fishes, with an emphasis on the functional morphology, systematics, evolution, diversity, distribution, and ecology of fishes. Laboratory includes identification of the diversity of regional fish faunas, as well as identification of field trips. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 122 with a minimum grade of C and at least one 300-400 level course from Biology or Environmental Science with a minimum grade of C; junior standing. Laboratory/studio course fee will be assessed.

457 Mammalogy (4)
The biology of mammals, with an emphasis on diversity, distribution, systematics, structural evolution and paleontology, and functional morphology. Laboratory includes identification of regional diversity, as well as dissections and field trips. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 122 with a minimum grade of C and at least one 300-400 level course from Biology or Environmental Science with a minimum grade of C; junior standing. Laboratory/studio course fee will be assessed.
150 Introduction to Environmental Science I (4)
An introduction to systematic ways in which the human mind comprehends the natural world; emphasis on studies of living systems, natural processes, and related phenomena including basic ecologic principles and environmental problems at local, national, and global levels. Topics to be covered include evolution, ecosystems, human overpopulation, biodiversity, energy sources, solid waste, and pollution of air, water, and soil. The laboratory integrates the scientific approach and provides hands-on experience in identification of abiotic and biotic factors affecting environmental quality. Lecture 3 hours, laboratory 2 hours. Prerequisite: UTC Math Placement Level 20 or Math 106 with a grade of C or better or Math ACT score of 22 or above. Laboratory/studio course fee will be assessed.

199 Special Projects (1-4)
On demand. Maximum credit four hours. Laboratory/studio course fee may be assessed.

225 Oceanography (3)
Chemical and physical properties of sea water. Causes and patterns of oceanic circulation. Life zones in the oceans and factors delimiting them. Origin and physiography of ocean basins. Mineral and energy resources of the oceans. May be registered as Geology 225. Credit not allowed in both Environmental Science 225 and Geology 225.

340 Environmental Survey Methods (4)
Field survey methods for compiling of botanical, zoological, geological, and archaeological data. To include mapping, sampling, and recording. Lecture 2 hours, laboratory 4 hours. Prerequisite: Environmental Science 151 or equivalent with a grade of C or better. Laboratory/studio course fee will be assessed.

360 Air and Water Pollution Control (3)
The study of the origin, monitoring and control of air and water pollutants; to include sample taking, testing and observation of procedures used in community laboratories. Lecture 2 hours, laboratory 2 hours. Prerequisites: one year of a natural science or engineering and fulfillment of the mathematics and statistics requirement for the respective concentration. Laboratory/studio course fee will be assessed.

401 Microbial Ecology (4)
A study of microorganisms in their natural environment with regard to microbial evolution, growth, interactions, dispersal mechanisms, ecological significance, and biotechnology applications. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 311 and Chemistry 351, or approval of instructor. Laboratory/studio course fee will be assessed.

404 Bioremediation (4)
A study of the potential use of biological systems in the remediation of areas contaminated with toxic pollutants. Lecture 3 hours, laboratory 2 hours. Prerequisite: Biology 311 and Chemistry 351, or approval of instructor. Laboratory/studio course fee will be assessed.

406 Limnology and Reservoir Ecology (3)
Chemical, physical, and biological processes in lake and reservoir systems (nutrient budgets and cycling, hydrodynamics, phytoplankton/zooplankton/benthic dynamics, and physical similarities and differences in lakes and reservoirs). Lecture 2 hours, laboratory 2 hours. Prerequisites: general chemistry, general biology, ecology, junior standing; general physics recommended. May be registered in Biology 406. Credit not allowed in both Environmental Science and Biology 406. Laboratory/studio course fee will be assessed.
407 Environmental Conservation (3)
Theories, methods, and practices of environmental management and resource utilization. Emphasis on soil, forest, water, mineral, and human resources. May be registered as Geography 407. Credit not allowed in both Environmental Science and Geography 407.

410 Environmental Law and Agencies (3)
Survey of national, state, and local environmental agencies, and provisions of environmental laws and ordinances at all levels of government. Emphasis on National Environmental Policy Act (NEPA). Analysis and composition and environmental impact statements. Prerequisite: senior standing.

430 Problems in Environmental Management (3)
Case history studies of problems in environmental management, with emphasis on the kinds of environmental precautions required in specific situations and on factors contributing to legal challenges to industrial and technological activities which have environmental consequences. Prerequisite: Environmental Science 151 with a grade of C or better.

435 Environmental and Ecological Genetics (3)
This course integrates ecology, genetics, and evolutionary biology with emphasis on applications of genetic concepts in three major areas: molecular analysis, developmental and population genetics. Contemporary approaches to studying evolution in natural populations will be presented. Includes case studies and journal readings to examine evolutionary effects of ecological interactions among organisms. Prerequisites: junior standing and Biology 325 or approval of instructor. May be registered as Biology 435. Credit not allowed in both Environmental Science and Biology 435.

440 Tropical Marine Ecology (4)
An examination of tropical marine habitats at the species, population and ecosystem levels with particular emphasis on seagrass beds, coral reefs, mangrove forests, tidal rivers and lakes, and the intertidal zone. The required field components is a one-week experience at a field station in the Caribbean. Lecture 2 hours, laboratory/field experience 4 hours. Prerequisite: Biology 122 or equivalent with a minimum grade of C, or Environmental Science 151 or equivalent with a grade of C or better. Laboratory/studio course fee will be assessed.

554 Demographic Analysis (3)
Techniques of measuring and analyzing human population growth and distribution. Emphasis is placed on relationships of human population changes on environmental resources as well as effects of environment on morbidity and mortality. Prerequisite: Environmental Science 151 or equivalent with a grade of C or better.

460 Toxicology (4)
Basic principles of toxicology, including physiological responses to toxicants, toxic effects, elimination of toxic agents, fundamental laws governing the interaction of foreign chemicals with biological systems, and toxicity testing methods. Lab component addresses analytical methods for measuring physiological responses to toxicant exposure. Lecture 2 hours, laboratory 4 hours. Prerequisites: Environmental Science 151 or Biology 121 or 122 with a minimum grade of C, Chemistry 351/353, Mathematics 131 or equivalent. May be registered as Biology 460. Credit not allowed in both Environmental Science and Biology 460. Laboratory/studio course fee will be assessed.

465 Remote Sensing and Imagery Analysis (3)
Principles of aerial and satellite photography and infrared, multispectral, and microwave sensing. Interpretation of remotely sensed data, including application to problems in a variety of environmental sciences. Lecture 2 hours, laboratory 2 hours. Prerequisites: Geography 221, completion of general education natural science and statistics requirements, Computer Science 150, junior standing. May be registered as Geography 465. Credit not allowed in both Geography 465 and Environmental Science 465. Laboratory/studio course fee will be assessed.

466 Geographic Information Systems (3)
Introduction to fundamental principles of geographic information systems (GIS). Applications, data structures and basic functions of GIS. GIS computer programs are used to demonstrate basic GIS functions. Lecture 2 hours, laboratory 2 hours. Prerequisite: Environmental Science/Geography 221. May be registered as Geography 466. Credit not allowed in both Geography 466 and Environmental Science 466. Laboratory/studio course fee will be assessed.

475 Environmental Workshops for Teachers (1-4)
Workshops for science educators in environmentally related topics such as the conservation of endangered species, soil conservation, or water quality and water resource conservation. Designed to provide teachers with laboratory or field experiences and materials related to the environmental sciences. May be taken a maximum of three times.

480 Seminar on the Environment (1)
Seminar and discussion of topics of current environmental interest. Student presentation required. Prerequisite: senior or graduate standing.

481 Politics and the Environment (3)
A political analysis of the conflicting interests involved in implementing policies to protect the environment, develop alternative energy sources, and promote economic growth.

482 Technology and the Environment (3)
Explores the complex relationships between technology and the environment that have existed since the Paleolithic Period. Special attention to the study of tools for extracting materials and energy from the environment and to the effect of these tools upon the landscape. Prerequisite: Environmental Science 151 or equivalent with a grade of C or better.

483 Economics and the Environment (3)
An economic analysis of causes and effects of pollution; the role of economic policy in controlling pollution with special emphasis on water, air, and solid waste residuals; an evaluation of the alternative environmental controls. Prerequisite: Environmental Science 151 or equivalent with a grade of C or better.

484 Values and the Environment (3)
An examination of the personal and social values at issue in the environmental problems of urban and nonurban regions. Attention to the emerging concern for an environmental ethic. Prerequisite: Environmental Science 150. May be registered as Philosophy 484. Credit not allowed in both Environmental Science and Philosophy 484.

490 Environmental Science Senior Project (3)
A group project involving analysis and solution of an environmental problem; oral and written presentation of progress and final results required. Fall semester alternate years. Prerequisite: senior standing.

491r Environmental Science Internship (Specific Agency, etc.) (1-4)
A cooperative arrangement between the University and agencies, organizations, groups, and businesses involved with environmental problems. Designed to provide students with a learning, observing, and work experience through direct contact with individuals working on problems related to their field. Maximum credit: 9 hours. Every semester. Prerequisite: junior or senior standing and consent of environmental studies department head.

492 Advanced Applications of Remote Sensing and Geographic Information Systems (2)
Applications of geographical research tools and techniques in conjunction with faculty instruction and supervised research that includes the processing of geographic data for use in a wide variety of environmental scenarios. Emphasis will be placed on methodological practice and documentation of procedures. Students will have opportunities for interaction with guest speakers and to learn hands-on methods involving collection of field data. Lecture 1 hour, laboratory 2 hours. Prerequisites: 90 earned hours and Environmental Science/Geography 466. Laboratory/studio course fee will be assessed.

495r Departmental Thesis (2 hours per term, 4 hours for the two terms) See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

496r Environmental Field Camp (1-6)
An interdisciplinary field experience representing two or more of the following disciplines: archaeology, botany, zoology, geology, and sociology. The field experience will include data collection in meaningful scientific studies, mapping, photography, and use of taxonomic keys. Prerequisite: introductory courses in the natural and behavioral sciences, at least junior level standing, and approval of instructors.
Special Topics in Marine Science (U/G) 1 to 6 hours.

Special Problems in Marine Science (U/G) 1 to 6 hours.

Coastal Ecology for Teachers (U/G) 4 hours.

Marine Aquaculture (U/G) 6 hours.

Parasites of Marine Animals (U/G) 6 hours.

Fauna and Faunistic Ecology of Tidal Marshes (U/G) 4 hours.

Marine Fisheries Management (U/G) 4 hours.

7000. Telephone (228) 872-4201 or (228) 875-2244, extension 201.

Marine Ecology (U/G) 5 hours.

Early Life History of Marine Fishes (G) 4 hours.

Comparative Histology of Marine Organisms (U/G) 6 hours.

Coastal Marine Geology (U/G) 3 hours.

Salt Marsh Plant Ecology (U/G) 4 hours.

Marine Invertebrate Zoology (U/G) 6 hours.

Coast Research Laboratory, P. O. Box 7000, Ocean Springs, MS 39564-7000.

Environmental Science Head or by writing: Office of Student Services, Gulf Coast Research Laboratory, P. O. Box 7000, Ocean Springs, MS 39564-7000. Telephone (228) 872-4201 or (228) 875-2244, extension 201.

Business Administration

See College of Business.

Chemistry

UC Foundation Professor Gail M. Meyer, Head

The program in Chemistry at UTC is designed to prepare students for careers in chemistry, biochemistry, medicine, dentistry and pharmacy. The chemistry curriculum provides programs leading to either the B.A. Chemistry degree or the B.S. Chemistry degree. The B.A. program emphasizes the liberal arts with specialization in chemistry. Students wishing to develop a broad background in chemistry while earning a minor in a related field should select the B.A. Chemistry degree. The B.S. program provides more extensive coursework in chemistry, physics and mathematics, and is recommended for students pursuing professional careers in chemistry or biochemistry. Within the B.S. Chemistry degree a student must select one of two concentrations: (1) Chemistry Concentration, or (2) Biochemistry Concentration. The B.S. Chemistry program is approved by the Committee on Professional Training of the American Chemical Society. The department also offers a minor in chemistry.

Preprofessional programs in dentistry, medical technology, medicine, cytotechnology, dental hygiene, pharmacy, and veterinary medicine are described in the Preprofessional Programs section of the catalog.

Chemistry (B.A.)

1144 - Chemistry; 1146 - Premedicine; 1148 - Predentistry

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Mathematics 210 or 307 (3 hours)

Natural Sciences: Physics 103/183 and Physics 104/184 (8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Foreign Language: Through the second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses

Mathematics 151/152#, 161/162, Physics 103/183#, 104/184#

37 hours chemistry including 121/123 (or 125), 122/124, 286, 333, 341, 351/353, 352/354, 371, 386, 443, 486#, and electives to complete 37 hours in chemistry

2.0 average in all chemistry courses (excluding Chemistry 111 and 211).

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

Typical course of study in Chemistry (B.A.)

Freshman Year

First Semester: Chemistry 121/123; English 121; Mathematics 144*; Behavioral and Social Sciences; Humanities and Fine Arts. Second Semester: Chemistry 122/124; English 122; Mathematics 145; Humanities and Fine Arts.

Sophomore Year

First Semester: Chemistry 286, 351/353, Mathematics 151/152; Foreign Language I. Second Semester: Chemistry 352/354; Mathematics 161/162; Foreign Language II, Cultures and Civilizations.

Junior Year

First Semester: Chemistry 341, 386, Physics 103/183; Foreign Language III; Elective. Second Semester: Chemistry Elective; Physics 104/184; Mathematics 210 or 307; Foreign Language IV.

Senior Year

First Semester: Chemistry 333, 371; Cultures and Civilizations; Behavioral and Social Sciences; Elective. Second Semester: Chemistry 443, 486; Cultures and Civilizations; Electives.

Total Hours: 120

CONSORTIUM COURSES

The University of Tennessee at Chattanooga maintains a formal affiliation arrangement with the Gulf Coast Research Laboratory (GCRL) in Ocean Springs, Mississippi. Through this arrangement, our students may take field courses in marine science at GCRL during the summer. Credits for these courses are awarded through the University of Southern Mississippi and will be accepted as transfer credit at The University of Tennessee at Chattanooga. The following is a list of courses taught at GCRL, their level (undergraduate or graduate), and the semester hours credit. Not all courses are offered each year.

- Marine Science I: Oceanography (U) 5 hours.
- Marine Science II: Marine Biology (U) 5 hours.
- Coastal Vegetation (U/G) 3 hours.
- Marine Phyology (U/G) 4 hours.
- Salt Marsh Plant Ecology (U/G) 4 hours.
- Coastal Marine Geology (U/G) 3 hours.
- Marine Invertebrate Zoology (U/G) 6 hours.
- Marine Ichthyology (U/G) 6 hours.
- Marine Microbiology (U/G) 3 hours.
- Comparative Histology of Marine Organisms (U/G) 6 hours.
- Marine Fisheries Management (U/G) 4 hours.
- Fauna and Faunistic Ecology of Tidal Marshes (U/G) 4 hours.
- Early Life History of Marine Fishes (G) 4 hours.
- Marine Ecology (U/G) 5 hours.
- Parasites of Marine Animals (U/G) 6 hours.
- Marine Aquaculture (U/G) 6 hours.
- Coastal Ecology for Teachers (U/G) 4 hours.
- Special Problems in Marine Science (U/G) 1 to 6 hours.
- Special Topics in Marine Science (U/G) 1 to 6 hours.

Students may obtain more information about the Gulf Coast Research Laboratory and admission to the summer program from the Biology/Environmental Science Head or by writing: Office of Student Services, Gulf Coast Research Laboratory, P. O. Box 7000, Ocean Springs, MS 39564-7000. Telephone (228) 872-4201 or (228) 875-2244, extension 201.
Chemistry Concentrations:

**2144 - Chemistry; 2146 - Premedicine;**

**2148 - Predentistry**

Chemistry 434; Mathematics 212; One Chemistry elective from 342, 453 or 467
One Chemistry research course from 495r, 496r, or 497r (a second course from 342, 453, or 467 may be substituted.)

2.0 average in all chemistry courses (excluding Chemistry 111 and 211). Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours. See page 67 for additional requirements.

*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Typical course of study in Chemistry (B.S.)

**Freshman Year**
First Semester: Chemistry 121/123; Biology 121; English 121; Mathematics 144*. Behavioral and Social Sciences; Humanities and Fine Arts. Second Semester: Chemistry 122/124; English 122; Mathematics 145; Humanities and Fine Arts.

**Sophomore Year**
First Semester: Chemistry 286, 341, 351/353; Mathematics 151/152. Second Semester: Chemistry 352/354; Mathematics 161/162; Physics 103/183; Behavioral and Social Sciences.

**Junior Year**
First Semester: Chemistry 386, 371, 466; Foreign Language I; Physics 104/184; Second Semester: Chemistry 372, 497; Mathematics 210 or 307; Foreign Language II; Cultures and Civilizations

**Senior Year**
First Semester: Chemistry 333, 486r; Chemistry elective with lab; Cultures and Civilizations; Mathematics 212. Second Semester: Chemistry 434, 443; Cultures and Civilizations; Elective.

Total Hours: 120

Chemistry: Biochemistry Concentration

**2244 - Chemistry; 2246 - Premedicine;**

**2248 - Predentistry**

Chemistry 467;
Biology 121, 122, 325 and one course from Biology 311, 412, 420, 428 or 460; One Chemistry research course recommended from 495r, 496r or 497r

2.0 average in all chemistry courses (excluding Chemistry 111 and 211). Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours. See page 67 for additional requirements.

*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Typical course of study in Biochemistry (B.S.)

**Freshman Year**
First Semester: Chemistry 121/123; Biology 121; English 121; Mathematics 145. Second Semester: Chemistry 122/124; Biology 122; English 122; Mathematics 151/152.

**Sophomore Year**
First Semester: Chemistry 341, 351/353, Physics 103/183; Mathematics 161/162. Second Semester: Chemistry 286, 352/354; Physics 104/184; Biology 325; Behavioral and Social Sciences.

**Junior Year**
First Semester: Chemistry 371, 386, 466; Foreign Language I; Cultures and Civilizations; Second Semester: Chemistry 372; Biology 311, 412, 420, 428 or 460; Foreign Language II; Mathematics 210.

**Senior Year**
First Semester: Chemistry 333; Behavioral and Social Sciences; Elective; Cultures and Civilizations; Humanities and Fine Arts. Second Semester: Chemistry 443, 467, 486r; Cultures and Civilizations; Humanities and Fine Arts.

Total Hours: 120

**4530 - CHEMISTRY MINOR**

Chemistry 121/123 (or 125), 122/124, 341, 351/353, 352/354, and one course selected from 342, 371, 443, or 466. Minimum 2.0 average in the minor.

CHEMISTRY COURSES (CHEM)

111 Chemistry and the Environment (3)
Examines chemical concepts and methods of investigation with applications to the environment. Spring semester odd years. Credit may not apply toward a chemistry major.

119 Light and Life (4)
Examines the methods of investigation that lead to our understanding of light and its role in nature and human development. Lecture 3 hours, laboratory 2 hours. Prerequisite: UTC Math Placement, Level 20. May be registered as Biology 119 or Physics 119. Credit allowed in only one of the three courses. Laboratory/Studio course fee will be assessed.

121 General Chemistry I (3)
Surveys chemical principles involving structure, properties and reactions. Every semester. Lecture 3 hours Prerequisite: UTC Math Placement level 20 or Mathematics 106 or equivalent. Chemistry 125 may be substituted for Chemistry 121 and 123 in meeting all requirements. Corequisite: Chemistry 123.

122 General Chemistry II (3)
Examines chemical concepts in inorganic, organic, analytical and physical chemistry. Every semester. Lecture 3 hours. Prerequisite: 121 or 125 with a minimum grade of C; UTC Math Placement Level 30 or Mathematics 131 or 144 (Chemistry majors). Corequisite: Chemistry 124.
123 General Chemistry I Laboratory (1)  
Laboratory experiments to support and enhance the topics covered in Chemistry 121. Every semester. Lecture 3 hours. Prerequisite: UTC Math Placement Level 20 or Mathematics 106 or equivalent. Corequisite: Chemistry 121. Laboratory/Studio course fee will be assessed.

124 General Chemistry II Laboratory (1)  
Laboratory experiments to support and enhance the topics covered in Chemistry 122. Every semester. Laboratory 3 hours. Prerequisite Chemistry 123 with a minimum grade of C; UTC Math Placement Level 30 or Mathematics 131 or 144 (Chemistry majors). Corequisite: Chemistry 122. Laboratory/Studio course fee will be assessed.

125 Honors General Chemistry (4)  
Provides an advanced survey of chemical principles involving structure, properties, reactions, and organic chemistry. Laboratory work emphasizes advanced experimental procedures. Fall semester. Lecture 3 hours, laboratory 3 hours. Prerequisite: approval of instructor. Chemistry 125 may be substituted for Chemistry 121/123 in meeting all requirements.

168 Survey of Organic and Biochemistry (3)  
A selection of chemistry principles relevant to health fields, including a survey of organic and biochemistry. Spring semester. Lecture 3 hours. Prerequisite: Chemistry 121/123 or 125 with minimum grade of C. Credit not allowed after Chemistry 466. Credit may not be applied toward a chemistry major.

170 Survey of Organic and Biochemistry Laboratory (1)  
Laboratory experiments to support and enhance the topics covered in Chemistry 168. Spring semester. Laboratory 2 hours. Prerequisite: Chemistry 123 with minimum grade of C. Corequisite: Chemistry 168.

199r Special Projects (1-4)  
Focuses on individual or group projects. On demand. Maximum credit 4 hours.

211 Forensic Chemistry (3)  
Presents the application of chemical analysis to criminalistics including studies of physical evidence, microscopy, drug analysis, toxicology, arson investigation, serology, firearms, and documents. Fall semester odd years. Credit may not be applied toward a chemistry major.

286 Scientific Communication (2)  
An introduction to the techniques of oral presentations including the use of current technology. Open to chemistry majors only. Every semester. Lecture 2 hours. Prerequisite: Chemistry 122/124.

333 Inorganic Chemistry (3)  
Concepts and models in inorganic chemistry with emphasis on atomic structure and bonding, molecular orbital theory, material science, and descriptive inorganic chemistry including biological and environmental applications. Fall semester. Lecture 3 hours. Prerequisites: Chemistry 352/354 with a minimum grade of C; Mathematics 161/162. Pre- or Corequisite: Chemistry 341 and Physics 104/184 or 231/281.

341 Quantitative Analysis (4)  
Examines the theory and practice of volumetric, electrochemical, and spectrophotometric analysis applied to the study of stoichiometry and equilibrium. Fall semester. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 122/124. Laboratory/Studio course fee will be assessed.

342 Methods of Environmental Analysis (4)  
Focuses on advanced theory and practice of analytical chemistry including instrumental approaches to separation and analysis. Spring semester, even years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 341, 351/353, Laboratory/Studio course fee will be assessed.

351 Organic Chemistry I (3)  
Studies compounds of carbon with emphasis on structure, reactivity, mechanisms, and synthesis of organic molecules. Fall semester. Lecture 3 hours. Prerequisite: Chemistry 122 with a minimum grade of C; Corequisite: Chemistry 353.

352 Organic Chemistry II (3)  
Continuation of Chemistry 351. Emphasis on functional group manipulation and synthesis. Spectroscopic methods of analysis with emphasis on structure elucidation included. Spring semester. Lecture 3 hours. Prerequisite: Chemistry 351/353 with minimum grade of C; Corequisite: Chemistry 354.

353 Organic Chemistry I Laboratory (1)  
Laboratory experiments to support and enhance the topics covered in Chemistry 351. Fall semester. Laboratory 3 hours. Prerequisite: Chemistry 124; Corequisite: Chemistry 351. Laboratory/Studio course fee will be assessed.

354 Organic Chemistry II Laboratory (1)  
Laboratory experiments to support and enhance topics covered in Chemistry 352. Spring semester. Laboratory 3 hours. Prerequisite: Chemistry 353 with minimum grade of C; Corequisite: Chemistry 352. Laboratory/Studio course fee will be assessed.

371 Physical Chemistry I (4)  
Examines thermodynamics, kinetics, and quantum mechanics with applications to physical and chemical properties of matter. Fall semester. Lecture 3 hours, laboratory 3 hours. Prerequisites: Chemistry 341, 351/353; Mathematics 161/162. Pre- or Corequisite: Physics 104/184 or 231/281. Laboratory/Studio course fee will be assessed.

372 Physical Chemistry II (4)  
Continuation of 371 with primary emphasis on kinetics, quantum mechanics, and spectroscopy. Spring semester. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 371. Laboratory/Studio course fee will be assessed.

386 Chemical Literature (1)  
Surveys the primary, secondary, and tertiary sources of chemical information with weekly individual assignments in the use of these sources. Fall semester. Prerequisite: 16 semester hours of chemistry.

390r Cooperative Work Experience (1)  
Cooperative chemistry work experience is part of the Cooperative Education Program. Students participate in off-campus laboratory work in industry or government. Written and oral reports required. Prerequisite: Selection by Cooperative Education Office. Maximum credit 4 hours. Credit may not be applied towards a chemistry major. Course graded on a satisfactory/no credit basis.

426 Chemistry in Industry (2)  
Surveys the chemical industry including economic aspects, activities of chemists, and case studies in the solving of industrial problems. Spring semester odd years. Prerequisite: 24 semester hours of chemistry.

434 Advanced Inorganic Chemistry (4)  
Advanced theories of bonding and structure in inorganic chemistry with emphasis on ligand field theory, biorganic chemistry, and organometallic chemistry. Spring semester. Lecture 3 hours, laboratory 3 hours. Prerequisites: Chemistry 333, 371 with grades of C or better; Mathematics 212; Physics 104/184 or 231/281. Laboratory/Studio course fee will be assessed.

443 Instrumental Analysis (4)  
Examines the theory and use of infrared and ultraviolet spectroscopy, nuclear magnetic resonance, atomic absorption, gas chromatography, thermal analysis, electrochemical analysis, and other instrumental methods of characterizing chemical structure. Spring semester. Lecture 3 hours, laboratory 3 hours. Prerequisites: Chemistry 341 and 352/354 with minimum grades of C; Physics 104/184 or 231/281. Laboratory/Studio course fee will be assessed.

453 Advanced Organic Chemistry (4)  
Studies advanced concepts of organic chemistry upon which modern organic chemistry is developed. Kinetics, thermodynamics, multistep synthesis, molecular orbital concepts and orbital symmetry, and molecular structure determination by modern physical methods are emphasized. Fall semester even years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Chemistry 352 with minimum grade of C and Chemistry 354. Laboratory/Studio course fee will be assessed.

466 Biochemistry (3)  
Surveys the chemical aspects of protein and enzyme function, bioenergetics, metabolism, photosynthesis, nucleic acid function, and protein biosynthesis. Fall semester. Prerequisite: Chemistry 352 with a grade of C or better.
467 Proteins and Nucleic Acids (4)
Designed for students interested in advanced studies in biochemistry, molecular biology, and related medical sciences. Lectures will extensively cover material such as biochemical reactions, amino acid and peptide metabolism, protein function, nucleic acid base metabolism, nucleic acid function, and enzyme kinetics. The laboratory will be an introduction to modern biochemical techniques. Spring semester. Lecture 3 hours, laboratory 3 hours. Prerequisites: Biology 325, Chemistry 371 and 466 with grades of C or better in each course. Laboratory/Studio course fee will be assessed.

475 Polymer Chemistry (2)
Focuses on the chemistry of synthetic polymers including mechanisms of polymerization and the relation of properties to structure. Spring semester even years. Prerequisites: Chemistry 352 and 371 or equivalent knowledge.

486r Seminar (1)
This participation seminar is based on student papers, invited speakers, and other activities. Every semester. Prerequisites: Chemistry 286 and 24 additional semester hours of chemistry. Maximum credit 2 hours.

495r Departmental Thesis (2 hours per term, 4 hours for the two terms) The Chemistry Department strongly recommends that all senior departmental thesis projects be preceded by a ten-week summer research project or by two semesters of departmental research in Chemistry 497. Between 5 and 10 clock hours of research per week are expected for 495r credit. Prerequisite: approval of Chemistry Department. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

496r Industrial Research (2)
Focuses on group participation in a research project sponsored jointly by the Chemistry Department and a local industry. Written report required. On demand. Laboratory 4 hours. Prerequisite: 20 semester hours of chemistry.

497r Research (2)
Laboratory research under staff supervision. Oral summary or written report of results required each semester of credit. Students should confer with instructor prior to registration. Every semester. Laboratory 6 hours. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Involves individual or group projects. Credit may be earned through University, governmental, or industrial laboratory experience approved by the department. Written report and seminar presentation required. Every semester. Maximum credit 4 hours. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
Examines a special topic of a selected area of chemistry as specified in the schedule of classes. Students should confer with the instructor prior to registration. On demand.

Classical Civilization
See Foreign Languages and Literatures.

Communication

Associate Professor Betsy Alderman, Acting Head

The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) accredits the UTC Department of Communication. The department offers a Bachelor of Arts degree requiring a combination of broad liberal learning and specialized study in communication. In addition to meeting the general education requirements, the communication major must complete an approved minor. Majors must complete an internship of no less than 150 hours of on-the-job training.

1170 - Communication (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhettoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Two approved courses in Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved courses in behavioral or social science courses in two different disciplines (6 hours) May include Communication 320 as one of the two courses.

Foreign Language: Through second college year in one foreign language.

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses

Completion of 33 hours of communication courses including 101, 210, 231, 320, 420, 451 and 485 or 480, and other communication courses as electives for the total of 33 hours.

One approved computer literacy course.

Communication majors must take a minimum of 80 semester hours in courses outside the major, with no fewer than 65 semester hours from the liberal arts and sciences.

A communications major may complete a maximum of 30 credit hours in the College of Business Administration. This limit does not apply to students seeking the double major or degree in business and communication.

2.0 average in communication courses.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

4535 - COMMUNICATION MINOR
A total of 18 hours, including Communication 101 and 230. Nine hours must be at the 300 level or above.

Minimum 2.0 average in the minor.

COMMUNICATION COURSES (COMM)

101 Introduction to Mass Communication (3)
An introduction to the field of mass communication. Explores the historical development and current structure of the mass media. Examines the process of creating mass communication messages and economic, legal and ethical issues facing media outlets. Every semester. Lecture 3 hours.

130 Basic Computer Skills for Communication Majors (1)
Introduction to basic computer technology for mass communication. Basic elements of word processing, electronic mail, web page building and maintenance, and use of the World-Wide-Web for mass communication. Every semester. Laboratory 2 hours

199r Special Projects (1-3)
Individual or group studies. Every semester. Laboratory 1 to 3 hours
230 Media Writing I (3)
Introduction to factual writing style for the media and the presentation of information in multiple formats to diverse audiences. News and public relations writing, information gathering, and interviewing. Every semester. Laboratory 4 hours. Prerequisites: English 121 with a grade of C or better, keyboard proficiency of 30 wpm.

231 Media Writing II (3)
Researching, structuring, writing, and evaluating news stories for print, radio, television and the Web. Comparisons of news, public relations and converging media. Every semester. Laboratory 4 hours. Prerequisites: English 122 and Communication 230 with grades of C or better, keyboard proficiency of 36 wpm, or approval of the instructor.

271 Introduction to Public Relations (3)
Fundamentals of establishing and maintaining effective relations with organizational publics. Introduction to promotion methods and management of public relations function. Every semester. Lecture 3 hours. Prerequisite: Communication 101.

320 Mass Communication Perspectives (3)
History and development of mass media and mass media issues in American society. Cultural, technological, economic and societal consequences of the media. Every semester. Lecture 3 hours. Prerequisite: Communication 324.

324 Race, Gender and the Media (3)
Examines U.S. mass media construction of race, ethnicity, gender, and sexuality within an historical context and investigates the role of women and minority groups in U.S. media industries. On demand. Lecture 3 hours. Prerequisite: junior standing or approval of instructor. May be registered as Women's Studies 324. Credit not allowed in both Communication 324 and Women's Studies 324.

333 Persuasive Writing (3)
Preparation of persuasive copy to include advertising and promotional materials. Creative and conceptual aspects emphasized. Every semester. Laboratory 4 hours. Prerequisite: Communication 231.

335 Publication Design (3)
Introduction to publication design, with special attention to design principles and techniques of publication layout. Every semester. Laboratory 4 hours. Prerequisite: Communication 230.

337 Web Design (3)
A broad introduction to Web design with a focus on effectively presenting images, video, audio, and written material on the Web. Every semester. Laboratory 4 hours. Prerequisite: Communication 230.

340 Audio Production and Presentation (3)
Producing and presenting content in radio and non-broadcast audio media, using both studio and portable facilities. Studio, control room, and field production procedures, recording and editing, music and sound effects. Every semester. Lecture 1 hour, laboratory 3 hours.

345 Video I (3)
Introduction to the basic techniques and theory of visual media production. Emphasis on producing public affairs, educational, and entertainment content for television and multiple formats. Lecture 2 hours, laboratory 3 hours. Prerequisite: Communication 231.

350 Television News Production (3)
Principles and skills of producing television newscasts. Includes the production of two half-hour newscasts. Fall semester. Laboratory 3 hours. Prerequisite: Communication 231.

355 Documentary I: History, Theory and Practice (3)
Introduces students to the theory, history, aesthetics, editing practices, ethics, and political significance of the genre, as well as concept development and visual storytelling techniques. Includes analysis of significant documentaries and preparation of a treatment for a short documentary.

361 Advanced Reporting (3)
Reporting and writing news from city and county sources, with emphasis on researching public documents. Explorations and discussions of news and its relationship to society. On demand. Laboratory 4 hours. Prerequisite: Communication 231.

363 Feature Writing (3)
Nonfiction writing for newspapers, magazines and specialized publications. Spring semester. Laboratory 4 hours. Prerequisite: Communication 231 or approval of the instructor.

366 Creative Editing (3)
Principles and basic skills in newspaper, magazine, electronic and specialized publication copy editing. Fall semester. Laboratory 4 hours. Prerequisite: Communication 231.

400r Special Topics (3)
Specialized study of mass media designed to meet interests of students and faculty. On demand. Approval of instructor or head of the department.

410 Public Communication and Environmental Issues (3)
Seminar concerning environmental policy, information, and education, environmental reporting, and environmental public relations. Also discusses risk communication and the multiracial environmental justice movement. On demand. Prerequisite: Junior or senior standing. Completion of natural science/lab requirements, or approval of instructor.

420 Senior Seminar (3)
Current issues in mass media and completion of a research project. Every semester. Prerequisite: Communication 320.

445 Video II (3)
Advanced visual media production theory and techniques. Emphasis on writing effective scripts, project management, and legal and ethical issues. Spring semester. Lecture 2 hours, laboratory 3 hours. Prerequisite: Communication 345.

451 Mass Communication Law and Ethics (3)
United States legal system, elements of constitutional law, the law of mass communication, Personal and professional ethics as they apply to communications disciplines. Every semester. Lecture 3 hours.

455 Documentary II: Production and Post-Production (3)
Documentary video production and post-production, including advanced shooting, lighting, audio, and nonlinear editing. Students produce and edit a short documentary conceptualized and researched in Documentary I. Prerequisite: Communication 355 or approval of instructor.

461 Newspaper and Newsletter Editing and Design (3)
Principles and practices of editing and evaluating news copy, writing headlines and captions, newspaper and newsletter layout and design practices, electronic editing, and newspaper and newsletter production processes. Every fourth semester. Laboratory 4 hours. Prerequisite: Communication 231.

465 The Advertising Campaign (3)
Principles of campaign research, planning, implementation, and presentation applied to an account. On demand. Lecture 1 hour, laboratory 3 hours. Prerequisite: Communication 333.

470 The Public Relations Campaign (3)
Principles of campaign research, planning, implementation, and evaluation, and their application. Spring semester. Lecture 1 hour, laboratory 3 hours. Prerequisites: Communication 271 and 333.

480 Directed Project (3)
Guided project designed to demonstrate proficiency at professional level in a specific area. Every semester. Prerequisites: senior standing and approval of the department in the semester preceding enrollment.

485 Individual Internship (3)
Working experience in a professional situation. Every semester. Prerequisites: senior standing and approval of the department in the semester preceding enrollment.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.
Computer Science and Engineering
See College of Engineering and Computer Science.

Education
See College of Health, Education and Professional Studies.

Engineering
See College of Engineering and Computer Science.

Criminal Justice

Professor Helen Eigenberg, Head

The Criminal Justice program promotes an understanding of the justice systems on the undergraduate and graduate levels to both majors and nonmajors. Emphasis is placed on intellectual, experiential, and problem solving activities. Students acquire conceptual and technical knowledge and learn basic skills, i.e., interpersonal, computer, legal research, for entry level employment in criminal justice systems and social service agencies. At the graduate level, students engage in rigorous study in preparation for managerial and leadership roles throughout the justice system.

2176 - Criminal Justice (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours).

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Sociology 151* and Psychology 101* (6 hours)

Major and Related Courses

33 hours of core courses including: Criminal Justice 110, 211, 303 or 317 or 425, 310, 311, 312, 325, 375, 410, 430, 485
15 hours Criminal Justice electives with at least 9 of the 15 elective hours at the 300/400 level. (No more than 6 hours of Criminal Justice 478 and 479 may be applied toward the 15 hours of Criminal Justice electives.)

One course selected from Legal Assistant Studies 170, 225, 245, 350, 401, 406, 410

Psychology 101# and Sociology 151#

A minimum grade of C required in all core Criminal Justice courses, and a 2.0 overall GPA in the major is required.

Electives to complete 120 hours.

Minimum of 39 hours of 300-400 levels courses.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirements.

4541 - CRIMINAL JUSTICE MINOR

18 hours including Criminal Justice 110 and 15 hours of criminal justice electives with at least 9 hours at the 300/400 level (excluding 478, 479, 485, 495, 497, 498).

Minimum 2.0 average in the minor.

CRIMINAL JUSTICE COURSES (CRMJ)

110 Introduction to the Criminal Justice System (3)

An overview of the criminal justice system as it currently operates in its three major components: police, courts, corrections. A broad-based interdisciplinary perspective is employed to introduce the student to theories of crime and the process of criminal justice in modern America.

199r Special Projects (1-4)

Individual or group projects. On demand. Maximum credit 4 hours.

201 Violence in America (3)

An historical investigation into violence in America and the evolutionary response of criminal justice agencies. Every semester.

211 Information Systems in Criminal and Juvenile Justice (3)

An introduction to information management tools and processes of accountability as they relate to the two systems of justice. Fall semester.

250 Media and the Criminal Justice System (3)

Critical exploration of media portrayals of crime and criminal justice. News and entertainment genres are examined. Connections between crime, culture, politics, society and individual behavior, and the mass media receive special attention.

295 Violence Against Women (3)

Examines a variety of forms of violence against women in the United States including domestic violence, sexual assault, sexual harassment and pornography. Explores how violence against women has been minimized in society and how the criminal justice system has rarely developed effective ways to address these types of crimes. May be registered as Women's Studies 295. Credit not allowed in both Criminal Justice 295 and Women's Studies 295.

303 Comparative Criminal and Juvenile Justice Systems (3)

An examination of these two systems of justice as they function in other countries. Fall semester. Prerequisite: Criminal Justice 110 or completion of general education social science requirement or approval of instructor.

310 Law Enforcement in Criminal and Juvenile Justice (3)

Examines the historical and philosophical evolution of the police and the role of police in society. Discusses police functions, subculture, community relations and decision making. Explores issues such as police corruption and deviance and attempts to control police behavior. Spring semester. Prerequisite: Criminal Justice 110 or approval of instructor.

311 Criminal Justice Research Methodology (3)

Examination of the contemporary philosophy and techniques of research as applied in the criminal justice field. Prerequisite: Criminal Justice 110.

312 Correctional Perspectives in Criminal and Juvenile Justice (3)

Philosophical and historical evolution of corrections in the U.S. Emphasis on punishment and rehabilitative rationales, institutional programs and procedures, inmate social structures, and contemporary issues. Spring semester. Prerequisite: Criminal Justice 110 or approval of instructor. For Criminal Justice majors, credit not allowed in both Criminal Justice 312 and Sociology 323.
317 Minorities and Criminal Justice (3)
This course involves a critical analysis of multicultural, intergroup relations in the United States. It is intended to help students gain increased understanding of how race, ethnicity, gender, social status, age, occupation, etc., are related to the myriad of problems confronting social relations and the workings of the criminal justice system. Spring semester. Prerequisite: Criminal Justice 110 or completion of general education social science requirement or approval of instructor.

325 Law and Justice System (3)
An overview of the role of the actors in the American courtroom, the interaction of these actors and the effect of social forces on their behavior. Includes prosecutor, plaintiff and defense lawyers, judges, juries, eye witnesses, expert witnesses, and court staff. Spring semester. Prerequisite: Criminal Justice 110 or approval of instructor.

330 Probation, Parole and Community Corrections (3)
Examines the history, law, administration and current status of community correctional programs, including diversion, probation, parole, halfway houses, volunteer programs and other community programs for juvenile and adult offenders. Prerequisite: Criminal Justice 110 or approval of instructor.

355 Public and Private Security (3)
The organization of security systems in public and private agencies and institutions. An in-depth analysis of the historical perspectives, current status components, and opportunity in private security. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

370 Drugs: The Law and the Community (3)
Study of the drug problem, related law, and treatment of alternatives. On demand. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

372 Serial Murder (3)
This course is designed to provide students with an in-depth examination of serial murder. It focuses on the myths and stereotypes that have evolved from mass media and public efforts to find explanations for the relatively rare phenomenon of serial murder. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

375 Juvenile Justice (3)
A study of historical, philosophical, and legal influences defining the juvenile justice system. Students will examine the structure of the juvenile court, choices for intervention, methods for measuring crime, and special topics associated with juvenile justice. Fall semester. Prerequisite: Criminal Justice 110 or completion of general education social science requirement or approval of instructor. For Criminal Justice majors, credit not allowed in both Criminal Justice 375 and Sociology 322.

390 Police Procedure and Criminal Investigation (3)
A study of the laws on arrest, use of force, search and seizure, interrogation of suspects, obtaining confessions, and criminal identifications. Includes investigative techniques associated with collection and preservation of physical evidence as well as interrogation and preparation of formal statements of witnesses and suspects. Prerequisites: Criminal Justice 110 and 310.

401 Victimology (3)
An examination of the multifaceted problem of criminal victimization. Focuses on defining victimization, the incidents of victimization, social characteristics of victims, treatment of victims in the criminal justice system, and efforts designed to alleviate the consequences of victimization. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

402 Organized Crime (3)
The effect of organized crime on the community, the government, legal systems, and the individual; and methods of combating organized crime. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

404 Police Administration and Management Issues (3)
An in-depth analysis of critical issues in police leadership, management, and operations with an emphasis on labor-management relations, discrimination, civil liability, risk management, and police review systems. Prerequisite: Criminal Justice 310.

410 Theories of Criminal and Delinquent Behavior (3)
An analysis of theory and research on epidemiology and etiology of crime. Fall semester. Prerequisite: Criminal Justice 110. For Criminal Justice majors, credit not allowed in both Criminal Justice 410 and Sociology 321.

412 Correctional Administration and Legal Rights of Inmates (3)
The study of modern correctional organizations and administrative strategies. Special emphasis is placed on current legal issues involving both staff and client/offenders. Prerequisites: Criminal Justice 110 and 312.

414 Terrorism (3)
A survey of modern domestic and international terrorism. Examines the structure and dynamics of terrorist groups, types of terrorist violence, and justification of violence. Looks at criminal justice and nonprofit, human services policies and responses to this particular type of disaster. Prerequisites: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

415 White Collar and Corporate Crime (3)
Examination of the relative harm done to society as a result of white collar and corporate crime. Review of causes, legislation, regulatory agencies and possible forms of intervention. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor. May be registered as Women’s Studies 425. Credit not allowed in both Criminal Justice 425 and Women’s Studies 425.

430 Philosophical and Ethical Issues in Criminal Justice (3)
An investigation into the implications for criminal justice theory and practice of selected philosophical positions and perspectives. On demand. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

434 Gangs and the Criminal Justice System (3)
This course will provide an overview into the characteristics and mentality of gang members. Students will learn how to recognize gangsterism, and understand the gangster's mentality and influence in America today. Prerequisite: Criminal Justice 110 or completion of social science general education requirement or approval of instructor.

460 Dispute Resolution (3)
Alternatives to the courts for conflict resolution, including negotiation, mediation and arbitration. Discussion of legal issues, advantages and limitations of the alternatives. Laboratory exercises in applying these methods. On demand. Prerequisite: Completion of general education behavioral and social science requirements.

478 Internship in Criminal or Juvenile Justice (3)
Supervised internship in a criminal justice agency. Admission requires written application filed with the internship coordinator no later than two months prior to the semester in which the student plans to enroll in the course; personal interview with the internship coordinator; and a 2.00 grade point average, both overall and in criminal justice. Every semester. Prerequisite: criminal justice major, junior standing, and approval of instructor. Graded satisfactory/no credit.

479 Advanced Internship in Criminal or Juvenile Justice (3)
Supervised internship in a criminal justice agency. Admission requires written application filed with the internship coordinator no later than two months prior to the semester in which the student plans to enroll in the course; personal interview with the internship coordinator; and a 2.00 grade point average, both overall and in criminal justice. Every semester. Prerequisite: criminal justice major, junior standing, and approval of instructor. Prerequisite or Corequisite: Criminal Justice 478. Graded satisfactory/no credit.

485 Criminal Justice Senior Seminar (3)
Capstone course. Students will plan, design, and carry out a research project on a criminal or juvenile justice topic. Final projects will be grounded in relevant literature and will emphasize the integration of knowledge acquired in previous courses. Final papers which report the results for the study will be presented in a formal research seminar. For Criminal Justice majors only. Prerequisites: Criminal Justice 110, 211, 311, and senior standing.
Legal Assistant Studies

Associate Professor Karen McGuflce, Coordinator

The Legal Assistant Studies Program is a specialized program of study preparing students for employment in law-related occupations in one of the fastest growing professions in the country. The legal assistant is trained under the general supervision of an attorney, and handles tasks consistent with the legal assistant’s professional stature. In the performance of these duties, the legal assistant, often as a part of a legal team, works to provide increased efficiency in the delivery of legal services to the client. In carrying out these activities, legal assistants are employed in a variety of settings including: law firms, government, courts, corporations, non-profit organizations, banks, financial institutions, educational institutions, insurance companies, hospitals, and other health care facilities.

The program also welcomes students who hold a two-year degree or who have had some legal and/or college courses. Students in the program must complete the University General Education requirements or transfer the equivalent and 51 hours of Legal Assistant Studies course work and electives to total a minimum of 120 hours.

Continuation and Graduation Standards:
In view of the nature of legal assistance and the fact that individual rights may be affected by individuals providing legal assistance, the following standards will be applied by the Legal Assistant Studies faculty:
1. To progress in Legal Assistant Studies, students are required to:
   a) maintain a 2.5 (4.0 = A) grade point average in all legal assistant studies courses, and;
   b) maintain an active liability insurance policy for the legal assistant practicum.
2. If in the judgment of the faculty there is a reason to question the academic, emotional, ethical, or professional fitness of a student, the faculty have the right to make recommendations regarding continuation in the program.
3. Students who fail legal assistant studies courses may not be allowed to progress in the program. Students may only repeat a Legal Assistant Studies course(s) one time.

Transfer Students
Transfer students majoring in Legal Assistant Studies must take a minimum of 15 hours from approved Legal Assistant Studies courses at The University of Tennessee at Chattanooga.

Legal Assistant Studies (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major and Related Courses
Legal Assistant Studies core courses (21 hours) including LAS 101, 210, 235, 360, 390, 435, 471
6 hours of Legal Assistant Studies 470
Computer Science 110

Completion of one of the following concentrations:

2430 - Legal Assistant Studies
12 hours from Legal Assistant Studies 170, 199r, 220, 225, 230, 240, 245, 250, 300, 325, 350, 400, 401, 406, 410, 420, 497r, 498r, 499 with at least 6 hours at the 300-400 level; and
12 hours from the following with at least 6 hours at the 300-400 level and no more than six hours from any one discipline: Accounting 201, 202, 307; Business Administration 335, 336; Criminal Justice 110, 317, 325, 430, 460; English 277; Environmental Sciences 410; Philosophy 211, 425; Political Science 221, 321, 322, 323, 421; Psychology 425; or 3 hours from an LAS-related course as approved by the Coordinator.
2.0 average overall, 2.0 UTC average and 2.5 average in Legal Assistant Studies courses.
Minimum of 15 hours LAS courses at UTC.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.

2435 - Legal Assistant Studies: Social Sciences
Six (6) hours from Legal Assistant Studies 170, 220, 225, 230, 240, 245, 250, 300, 325, 350, 400, 401, 406, 410, 420;
Business Accounting 201;
Criminal Justice 325;
Psychology 202, 425;
One course from PANM 205#, Psychology 201/204# or Sociology 250#;
One course from Sociology 314 or Criminal Justice 311
2.0 average overall, 2.0 UTC average and 2.5 average in Legal Assistant Studies courses.
Minimum of 15 hours LAS courses at UTC.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
#Also satisfies general education requirement.
LEGAL ASSISTANT STUDIES MINOR
18 hours including Legal Assistant Studies 101 and 210, and 12 hours of legal assistant studies electives (excluding LAS 325, 401, 470, 497, 498 and 499). At least nine (9) of the 12 hours must be at the 300-400 level. Minimum 2.0 average required in all courses attempted for the minor.

LEGAL ASSISTANT STUDIES COURSES (LAS)

001 Legal Assistant Professional Experience (0)
Registered course for no credit to acknowledge employment as a full time legal assistant for at least one year in the past five years.

101 Law and The Legal Assistant (3)
Introduction to the study of law and the legal system the legal assistant in the legal system; an overview of the skills of the legal assistant including legal interviewing, investigating and professional ethics. Fall semester.

170 Introduction to Criminal Law (3)
An overview of both substantive and procedural law related to the definitions, investigations, processing and punishment of crimes, providing students with an overall understanding of the articulation between law and the criminal justice system. It also reviews the historical foundations of criminal law, elements of crime, purposes and functions of law, limits of the law, and the function of law in American society. Formerly Criminal Justice 170.

199r Special Projects (1-4)
Individual or group projects. Every semester. Prerequisites: approval of instructor.

210 Legal Research and Writing (3)
Introduction to primary and secondary legal sources including federal and state court reports; legal digests and Shepard's annotated law reports; federal administrative law; legal periodicals with indices; treatises and restatements; and research aids. Fall semester.

220 Real Property Law (3)
Review of substantive law relating to real estate transactions. On demand.

225 Commercial Law (3)
Introduction to the execution, validity and enforcement of contracts, mortgages, pledge assignments and other security devices. Overview of federal and state law regulating consumer credit and collection procedures. On demand.

230 Estate and Trust Law (3)
Introduction of Tennessee substantive law of successions and dominions, including wills and estate administration. On demand.

235 Litigation I (3)
Introduction and analysis of the litigation process in federal and state courts. Lectures are supplemented with drafting practice. Fall semester.

240 Business Organizations (3)
Analysis of sole proprietorship, partnerships and corporations from a legal perspective. On demand.

245 Family Law (3)
Review of substantive law relating to marriage, children and property. On demand.

250 Personal Injury Practice (3)
An examination of tort, worker's compensation and insurance law as it relates to personal injury. On demand. Prerequisite: LAS 210.

300 Interviewing and Investigation (3)
An in-depth study of principles, methods and investigative techniques utilized to locate, gather, document and disseminate information. The emphasis will be on developing interviewing and investigating skills intended to prepare the legal assistant to communicate effectively. On demand.

325 Legal Aspects of Non-Profit Management (3)
The course examines the emerging legal issues facing nonprofit agencies by studying pertinent constitutional, statutory and case law. Moreover, students will be exposed to case studies to assist them in connecting law and agency practice. Fall Semester. May also be registered as PANM 325. No credit for both LAS 325 and PANM 325.

350 Law of Evidence (3)
Introduction to the law of evidence in Federal and State (Tennessee) Courts including the purpose and construction; burden of proof; admissibility and presumptions; relevancy; privileges and hearsay. On demand. Prerequisite: LAS 235.

360 Law Office Management and Computer Applications (3)
A study of the techniques and approaches for the efficient operation of a law office through the utilization of computer software programs. Fall semester. Prerequisites: LAS 101 and Computer Science 110.

390 Advanced Legal Research and Writing (3)
Utilization of traditional and computerized legal research methods in written assignments. Emphasis is on the analysis of fact situations, methods of effective research and use of legal materials in working practical problems; examination of basic and advanced search techniques using the major legal databases Lexis and Westlaw. Spring semester. Prerequisites: LAS 210 and Computer Science 110.

400 Intellectual Property Law (3)
The law of trademarks, copyrights, patents, and trade secrets including the search, selection, registration and transfer process. United States and International intellectual property laws discussed. On demand. Prerequisites: LAS 101 and 225 or approval of instructor.

401 Constitutional Law (3)
An examination of the leading constitutional principles pertaining to modern criminal procedure. Fall semester. Prerequisites: Criminal Justice 110 or LAS 101. Formerly Criminal Justice 400.

406 Juvenile Law (3)
Statutory and case analysis of judicial decisions, substantive juvenile law and procedures significant to practices of various agencies in juvenile justice. Spring semester. Prerequisites: Criminal Justice 110 or LAS 101. Formerly Criminal Justice 406.

410 Employment Law (3)
A study of employer/employee law in the United States discussing the National Labor Relations Act, the Occupational Safety and Health Act, unfair labor practices, unions, strikes, discrimination, sexual harassment, and employee privacy. On demand. Prerequisites: LAS 101 and 235 or approval of instructor.

420 Legal Issues in Health Care (3)
Study of the laws applicable to health care including access to health care services, the organization of health care, medical malpractice, and current issues in the medical field. On demand. Prerequisites: LAS 101 and 235 or approval of instructor.

435 Litigation II (3)
Detailed analysis and practice of pretrial discovery, pretrial motions, evidence, trial preparation, assistance at trial motions and post-trial motions. Spring semester. Prerequisite: LAS 235.

470r Legal Assistant Internship (3-6)
Internship to give the student experience in a selected area of legal specialization under the supervision of an attorney. Students with credit for LAS 001 may substitute 2 legal specialty courses for these hours. Students who have completed a prior legal assistant internship for credit hours may substitute one legal specialty course for 3 hours of LAS 470. Students cannot exceed 6 hours of internship credit toward the degree. Every semester. Prerequisite: senior standing or approval of coordinator.

471 Legal Ethics and Professionalism (3)
An integrative seminar emphasizing ethical and related issues common to legal assistant theory practice and procedures. Spring semester. Prerequisite: senior standing or approval of coordinator.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Independent Research (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.
499r Independent Studies (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Special Topics (1-4)
On demand.

Economics

Professor Ziad Keilany, Head

The economics curriculum is designed to prepare students for a successful career in different sectors of the economy. This is accomplished by offering a B.A. as well as B.S. in economics. The B.A. degree provides flexibility in course offerings and requires study of a foreign language. The B.S. degree, on the other hand, stresses mathematics and analysis.

1204 - Economics (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: Economics 201* (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Foreign Language: Through second college year in one foreign language.

Completion of a minor with a minimum of 2.0 grade point average.

Major and Related Courses
18 hours in economics including 101, 102, 201#, 324, 325, and 453
15 hours from the following: Economics 301, 306, 317, 404, 415 or 416 (not both), 417, 425, 426, 429, 430, 437, 444, 450, 452, 455, 460, 465, 470, 497r, 498, 499r, Accounting 201; Finance 302 (BACC 202 is prerequisite)

Minimum of 39 hours of 300 and 400 level courses.

2204 - Economics (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 131# (3 hours)

Statistics: Economics 201* (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major and Related Courses
Economics 201# and 202; Mathematics 131# and 136

15 hours core courses including Economics 101, 102, 324, 325, 453

18 hours from the following: Economics 301, 306, 317, 404, 415 or 416 (not both), 417, 425, 426, 429, 430, 437, 444, 450, 452, 455, 460, 465, 470, 497r, 498, 499r; Accounting 201; Finance 302 (BACC 202 is prerequisite)

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

An economics major may earn a maximum of 30 credit hours in the College of Business. This limit does not apply to students seeking the double major or degree in business and economics.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

4550 - ECONOMICS MINOR

A student may obtain a minor in economics by taking Economics 101 and 102 plus 12 hours from the following courses: Economics 202 and/or any 300 or 400 level economics courses (minimum of 18 hours).

Minimum 2.0 average in the minor.

ECONOMICS COURSES (ECON)

101 Principles of Economics: Macroeconomics (3)
A study of national income and its determination, money and banking, economic fluctuations, fiscal and monetary policy, economic growth, and international economics. An introduction to the study of human behavior and the human condition in the context of macroeconomic forces. Every semester. Economics 101 and Economics 102 can be taken in either order.

102 Principles of Economics: Microeconomics (3)
A study of the market system, the price system, forms of business organization, government and business, labor and distribution. An introduction to the study of human behavior and the human condition in the context of microeconomic forces. Every semester. Economics 101 and Economics 102 can be taken in either order.

199r Special Projects (1-3)
Individual and group projects. On demand. Maximum credit 3 hours.

201 Statistics for Economics I (3)
Basic concepts of data collection and presentation, descriptive and inferential statistics, probability, sampling distributions, estimation and hypothesis testing with emphasis of economic data and problems. On demand. Prerequisites: Economics 101, 102 and Mathematics 135. No credit allowed after Management 211, Mathematics 210 or equivalent.

202 Statistics for Economics II (3)
Statistical inference with an emphasis on regression, a primary tool in economic analysis. Computer applications. Prerequisites: Economics 201. No credit allowed after Management 212 or equivalent.

301 Money and Banking (3)
Development and analysis of the American monetary system and commercial and central banking; special attention to analysis and evaluation of monetary policies. Every semester. Prerequisites: Economics 101, 102.
306 Public Finance (3)
Public expenditures and revenues, principles of taxation, public debt, and fiscal policy. On demand. Prerequisites: Economics 101, 102.

317 Labor Economics and the Labor Process (3)
Theories of labor markets, the labor process, and income distribution. Economic aspects of issues such as discrimination, education and unemployment. On demand. Prerequisites: Economics 101, 102.

324 Intermediate Microeconomic Theory (3)
Survey of developments in economic analysis; price determination, including considerable study of demand and cost theory; imperfect competition. On demand. Prerequisites: Economics 101, 102.

325 Intermediate Macroeconomic Theory (3)
Introduction to contemporary theory of income and employment; emphasis on the essential principles and concepts used in the determination of the level of income and employment, the rate of economic growth, and the general price level. Every semester. Prerequisites: Economics 101, 102, or equivalent.

404 International Economics (3)
The classical and modern theories of international trade; international trade accounting; exchange rates; tariffs and other restrictions on trade; recently created agencies and programs to promote international economic relationships; the influence of international economic relationships on world politics. On demand. Prerequisites: Economics 101, 102.

415, 416 Economic History of the United States (3, 3)
First half from colonial period to 1873. Origins, development, and expansion of the American economy with emphasis on roles of government and business. Relationship between economic growth and social development designed to provide perspective on problems of modern society. 415 fall/416 spring semester alternate years. May be registered as History 415, 416.

417 Women in the Economy (3)
The role of women in the U.S. economy. An economic analysis of women's labor force participation, discrimination against women in the labor market, women's paid and unpaid work, the child care industry, and female poverty. On demand. Prerequisites: 101, 102 or approval of instructor. May be registered as Women's Studies 417. Credit not allowed in both Economics 417 and Women's Studies 417.

425 Industrial Organization (3)
The structure of industry, business conduct, and economic performance; analysis of antitrust law and government regulation. Every semester. Prerequisites: Economics 101, 102.

426 Comparative Economic Systems (3)
Theoretical and empirical examination of various economic systems with emphasis on current capitalist and socialist economies. Objectives and outcomes of market and planned economies are compared. On demand. Prerequisites: Economics 101, 102.

429 Managerial Economics (3)

430 Environmental Economics (3)
An economic study of environmental issues and alternative solutions to them. Topics include measurement of cost and benefits, property rights and externalities, pollution control, and past, present, and future environmental policy and regulations. On demand. Prerequisites: Economics 101, 102.

437 Health Care Economics (3)
Supply and demand for health care; government programs affecting health care markets; health care providers as business firms, including hospitals, pharmaceutical firms, individual and group medical practices, health and malpractice insurance providers and HMOs. The role of government will be covered in all of these areas. Health care systems in other countries will be studied and compared to the system in the United States. Prerequisites: Economics 102.

444 Economics of Underdeveloped Areas (3)
Factors underlying economic progress of nations and geographic areas; analysis of resources, manufacturing and agricultural productivity, saving and investment, trade, monetary and banking system, and fiscal system. On demand. Prerequisites: Economics 101, 102, or graduate standing.

450 Marxian Political Economy (3)

452 European Economic History (3)
The economic history of Europe from the breakup of the ancient world through the 19th century. Exploration of the relationship between economic growth and social development. On demand. Prerequisite: Junior standing.

453 History of Economic Thought (3)
Development of theories of value and distribution, macroeconomics, money and banking, international trade, and business cycles; works of Smith, Malthus, Ricardo, Marx, Jevons, Marshall, Wicksell, Knight, Schumpeter, and Keynes. On demand. Prerequisites: Economics 101, 102.

455 Urban Economics (3)
A study of the metropolitan economy with a problem orientation in areas of intra-metropolitan industry location, urban residential location and travel behavior, the urban ghetto, housing markets, urban transportation, and environmental quality. On demand. Prerequisites: Economics 101, 102.

460 Introduction to Econometrics (3)
The study of issues in economics and statistical tests of economic models through regression analysis. Also recommended for non-economics majors with an interest in economics and mathematics. On demand. Prerequisites: Economics 101, 102; Management 212 or Mathematics 407.

465 Economics of Regulated Industries (3)

470 Seminar in Current Economic Topics (3)
The application of economic techniques and analytical methods to not less than five current topics, which may vary from semester to semester, selected by the instructor. Designed for senior economics majors. On demand. Prerequisites: 6 hours of economics courses at the 300 level or above.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
On demand.
English
Professor Verbie L. Prevost, Head

The English Department offers programs leading to the B.A. in English with concentrations in literary studies and writing, along with course work toward the B.S. in the teaching of English in the secondary school (see the College of Health, Education, and Professional Studies). Regardless of focus, the major in English emphasizes the critical study of language, literature, and rhetoric, and the writing of a wide variety of texts for diverse situations and audiences. Through reading, interpreting, and criticizing texts, the student has multiple opportunities to explore and participate in the tradition of using language to embody human experience. The variety of writing experiences available within the department allows students to reach an advanced level of competence in the use of language and those intellectual skills which support a variety of career options and professional choices. The major in English provides an essential and versatile education for both life and work.

1261 - English and American Language and Literature (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)
Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses
A minimum of 39 hours English in addition to general education requirements including English 201, 202, 205, 206, 307, 361 and one course from 446r or 447r; 12 hours of major course work chosen from the following writing courses: English 300, 327r, 375r, 376r, 410, 446r, 447r, 471r, 473, 479 and 495r. Communication 363 may also be used to satisfy course work in the writing concentration. Students who are focusing on creative writing must take English 270 before they can take upper-level creative writing courses.

Additional 300-400 level English courses to total at least 27 upper-level hours.

2.0 average in all English courses (excluding English 121 and 122)
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.

ENGLISH MINORS

4551 - English: Creative Writing
21 hours including: English 205, 206, 270; 9-12 hours in creative writing courses chosen from English 327r, 374r, 375r, 376r, 471r; and 0-3 hours in rhetoric/writing courses chosen from English 300, 370, 450, 473, 479r. A minimum 2.0 average is required in all minor course work.

4552 - English: Literature
21 hours including English 201, 205, 206 and 12 hours elective course work in literature at the 300-400 levels.
A minimum 2.0 average is required in all minor course work.

4553 - English: Writing
18 hours in Rhetoric and Writing courses including: English 202; 0-3 hours of 200-level writing courses chosen from English 270, 276, 277, 278, 279; at least 12 hours of 300-400 levels rhetoric/writing courses chosen from English 300, 362, 370, 410, 446, 450, 471, 473, 479r. 3 hours of the required 300-400 level work may be in creative writing chosen from English 374r, 375r, 376r, 471r. A minimum 2.0 average is required in all minor course work.

ENGLISH COURSES (ENGL)

105 Developmental Writing I (3 hours of institutional credit)
Review of standard language forms. Requires extensive practice in the writing of sentences and paragraphs as well as in the practice of editing for proper punctuation and accurate grammatical structure. Every semester. Credit not applicable toward any degree. Prerequisite: Placement required.
106 Developmental Writing II (3 hours of institutional credit)
Emphasis on developing ideas and organizing them into coherent paragraphs while using standard language forms. Requires extensive practice in writing paragraphs and short essays. Every semester. Credit not applicable toward any degree. Pre-requisite: Grade of C or better in English 105 or placement.

113 Western Humanities I (3)
A historical approach to the pivotal ideas, systems of thought, and creations of the Western world from antiquity to approximately 1600 C.E. Emphasis on matters of literary structure, style, and content. Pre or Corequisite: English 121d. May be registered as Classics 113 or Philosophy 113. Credit allowed in only one of the three courses.

115 Western Humanities II (3)
A historical approach to the pivotal ideas, systems of thought, and creations of the Western world from approximately 1600 C.E. to the present. Emphasis on matters of literary structure, style, and content. Pre or Corequisite: English 121d. May be registered as Philosophy 115. No credit allowed in both English 115 and Philosophy 115.

121 Rhetoric and Composition (3)
The principles and practice of effective reading and writing. Frequent themes, exercises, selected readings. Attention to individual problems of grammar and usage. Formerly English 101. Every semester. Pre-requisite: Grade of C or better in English 106 or placement. In rare instances exemption from English 121 may be recommended by the department.

122 Rhetoric and Composition (3)
Review of competencies stressed in English 121 with emphasis on the extended essay; use of research matter in writing; attention to diction, figurative and symbolic language, relationship of style and meaning. Formerly English 102. Every semester. Pre-requisite: English 121 with grade of C or better or placement.

131 Values in 20th-Century American Fiction (3)
A study of contemporary values as reflected in selected twentieth century American novels and short stories from World War I to the present. Formerly English 111. On demand.

133 Introduction to Literature (3)
Readings from poetry, fiction, and drama to demonstrate how the writer selects from ideas, experience, and language and combines these elements to speak of and to the human condition. Formerly English 103. On demand.

161 English as a Foreign Language I (3)
The first of two sequential courses in ESL, this course offers nonnative speakers intensive practice in reading, writing and the more difficult points of English usage. Required during the first term of residence of all students who are non-native speakers of English and who are placed in the course on the basis of the English department's writing proficiency examination that must be completed before registration by all nonnative speakers of English. Fall semester.

162 English as a Foreign Language II (3)
The second of two sequential courses in ESL, this course offers nonnative speakers intensive practice in writing and in the more difficult points of English usage and style. Required during the first term of residence of all students who are non-native speakers of English and who are placed in the course on the basis of the English department's writing proficiency examination that must be completed before registration by all nonnative speakers of English. Spring semester. Pre-requisite: Placement test or completion of English 161.

199r Special Projects (1-4)
Individual or group projects. Every semester. Maximum credit 4 hours for B.A. in English or B.S., Secondary Education in English. Pre-requisite: approval of department head.

201 Introduction to Literary Analysis (3)
An introduction to critical concepts and skills required in the field of literary studies; approaches to analyzing and interpreting literary texts, genre forms and critical terminology, and research methods. Emphasis on close reading and careful critical writing. Fall and spring semesters. Must be completed within the first 21 hours of major course work. Pre- or Corequisite: English 122.

202 Introduction to Rhetorical Analysis (3)
An introduction to rhetorical studies with an emphasis on rhetorical history, rhetorical analysis and rhetorical practice. Topics include natural and comparative/cultural rhetoric, the rhetoric of ancient Greece, and definition of rhetoric, past and present. Practice will include rhetorical analysis of texts and analysis of the rhetorical principles of purpose, situation, genre and audience. Must be completed within the first 21 hours of major course work. Pre-or Corequisite: English 122.

203 Literature of the Humanities (3)
Selections from the literature of the Western tradition, from Homer to the end of the Renaissance; read in English and studied in the context of the other humanities and the fine arts. On demand.

204 World Literature from the Renaissance (3)
Selections from English literature of the Renaissance and later periods and from European and American writers. On demand.

205 Survey of British Literature (3)
Selected readings in major works of British literature from the middle ages to the present, with emphasis on historical, cultural and formal developments. Fall and spring semesters. Must be completed within the first 21 hours of major course work. Pre-or Corequisite: English 122.

206 Survey of American Literature (3)
Selected readings in major works of American literature from the colonial period to the present, with emphasis on historical, cultural and formal developments. Fall and spring semesters. Must be completed within the first 21 hours of major course work. Pre-or Corequisite: English 122.

211 Survey of English Literature to 1800 (3)
On demand.

212 Survey of English Literature since 1800 (3)
On demand.

213 American Literature to 1855 (3)
Representative works from the Colonial and Romantic periods. On demand.

214 American Literature from 1855 (3)
Representative works from the late 19th and 20th centuries. On demand.

219 African-American Literature (3)
Readings will be largely fiction with supportive critical works and some poetry and drama to examine the development of African-American literature from the 1850's to the present. Figures may include Harper, Chestnutt, Washington, DuBois, Hurston, Wright, Ellison, Brooks, Baldwin, Walker, and Morrison. Spring semester. May be registered as Humanities 219. Credit not allowed in both English 219 and Humanities 219.

228 Children's Literature (3)
A survey and evaluation of some of the best literature for children, with special attention to literature for preschool and elementary school years. Pre-requisite: one lower level course in written communication in English.

229 Literature for the Adolescent (3)
A survey and evaluation of literature whose primary audience is the adolescent, with special attention to the usefulness of such literature in secondary education. Spring semester. Pre-requisite: one lower level course in written communication in English.

230r Popular Fiction (3)
Science fiction or detective fiction or other type of popular fiction, one or another of which will be studied for its literary merit; the type of popular fiction to be studied in any particular section will be specified in the schedule of classes. On demand.

257 The Romantic Experience (3)
An interdisciplinary survey of “Romanticism” in European civilization, ca. 1789 to 1918, addressing and analyzing some of the main historical, philosophical, and aesthetic forces involved in this broad cultural experience. On demand. May be registered as Humanities 257. Credit not allowed in both English 257 and Humanities 257.
270 Creative Writing (3)
Instruction and practice in writing imaginative literature for magazines and specialized publications. Fall and spring semesters.

276 Technical Writing (3)
Preparation of documents that convey technical information to diverse audiences. Emphasis on audience analysis, information gathering, coordination of visual and verbal representations of data, and careful editing for precise language. Guidance in the electronic production of texts such as descriptions, abstracts, instructions, reports, presentations, proposals, graphics, brochures, resumes, and web pages. Fall and spring semesters. Prerequisite: English 122 with a grade of C or better.

277 Professional Writing (3)
An introduction to the variety and forms of workplace discourse. Emphasis on composing documents such as memos, letters, resumes and reports; planning and managing short- and long-term writing projects; integrating oral and written communication; and using new communication technologies. Fall and spring semesters. Prerequisite: English 122 with a grade of C or better.

278 Scientific Writing (3)
An introduction to the theory and practice of the different conventions of science writing. Practice in the analysis and writing of scientific reports and supporting materials such as abstracts, proposals, and research reviews. Emphasis on the challenges of communicating within a specialized audience as well as translating specialized language for general audiences. Fall and spring semesters. Prerequisite: English 122 with a grade of C or better.

279 Writing for the Social Sciences (3)
An introduction to the theory and practice of the discourse used in social sciences. Emphasis on the processes of thinking involved in researching, reading, and communicating in these fields. Extended research and original essays with opportunities for the student to focus on his or her academic field. Fall and spring semesters. Prerequisite: English 122 with a grade of C or better.

300 Intermediate Rhetoric and Composition (3)
An introduction to the theory and practice of the basic kinds and combinations of discourse and their aims; extended essays and other writing assignments in these kinds of discourse. Fall and spring semesters. Prerequisite: English 122.

301 The Literature of England to 1300 (3)
Representative works in translation. On demand.

302 The Literature of England, 1300-1500 (3)
Representative works including Chaucer. On demand.

303 Early Renaissance Literature to 1600 (3)
Representative non-dramatic works from Tudor and Elizabethan periods. On demand.

304 Milton and the Seventeenth Century (3)
Representative works from the Jacobean and late Renaissance periods. On demand.

305 Age of Dryden, Pope, and Swift (3)
Representative works from the early 18th century. On demand.

306 Age of Johnson (3)
Representative works from the mid and late 18th century. On demand.

307 Shakespeare (3)
Reading and study of selected major plays with emphasis on essentials of character, plot, themes, language and staging. Fall and spring semesters. Prerequisite: English 122.

311 Literatures of Early America (3)
Selected readings tracing the development of an American literature from the narratives of European explorers and Native American mythologies to the early Romanticism of the Federalist period, with emphasis on historical, cultural, and formal developments. On demand. Prerequisite: English 122.

312 American Literature: 1800-1865 (3)
Selected readings in nineteenth-century American Literature to the Civil War, including representative works in the transcendental, romantic, and sentimental traditions, with an emphasis on historical, cultural, and formal developments. On demand. Prerequisite: English 122.

313 American Literature: 1865-1914 (3)
Selected readings in American Literature between the Civil War and the First World War, with an emphasis on developments in American prose and their historical and cultural contexts. On demand. Prerequisite: English 122.

314 American Literature: 1914-1945 (3)
Selected readings in American literature between the two World Wars, including representative works in late realism/naturalism, modernism, the Harlem Renaissance, and the Southern Renaissance with an emphasis on historical, cultural, and formal developments. On demand. Prerequisite: English 122.

315 American Literature Since World War II (3)
Selected readings in American literature from the Second World War to the present, including representative works in late modernism and postmodernism, the Beat movement, the Confessional poets, the Black Arts movement, post-Stonewall gay and lesbian literature, and Chicano/a and Native American literature with an emphasis on historical, cultural, and formal developments. On demand. Prerequisite: English 122.

316 African Literature (3)
A study of selections from the literature of Africa. Emphasis on historical fiction and the oral tradition. On demand.

317 English Romantic Period (3)
Representative works from the period 1789-1837. On demand.

318 Victorian Literature (3)
Representative works from the period 1837-1901. On demand.

319 English Transitional Period (3)
Representative works from the period 1880-1920. On demand.

320 Modern British Literature (3)

325 Colonial and Post-Colonial Literature in English (3)
A critical examination of English-language poetry, fiction, drama and prose from former colonies and dependencies of the British empire. Special emphasis on defining the imperial and colonial experiences and on the literary legacy of British imperialism. On demand. Prerequisite: English 122.

327r Literary Editing and Publishing (3)
Practical experience in literary publishing through work on the Sequoya Review, the campus literary journal. Students will solicit and evaluate work for publication, and then gain practical experience in editing/layout, and production of the journal, as well as in promoting the finished product. Includes introduction to the larger literary market and instruction in preparing creative work for submission and publication. Approval of department head and instructor required to register for credit after 6 hours earned. Maximum 9 hours will apply toward the degree.

331 American Women Writers (3)
A survey of American women writers of the 20th century. On demand. Prerequisite: English 122. May be registered as Women’s Studies 331. Credit not allowed in both English 331 and Women’s Studies 331.

332 Southern American Literature (3)
Emphasis on 20th century authors. On demand.

333r Masterpieces of Asian Literature (3)
Study of representative works with emphasis on a country, period, or genre. On demand.

335 African-American Slave Narrative Tradition (3)
Study of slave narratives and subsequent literature influenced by them. On demand. May be registered as Humanities 335. Credit not allowed in both English 335 and Humanities 335.
350 Introduction to the Theory and Function of Literary Criticism (3)
The concepts, terminology, and procedures of formal literary study. Emphasis on the basic theoretical problems of criticism and relation of literary analysis to literary evaluation, etc. On demand.

351 History of Literary Criticism (3)
Selected readings from representative literary critics. On demand.

362 Origins and History of Writing: Hieroglyphics to Hypertext (3)
A survey course designed to give students an historical and philosophical grounding in the evolution of writing, from the ancient hieroglyphics of Mesopotamia and Greece, to the artistic manuscript of the medieval ages to the printed book and hypertext.

361 History of the English Language (3)
A survey of the history of the English language, beginning with its Indo-European backgrounds, tracing the development of Old, Middle, and Modern English through major changes in vocabulary, sound, word formation, and syntax. Fall and spring semesters. Prerequisite: English 122.

370 Persuasion and Propaganda (3)
A study of the powers and abuses of persuasion, using historical and contemporary examples. On demand.

374r Creative Writing: Nonfiction (3)
A seminar and workshop in writing with individual projects in creative nonfiction. On demand. Approval of department head and instructor required to register for credit after 6 hours earned.

375r Creative Writing: Poetry (3)
Instruction and practice in the understanding and writing of poetry. Spring semester. Approval of department head and instructor required to register for credit after 6 hours earned.

376r Creative Writing: Fiction (3)
Instruction and practice in the understanding and writing of fiction. Spring semester. Approval of department head and instructor required to register for credit after 6 hours earned.

380 Modern Japanese Fiction (3)
An introduction to prominent works of Japanese fiction since the late nineteenth century. Readings include novels and short fiction in translation. On demand. Prerequisite: English 121.

395 Greek and Roman Tragedy in Translation (3)
See Classics 395.

400 Seminar in the Novel (3)
A seminar in the senior year designed to integrate the student’s understanding of the novel as a genre. On demand.

410 Approach to Composition (3)
Designed to improve the student’s writing and to improve the individual’s ability as a critic of writing, particularly as a potential teacher of writing; focus on expository prose. Fall and spring semesters. Prerequisite: English 122.

413 Advanced Expository Writing (3)
An advanced writing-intensive course for students from a variety of majors. Designed to help students develop their analytical and composing abilities through demanding critical reading and writing. Also designed to train students to internalize the principles of writing style. Fall and spring semesters. Prerequisites: English 122 and junior standing or above.

415r Advanced Short Story Workshop (3)
This course is designed to move students toward the production of short fiction of publishable quality. Students will present their own work to their peers to be critiqued and will be responsible for critiquing the works of others. Students will also be expected to read short story collections and works on craft as assigned. There will be required common as well as independent readings in contemporary short fiction. Maximum 9 hours will apply toward the degree. Prerequisite: 6 hours English 376r or approval of instructor.

420 Early English Drama, Origins to 1642 (3)
The English drama as a literary type, its history and development from Medieval times to 1642, exclusive of Shakespeare. On demand.

421 Later English Drama, 1660-1800 (3)
Study of English drama from the Restoration through the 18th century. On demand.

423 American Novel to 1900 (3)
Representative novels of American romanticism, realism, and naturalism. On demand.

425 Visual Rhetoric (3)
This course explores the persuasive potential of images--icons, photographs, and video--in the construction of narrative and argument. Specifically, students in this course will analyze and interpret the symbolic significance of images, and they will produce rhetorical texts/artifacts that are primarily image-based. Prerequisite: English 202.

430 Development of the British Novel: from Defoe to George Eliot (3)
The development of the British novel from its origins in the 18th century through George Eliot and her contemporaries. On demand.

431 The Modern British Novel (3)
On demand.

432 Modern Poetry (3)
On demand.

434 Twentieth-Century American Novel (3)
On demand.

435 Modern American Drama (3)
Selected plays of representative dramatists with special emphasis on American drama since 1920. On demand.

443r Major British Figures (3)
A reading course in the works of a major British writer or writers. Writers to be studied will be specified in the schedule of classes. On demand. Maximum credit 6 hours for the degree.

445r Major American Figures (3)
A reading course in the works of a major American writer or writers. Writers to be studied will be specified in the schedule of classes. On demand. Maximum credit 6 hours for the degree. May be registered as Women's Studies 445r only when the content focuses on female authors.

446r Major Issues in Rhetoric (3)
An intensive seminar on a focused issue in rhetoric. Specific subject to be identified in the schedule of classes. Open to English majors only; others with approval of instructor. Prerequisite: 27 hours of English above the 100 level.

447r Special Topics in Literature and Language (3)
An intensive study seminar on a focused theme or topic in literature or language. Specific subject to be identified in the schedule of classes. Open to English majors only; others with approval of instructor. Prerequisite: 27 hours of English above the 100 level.

450 Theories and Methods of Argument (3)
An advanced study in the theories and methods of argument. Students will review classical rhetoric and an Aristotelian model of persuasion with special emphasis on epidemiic, deliberative, and forensic rhetorical classifications.

460 Modern English Grammar (3)
An introduction to the system phonological, morphological, syntactical of present-day American English. Emphasis on various recent presentations of this system. On demand. Prerequisites: 360, 361, or approval of the department head.

462 English As A Second Language (3)
This course offers nonnative speakers intensive practice in listening, speaking, reading, and writing English. The course is designed to enhance the student’s academic course work in the areas of note taking, discussion, essay writing, research
and documentation, and group presentation. Course will not apply to any undergraduate major or degree. Cannot be taken for graduate credit.

471r Writing Workshop (3)
An advanced workshop in writing with individual projects in imaginative, expository, or critical writing. On demand. Prerequisites: two writing courses above 100 level. Approval of department head and instructor required to register for credit after 6 hours earned.

473 Proposals, Articles and Technical Research (3)
Proposal-writing as practiced in government, academic, business, and industry, grounded in persuasive theory. Students will also learn technical research skills and write several technical/scholarly articles. Spring semester. Prerequisites: English 121 and 122.

479r Internship (3)
The internship provides 150 hours of hands-on experience for the student who is interested in a career in business, industry, government, or non-profit agency. Students must apply for the internship during the semester previous to the intended internship experience. Student interns work for an average of 10 hours per week under the supervision of a professional in the Chattanooga area. Prerequisites: English major or minor with 18 hours of English credit in addition to English 122, and approval of internship coordinator. Maximum 6 hours credit.

480 Theatre and Feminism (3)
Readings, discussion and writing about a wide variety of plays by modern feminist playwrights. On demand. Prerequisite: English 121. May be registered as Theatre and Speech 480 or Women's Studies 480. Credit allowed in only one of the three courses.

482 Women's Rhetoric (3)
A theoretical, historical, and, primarily, rhetorical examination of women's discourse through the study of speeches, essays, and other rhetorical artifacts. Special attention will be given to the ways women have used traditional rhetorical strategies and how they have subverted this tradition and/or brought strategies from private life to bear on public discourses. On demand. Prerequisites: English 122 and 202, or approval of instructor. May be registered as Women's Studies 482. Credit not allowed in both English 482 and Women's Studies 482.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-3)
Individual study projects by special approval of department head. Every semester. Maximum 3 hours for B.A. in English or B.S., Secondary English. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
Group study projects by special approval of department head. Every semester. Maximum 6 hours toward the B.A. in English; maximum 3 hours toward the B.S., Secondary English.

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Foreign Languages and Literatures
Professor Felicia Sturzer, Acting Head

The department offers the B.A. degree in Foreign Languages with concentrations in French, Greek and Latin, and Spanish. A student may also pursue a B.A. in Humanities degree with an emphasis in classical civilization. Elementary and intermediate German, Italian, and Portuguese are offered and may be chosen to fulfill the foreign language requirement. Modern language courses, taught in English, which deal with foreign literatures and civilizations, afford the non-foreign language student a broader perspective of other peoples and cultures.

The department also offers minor programs in Latin, Greek, Classics, Spanish, or French.

A native speaker of a language which is offered for credit by the Department of Foreign Languages and Literatures or anyone with native speaker proficiency in such a language must consult the department for proper placement and approval to enroll.

Independent studies will be offered only for 400-level courses, with the exception of courses in German and the Classical languages, which will be taught at any level in this format only upon availability of staff and mutual consent of student and instructor.

All incoming students who have three years or more of high school study in a single foreign language (and no college level study of the language) and who wish to continue study in that language will be required to take a placement test to determine their level of competence in that language. A student should begin study of the language in question at the level established by the placement level. Under special circumstances, exceptions may be granted upon appeal to the department.

Classical Civilization

4532 - MINOR IN CLASSICS
18 hours in classical civilization including:
(a) 9 hours in ancient civilization, literature, art, philosophy or religion, chosen from Classics 110, 113, 310, 351, 352, 353, 410, 395, 396, 397; Art 214; English 113; History 103, 351, 352, 353, 401; Philosophy 101, 113, 351; Religion 351; Women's Studies 410; or University Honors 214; and
(b) 9 hours from either category (a) or from Greek and/or Latin language courses above 101.

8 hours must be at the 300/400 level and no more than 6 hours may be at the 100-level. Minimum 2.0 average in the minor.

CLASSICS COURSES (CLAS)

110 Major Triumphs of Greece and Rome (3)
Major accomplishments of the Greco-Roman civilization and their impact upon the modern world. On demand.

113 Western Humanities 1 (3)
An historical approach to the pivotal ideas, systems of thought, and creations of the Western world from antiquity to approximately 1600 C.E. Emphasis on ancient Greek and Roman thought and the classical tradition. Corequisite: English 121.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit four hours.

300 Scientific Terminology (2)
Designed to meet the needs of non-language students. Origin and derivation of English words in common scientific usage. On demand.

310 The Greco-Roman World (3)
The history, culture, and lifestyles of the ancient Greeks and Romans. On demand. May be registered as History 310. Credit not allowed in both Classics 310 and History 310.

351 History of Classical Greece (3)
Greek social and political history from the period of the Persian Wars to the Achaean War, covering Classical Athens and Sparta, the Peloponnesian War, and the rise of Macedon and Alexander the Great, with an emphasis on the art, philosophy, and religion of Greece's polis-based society during the 5th and 4th centuries BC. May be registered as History 351. Credit not allowed in both Classics and History 351.
352 History of the Roman Republic (3)
Roman social and political history from the 8th century to 44 BC covering, through an analysis of their art, philosophy, and literature, the Romans’ origins, their city’s development and growth into an imperial power, as well as the key figures involved in the break-up of the Republic. May be registered as History 352. Credit not allowed in both Classics and History 352.

353 History of the Roman Empire (3)
Roman social and political history from 44 BC to AD 491, covering through an analysis of their art, philosophy, and literature the rise of bureaucratic government, the Roman economy, life under the Julio-Claudians, Flavians, Antonines, Severans, Diocletian, and Constantine, Rome’s interaction with barbarians and Christians, and the fall of the Western empire. May be registered as History 353. Credit not allowed in both Classics and History 353.

395 Greek and Roman Tragedy in Translation (3)
A study of the origin of tragedy and its dramatic and philosophical development in the works of Aeschylus, Sophocles, Euripides, and Seneca. On demand. May be registered as English 395. Credit not allowed in both Classics 395 and English 395.

396 Classical Mythology (3)
A study of the origins and meaning of Greek and Roman myths, their importance for understanding ancient culture, and their influence on later literature and art. On demand.

397 Greek and Roman Comedy in Translation (3)
A study of the origins, development, and changes in comedy as seen in the works of Aristophanes, Menander, Plautus, and Terence. On demand.

410 Classical Women (3)
A survey of the history of women and their representation from the heroic age and Homer to the Roman Empire of the 2nd century AD. Evidence from legal texts and literature along with epigraphic, numismatic and artistic depictions of women will be considered from several key periods, including 5th century Athens and Rome during the late Republic and early Empire. May be registered as Classics 410 or Women’s Studies 410. Credit allowed in only one of the three courses.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

FRENCH COURSES (FREN)
101r Elementary French I (4)
Basic grammar, elementary reading, and conversation. Fall semester.

102r Intermediate French II (4)
Continuation of 101. Spring semester. Prerequisite: French 101 with a grade of C or better or placement.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit four hours.

211 Intermediate French for Conversation I (3)
Intensive oral practice in French with emphasis on acquiring conversational skills and cultural awareness of the French speaking world. Class taught mostly in French. Fall semester. Prerequisite: 102 with a grade of C or better or placement.

212 Intermediate French for Conversation II (3)
Emphasis on oral proficiency and cultural awareness of the French speaking world, in preparation for upper level courses. Class taught mostly in French. Spring semester. Prerequisites: French 211 with a grade of C or better or placement. This course is prerequisite for minors and majors.
213 Intermediate French for Reading I (3)
Continuation of grammar and oral practice in French with emphasis on acquiring reading skills. Classes taught mostly in English with discussion in French or in English. Fall semester. Prerequisites: French 102 with a grade of C or better or placement. This course is for students who only wish to satisfy their foreign language requirement. It does not prepare students for upper level French courses.

214 Intermediate French for Reading II (3)
Readings on French culture, literature and civilization. Emphasis on acquiring reading and translation skills. Classes conducted mostly in French with discussion in English or in French. Spring. Prerequisites: 211 or 213 with a grade of C or better or placement. This course is for students who only wish to satisfy their foreign language requirement. It does not prepare students for upper level French courses.

299r Group Studies (1-4)
On demand. Prerequisites: French 211 with a grade of C or better.

311, 312 Composition and Conversation (3,3)
Selections from French literature, topics of current interest and articles from French newspapers and magazines may be used as a basis for discussions and compositions. 311 fall/312 spring semester. Prerequisites: 211 or 213 with a grade of C or better or placement. This course is for students who only wish to satisfy their foreign language requirement. It does not prepare students for upper level French courses.

321 Advanced French Grammar I (3)
Special problems in syntax, illustrative reading, composition. On demand. Prerequisites: French 211, 212 or approval of department head. Corequisite: French 311 or 312.

322 Advanced French Grammar II (3)
Special problems in syntax, illustrative reading, composition. On demand. Prerequisites: French 211, 212 or approval of department head. Corequisite: French 311 or 312.

323 Introduction to French Culture (3)
The fine arts, patterns of living, and total life-style of the French people approached through their language. Geographical and historical backgrounds included. On demand. Prerequisites: French 211, 212 or approval of department head.

331, 332 Introduction to French Literature (3,3)
Representative works from the beginning to 1800 with attention to cultural, political, and social background. Sequel from 1800 to the present. Prerequisite: French 212 or placement.

340 French Internship (3)
A cooperative arrangement between the university and specific elementary or middle schools, social service agencies or businesses involved with either foreign language instruction, service to foreign language-speaking clients, or business transactions with companies abroad. Every semester. Prerequisite: Junior or senior standing and approval of department head.

399r Group Studies (1-4)
On demand. Prerequisites: French 212 with a grade of C or better or approval of department head.

401r Special Topics in French Language or Literature (2-3)
A reading course with emphasis on a field, period, or author, or on a topic of philology or linguistics. On demand. Special arrangement with the head of the department and the instructor. Prerequisites: French 311-312, 331-332.

The focus of the following courses may include the development of the novel, the theater, poetry, narrative techniques, various critical approaches to works within a century and Francophone literature with particular emphasis on Quebec Studies.

405 Romance Philology (3)
Historical linguistics, the development of Romance languages from Vulgar Latin into modern Romance Languages. Covers basic linguistic concepts and terminology as well as phonological and morphological developments in Romance languages with particular emphasis on French and Spanish. Prerequisites: French 321 or Spanish 321 or Latin 202, or approval of instructor.

407 Seventeenth Century French Literature (3)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head.

409 Eighteenth Century French Literature (3)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head.

411 Nineteenth Century French Literature (3)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head.

413 Twentieth Century French Literature (3)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head.

493 Senior Seminar French (3)
Integrated capstone experience emphasizing the knowledge and skills essential in the major covering French language, literature, and Francophone culture and civilization. Spring semester. Prerequisites: French major with senior standing.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisites: French 311-312, 331-332, or approval of department head.

German (GER)

101 Elementary German I (4)
Basic grammar, elementary reading, and conversation. Fall semester.

102 Elementary German II (4)
Continuation of 101. Spring semester. Prerequisite: German 101 with a grade of C or better or placement.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit four hours.

211 Intermediate German for Conversation I (3)
Grammar review, intensive oral practice in German, limited readings. Fall semester. On demand. Prerequisite: German 102 with a grade of C or better or placement.

212 Intermediate German for Conversation II (3)
Emphasis on oral proficiency and cultural awareness, with limited grammar and readings. Spring semester. Prerequisite: German 211 with a grade of C or better or placement.

213 Intermediate German for Reading I (3)
Grammar review, extensive reading in German, with discussion in English. Fall semester. Prerequisite: German 102 with a grade of C or better or placement.

214 Intermediate German for Reading II (3)
Readings in Germanic culture, literature and civilization. Emphasis on acquiring reading and translation skills. Classes conducted mostly in German with discussion in English or German. Spring semester. Prerequisite: German 211 or 213 with a grade of C or better or placement.

299r Group Studies (1-3)
On demand. Prerequisite: German 212 or 214 with a grade of C or better or approval of department head.
399r Group Studies (1-3)
On demand. Prerequisite: German 212 or 214 with a grade of C or better or approval of department head.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Greek

1332 - Foreign Languages: Greek and Latin (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Completion of a minor with a minimum 2.0 grade point average.

Concentration
18 hours Latin beyond 101, 102
12 hours Greek
2.0 average in all Greek and Latin courses
Minimum of 39 hours of 300 and 400 level courses
Minimum 2.0 average in all Greek and Latin courses
Electives to complete 120 hours
See page 67 for additional requirements

4574 - GREEK MINOR
18 hours of Greek above 101 with at least 9 hours at the 300 level or above. Minimum 2.0 average in the minor.

GREEK COURSES (GRK)

101 Elementary Greek I (3)
Elements of the Greek language. Reading of Greek prose. Fall semester.

102 Elementary Greek II (3)
Elements of the Greek language. Reading of Greek prose. Spring semester. Prerequisite: Greek 101 with a grade of C or better or placement.

199r Special Projects (1-4)
On demand.

310 Readings of Greek Literature (3)
A study of the development of Greek literature with selections from representative authors. On demand. Prerequisite: Greek 102 or approval of department head.

312 Advanced Greek Grammar and Composition (3)
On demand. Prerequisite: Greek 102 or approval of department head.

350r Greek Prose (3)
Greek historians, Attic orators, and Greek philosophers considered in different semesters. On demand. Prerequisite: Greek 102 or approval of department head.

351r Greek Poetry (3)
Greek tragedy, comedy, and lyric poetry considered in different semesters. On demand. Prerequisite: Greek 102 or approval of department head.

425r Special Topics in Greek Literature (2)
Readings in a specific author, genre, or period. On demand. Prerequisite: four semesters of Greek through the 300 level.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms) On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: four semesters of Greek through the 300 level or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: four semesters of Greek through the 300 level or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: four semesters of Greek through the 300 level or approval of department head.

Italian (ITAL)

101 Elementary Italian I (4)
Basic grammar, elementary reading, and conversation. On demand.

102 Elementary Italian II (4)
Basic grammar, elementary reading, and conversation. On demand.

211 Intermediate Italian for Conversation I (3)
Grammar review, intensive oral practice in Italian, limited readings. On demand. Prerequisites: Italian 101 and 102 or 2 years high school Italian.

212 Intermediate Italian for Conversation II (3)
Grammar review, intensive oral practice in Italian, limited readings. On demand. Prerequisites: Italian 211.

Latin

1334 - Foreign Languages: Latin (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: One approved course in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Completion of a minor with a minimum 2.0 grade point average.
Concentration
21 hours Latin beyond 101, 102; 9 hours from Classics 310, 395, 396, 397
2.0 average in all Latin courses
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements

4610 - LATIN MINOR
18 hours of Latin above 101 with at least 9 hours at the 300 level or above.
Minimum 2.0 average in the minor.

LATIN COURSES (LAT)
101 Elementary Latin I (3)
Elements of the language. Reading of Latin prose. Fall semester.

102 Elementary Latin II (3)
Elements of the language. Reading of Latin prose. Spring semester.
Prerequisite: Latin 101 with a grade of C or better or placement.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

201 Intermediate Latin I (3)
A continuation of first year Latin with an intensive review of basic Latin grammar.
Emphasis on attaining reading skills through select authors.
Prerequisite: Latin 102 with a grade of C or better or placement.

202 Intermediate Latin II (3)
Selected readings from Latin authors.
Prerequisite: Latin 201 with a grade of C or better or placement.

310 Readings in Latin Literature (3)
A study of the development of Latin literature with selections from representative authors.
On demand.
Prerequisite: Latin 202 or approval of department head.

312 Latin Prose and Composition (3)
On demand.
Prerequisite: Latin 202 or approval of department head.

350r Latin Prose (3)
Sallust, Caesar, Tacitus, Seneca, Cicero, and Petronius considered in different semesters.
On demand.
Prerequisite: Latin 202 or approval of department head.

351r Latin Poetry (3)
Latin lyric poetry, Roman comedy, Latin satire, Horace, Vergil, and Lucretius considered in different semesters.
On demand.
Prerequisite: Latin 202 or approval of department head.

425r Special Topics in Latin Literature (2)
Readings in a specific author, genre, or period. On demand.
Prerequisite: any 300-level Latin course.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors.
Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand.
Prerequisite: any 300-level Latin course or approval of department head.
Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand.
Prerequisite: any 300-level Latin course or approval of department head.
Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.
Prerequisite: four semesters of Latin through the 300 level or approval of department head.

Modern Languages (MLNG)

100 A Profile of French Culture (3)
A humanistic view of the patterns of living and total life-style of the French people with special attention to their art, music, and literature (in translation).
Geographical, historical, and linguistic backgrounds included. On demand. No foreign language credit.

110 A Profile of German Culture (3)
A humanistic view of the patterns of living and total life-style of the German people with special attention to their art, music, and literature (in translation).
Geographical, historical, and linguistic backgrounds included. On demand. No foreign language credit.

120 A Profile of Hispanic Culture (3)
A humanistic view of the patterns of living and total life-style of the Hispanic people with special attention to their art, music, and literature (in translation).
Geographical, historical, and linguistic backgrounds included. On demand. No foreign language credit.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours. No foreign language credit.

230 Contemporary Francophone African Cinema (3)
An overview of recent African films from former French colonies with attention to issues of identity, heritage, and former colonial status.
Prerequisite: English 121 or 122. May be registered as Theatre and Speech 230 or Humanities 230.
No foreign language credit. Credit allowed in only one of the three courses.

299r Group Studies (3)
On demand.
No foreign language credit.
Prerequisite: English 121 or 122.

300 Masterpieces of French Literature in Translation (3)
Study of representative works from French literature in relation to their cultural context.
On demand. No foreign language credit.
Prerequisite: English 121 or 122.

301 French Women Writers in Translation (3)
Contributions of French women writers to the social, economic and political institutions of French culture.
Readings from literary selections in several genres.
Topics studied are gender roles, systems of authority, masculine/feminine representations of reality, and the concept of "feminine" writing.
On demand.
No foreign language credit.
May be registered as Women's Studies 301.
Credit not allowed in both Modern Languages 301 and Women's Studies 301.
Prerequisite: English 121 or 122.

302 Latin American Women Writers in Translation (3)
Contributions of Latin American women writers to the social, economic and political institutions of Latin American culture.
Readings from literary selections in several genres.
Topics will include gender roles, systems of authority, masculine/feminine representations of reality, and the concept of "feminine" writing.
On demand.
No foreign language credit.
May be registered as Women's Studies 302.
Credit not allowed in both Modern Languages 302 and Women's Studies 302.
Prerequisite: English 121 or 122.

310 Masterpieces of Germanic Literature in Translation (3)
Study of representative works from German or Germanic literature in relation to their cultural context.
On demand.
No foreign language credit.
Prerequisite: English 121 or 122.

320 Masterpieces of Hispanic Literature in Translation (3)
Study of representative works from Spanish, Catalan, Portuguese, or Latin-American literature in relation to their cultural context.
On demand.
No foreign language credit.
Prerequisite: English 121 or 122.

330 Masterpieces of European Literature in Translation (3)
Study of representative works from French, German, or Hispanic literature in relation to their cultural context with emphasis on a specific period, genre, or theme.
On demand.
No foreign language credit.
Prerequisite: English 121 or 122.
Prerequisites: Portuguese 101-102 or placement. On demand. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

Individual Studies/Research Contract

27 hours Spanish beyond second college year, including Spanish 311-312, 321-322, 331-332, and 323 or 325

A minimum of 6 hours of Spanish at the 400 level

2.0 average in all Spanish courses

To meet requirements for the major, a minimum of 9 hours of 300 level or above must be taken at UTC.

Portuguese (PORT)

101 Elementary Portuguese I (4)
Basic grammar, elementary reading, and conversation. 101 fall/102 spring semester.

102 Elementary Portuguese II (4)
Basic grammar, elementary reading, and conversation. 101 fall/102 spring semester. Prerequisite: Portuguese 101 or placement.

199r Special Projects (1-4)
Individual or group projects. On demand.

211 Intermediate Portuguese for Conversation (3)
Continues the grammar intensive oral practice in Portuguese with emphasis on acquiring conversational skills. Class taught mostly in Portuguese. Fall semester. Prerequisites: Portuguese 101-102 or placement.

212 Intermediate Portuguese for Conversation (3)
Emphasis on oral proficiency and cultural awareness of the Portuguese speaking world, in preparation for upper level courses. Class taught mostly in Portuguese. Spring semester. Prerequisites: Portuguese 211 or 212 or placement.

499r Group Studies (1-4)
On demand.

Spanish

1336 - Foreign Languages: Spanish (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from each area (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western Cultures and Civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Completion of a minor with a minimum 2.0 grade point average.

Concentration

27 hours Spanish beyond second college year, including Spanish 311-312, 321-322, 331-332, and 323 or 325

A minimum of 6 hours of Spanish at the 400 level

2.0 average in all Spanish courses

To meet requirements for the major, a minimum of 9 hours of 300 level or above must be taken at UTC.

Minimum of 39 hours of 300 and 400 level courses

Electives to complete 120 hours

See page 67 for additional requirements

4662 - SPANISH MINOR

18 hours in Spanish, above 101-102, including Spanish 211-212, 311-312, 321; 12 hours must be at the 300 level or above. Spanish 213 and 214 cannot be used for credit toward the minor.

Minimum 2.0 average in the minor.

SPANISH COURSES (SPAN)

101 Elementary Spanish I (4)
Basic grammar, elementary reading, and conversation. Fall semester.

102 Elementary Spanish II (4)
Continuation of 101. Spring semester. Prerequisite: Spanish 101 with a grade of C or better or placement.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

211 Intermediate Spanish for Conversation I (3)
Intensive oral practice in Spanish with emphasis on acquiring conversational skills. Class taught mostly in Spanish. Fall semester. Prerequisite: Spanish 102 with a grade of C or better or placement. This course is a prerequisite for minors and majors.

212 Intermediate Spanish for Conversation II (3)
Emphasis on oral proficiency and cultural awareness of the Spanish speaking world, in preparation for upper level courses. Class taught mostly in Spanish. Spring semester. Prerequisites: Spanish 211 with a grade of C or better or placement. This course is a prerequisite for minors and majors.

213 Intermediate Spanish for Reading I (3)
Continuation of grammar, and oral practice in Spanish with emphasis in acquiring reading skills. Classes taught mostly in English with discussion in Spanish or in English. Fall semester. Prerequisites: Spanish 102 with a grade of C or better or placement. This course is for students who only wish to satisfy their foreign language requirement. It does not prepare students for upper level Spanish courses.

214 Intermediate Spanish for Reading (3)
Readings on Hispanic culture, literature and civilization. Emphasis on acquiring reading and translation skills. Classes conducted mostly in Spanish with discussion in English or in Spanish. Spring semester. Prerequisites: Spanish 211 or 213 with a grade of C or better or placement. This course is for students who only wish to satisfy their foreign language requirement. It does not prepare students for upper level Spanish courses.

299r Group Studies (1-4)
On demand. Prerequisites: Spanish 212 with a grade of C or better or approval of department head.

311, 312 Composition and Conversation (3,3)
Selections from Spanish literature, topics of current interest, and articles from Spanish newspapers and magazines may be used as a basis for discussions and compositions. 311 fall/312 spring semester. Prerequisites: Spanish 212 and oral proficiency with a rating of Novice-High or placement; English 121 or 122 with a grade of C or better.

321,322 Advanced Spanish Grammar (3,3)
Special problems in syntax, illustrative reading, and composition. 321 fall/322 spring semester. Prerequisite: Spanish 212 or placement.

323 Introduction to Spanish Culture (3)
The fine arts, patterns of living, and total life style of the Spanish people approached through their language. Geographical and historical backgrounds included. Prerequisite: Spanish 212 or placement.
325 Introduction to Spanish-American Culture (3)
The fine arts, patterns of living, and total life-style of the Spanish-American people approached through their language. Geographical and historical backgrounds included. Prerequisite: Spanish 212 or placement.

331 Masterpieces of Spanish Literature (3)
Readings of representative works from the earliest epic and lyric poetry to the modern novel and theater with attention to cultural, political, and social background. On alternate years. Prerequisite: Spanish 212 or placement.

332 Masterpieces of Latin American Literature (3)
Readings of representative works from the Chronicles of the Conquest to contemporary works, with attention to the cultural, political and social background. On alternate years. Prerequisite: Spanish 212 or placement.

340 Spanish Internship (3)
A cooperative arrangement between the university and specific elementary or middle schools, social service agencies or businesses involved with either foreign language instruction, service to foreign language-speaking clients, or business transactions with companies abroad. Every semester. Prerequisite: junior or senior standing and approval of department head.

399r Group Studies (1-4)
On demand. Prerequisite: Spanish 212 with a grade of C or better.

400r Topics in Spanish Literature (3)
Study of topics such as Spanish literature of the Golden Age, 18th and 19th century Spanish literature, The Generation of 1898, and contemporary Spanish literature. On demand, by special arrangement with the department head and the instructor. Prerequisites: Spanish 311-312, 331-332.

401r Special Topics in Hispanic Language or Literature (2-3)
A reading course with emphasis on a field, period, or author, or on a topic of philology or linguistics. On demand, by special arrangement with the department head and the instructor. Prerequisites: Spanish 311-312, 331-332.

402r Topics in Spanish-American Literature (3)
Study of topics such as Spanish-American novel, Spanish-American theater and poetry, and Spanish-American essay. On demand, by special arrangement with the department head and the instructor. Prerequisites: Spanish 311-312, 331-332.

403 Cervantes: Don Quijote de la Mancha (3)
A critical reading of Cervantes’ masterpiece, in its entirety, in the original seventeenth-century Spanish. The history, art, philosophy, religion, and literature of the Spanish Golden Age, presented as the background for Cervantes’ novels, are the impact of the Quijote and the imprint of Cervantes’ prose style in modern Spanish. Prerequisite: Spanish 331 or approval of instructor.

405 Romance Philology (3)
Historical linguistics, the development of Romance languages from Vulgar Latin into modern Romance Languages. Covers basic linguistic concepts and terminology as well as phonological and morphological developments in Romance languages with particular emphasis in French and Spanish. Prerequisite: French 321 or Spanish 321 or Latin 202, or approval of instructor.

406 Spanish Phonetics and Phonology (3)
A course in the applied linguistics of Spanish pronunciation. Issues of Spanish pronunciation (standard and dialects) through phonetic transcription (using IPA), basic linguistic terminology, and accurate description of Spanish sounds. Also presents all the Peninsular and Latin American contemporary variants of spoken Spanish, including Spanish spoken in the U.S. Prerequisites: Spanish 321-322 or approval of instructor.

408 Spanish American Poetry (3)
Readings of poetry from Spanish American from the Colonial Period to the present with an introduction to poetic theory and modes of approaching a poetic work. Prerequisites: Spanish 321-322 or approval of instructor.

410 Spanish American Short Story (3)
Readings and analyses of representative works by contemporary Spanish American short story writers. Prerequisites: Spanish 321-322 or approval of instructor.

412 Spanish American Theatre (3)
Readings in the dramatic literature of Spanish America of the 20th and 21st centuries, focusing on literary currents to which a play belongs, its form, the use of the language and the use of settings. Prerequisites: Spanish 321-322 or approval of instructor.

414 Magical Realism in Spanish American Narrative (3)
Readings of Spanish American narrative texts (short stories, novellas, and novels) that exhibit the characteristics of the style known as “Magical Realism.” Discussion of the texts, including the way in which the cultures of Spanish America are reflected in them. Prerequisites: Spanish 321-322 or approval of instructor.

493 Senior Seminar Spanish (3)
Integrated capstone experience emphasizing the knowledge and skills essential in the major covering Spanish language, literature, Hispanic culture and civilization. Spring semester. Prerequisites: Spanish major with senior standing.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. Prerequisites: 311-321, 331-332, or approval of department head. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisites: 311-321, 331-332, or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisites: 311-321, 331-332, or approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisites: 311-321, 331-332, or approval of department head.

Health and Human Performance
See College of Health, Education and Professional Studies.

History
Professor Kittrell Rushing, Acting Head

The Department of History offers an undergraduate major leading to the Bachelor of Arts degree in History. A major in history requires 39 hours of course work. The courses cover a wide range of topics in American, European, Asian, and Latin American history. There are many post-graduate opportunities for UTC history majors. After graduation our majors enroll in graduate programs in law, history, and other disciplines. Some teach at the high school or university level; others work for various public history institutions. Still others become practicing attorneys.

1414 -History (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: English 121, 122 (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: History 103*, 104* and 105* (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)
Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major Requirements
39 hours in history including 103#, 104#, 105#, 203#, 204#, and 301. At least one course (three hours) will be taken from each of the following categories of study:

I. American History: 331, 332, 335, 336, 337, 338, 341, 343, 346
II. European History: 311, 312, 313, 314, 315, 317, 318, 319, 320, 323, 324, 327, 328, 351, 352, 353
III. Non-Western History: 364, 365, 367, 368, 370, 371, 372, 375, 376
IV. 400-level courses: 401, 410, 411 412, 415, 416, 419, 422, 423 (400-level courses are topical courses that may be taught as seminars in which enrollment will be limited to 15 students.)

The following special topics courses may be approved by the department head for credit in the most appropriate regional category: 385#, 350, 499#.

2.0 average in all history courses
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

4581 - HISTORY MINOR
A minor in history consists of 18 hours in history including either 104 and 105 or 203 and 204 and at least three hours in each of the following areas at the 300 level or above:
I. American History: 331, 332, 335, 336, 337, 338, 341, 343, 346
II. European History: 311, 312, 313, 314, 315, 317, 318, 319, 323, 324, 327, 328
III. Non-Western History: 364, 365, 367, 368, 370, 371, 372, 375, 376

The following special-topics courses may be approved by the department head for credit in the most appropriate regional category: 385#, 350, 499#.
Electives to complete 18 hours,
Minimum 2.0 average in history courses.

HISTORY COURSES (HIST)

103 World Civilizations I: World History from the Origins to c. 1000 (3)
This course will introduce students to human achievements of civilizations and cultures in Eurasia, Africa, and the Americas from the origins of civilization to about the year 1000. Rather than taking a strictly chronological approach, it will focus more on the emerging cultures or traditions as expressions of their time and place. The creation of myths, gods and goddesses, Hellenism, Confucianism, Hinduism, Buddhism, Judaism, Latin Christianity, and Islam will be examined as value systems that gave meaning and organization to human life, reflected in political, social, technological, and artistic achievements. It will also show that these traditions constrained human alternatives, providing a kind of cultural hegemony within cultures, and that these traditions remain important in our modern world. Pre- or Corequisite: English 121.

104 World Civilizations II: World History from c. 1000 to 1800 (3)
This course will show how rising wealth and expanding material culture in Southeast China and Northwestern Europe, and the Eurasian impact of the Mongols led to a dynamic global interaction. The demand for commodities stimulated exploration, trade, and imperialism. The course will examine feudalism in Western Europe and Japan, the great imperial states of Eurasia, Africa, and the Americas, and colonialism in Africa, Asia, and the Americas, as well as the rise of the modern state and capitalism. It will show how global cultures mutually interacted, traditions changed and constrained, and what social, cultural, artistic, and intellectual changes occurred. Pre or Corequisite: English 121. Formerly History 101.

105 World Civilizations III: World History from c. 1800 to the Present (3)
A chronological study of how world cultures respond to industrialization and the impact this process had on the world outside of Northwestern Europe, showing the origins of modern economic inequality and the “great division” of the world into rich and poor regions. It will consider the spread of the nation-state idea, the rise of modern science, the impact of a global economy, and the advent of mass destruction in the World Wars. Ethnicity and nationalism, migration, the changing role of women, mass culture, and international problems will be considered. The tension between traditional values and materialism, technology and environmental problems, and the search for both continuity and change are also topics. Pre or Corequisite: English 121. Formerly History 102.

199r Special Projects (1-4)
Individual or group projects. Maximum credit 4 hours.

203, 204 United States History (3, 3)
A survey of American History from the age of discovery to the present, with special attention to the peoples, ideas, and cultures that created the United States. Pre- or Corequisite: English 121.

221 Science, Technology, and Society in the Industrial Age (3)
An historical examination of the impact of scientific and technological change in Western society since the advent of the Industrial Revolution.

301 Seminars in History (3)
A seminar primarily intended for junior majors in history or education - social studies with a history concentration. Focusing on specific topics in American, European, or non-Western history, the course introduces students to historiographical debate, analysis of historical evidence, and current historical methodologies. Prerequisite: 12 hours in history or approval of the instructor.

311, 312 Medieval Europe (3, 3)
Europe from the fall of the Roman Empire to the Italian Renaissance; the first semester emphasizing the formation of medieval institutions to c. 1200; the second semester stressing the shattering of the medieval synthesis.

313 The Age of the Renaissance (3)
Economic, social, artistic, and political developments, 1300-1500; Italian Humanism; Christian Humanism; and fermentation in the Church.

314 The Age of the Reformation (3)
Religious, political, social, and economic factors involved in the Protestant and Catholic Reformations in the 16th century.

315 Early Modern Europe, 1600-1750 (3)
Religious, political, economic, and social development in this period of contradictions and intellectual ferment; Puritans, counter-Reformation; Constitutionalism, Absolutism; Scientific Revolution, the Bourgeois in the arts.

317 The Era of the French Revolution and Napoleon (3)
Developments leading to the French Revolution and the fall of the monarchy, the noble resurgence and the phases of the revolution; accomplishments and failures of the revolution; Napoleon Bonaparte as heir to the Bourbons and the Enlightenment and Revolution, and as a social engineer.

318 Europe in the Nineteenth Century (3)
Europe from the creation of the Napoleonic Empire to the outbreak of World War I; the development and failure of the Congress System; the operation of the balance of power and international relations; national consolidation and domestic political developments, the rise of imperialism, and the spread of industrial society.

319 Europe in the Twentieth Century (3)
Political, economic, and social development of the European states from the outbreak of World War I to the present. Special attention given to the problems of world wars and reconstruction, with development of conflicting ideologies, the impact of worldwide depression, the decline of European colonial systems, and the diplomacy of the Cold War.

320 Under Hitler’s Shadow: Europe 1929-1945 (3)
A comparative approach to the study of Europe from the outbreak of the economic depression in 1929 to the end of the second World War in 1945. Beginning
with the rise of the National Socialist party, it examines political, cultural, and
economic affairs in other areas of Europe, and the consequences of Hitler's
increasingly brawny foreign policy. The course also focuses on WWII in Europe,
focusing on the subjugation of the continent to German control, the Holocaust,
resistance movements, and ultimate defeat of Hitler's Germany.

323, 324 History of England; History of Modern Britain (3, 3)
The history of Britain from the earliest times to the present; the first semester
emphasizing constitutional and institutional developments to 1660; the second
semester, the growth of political democracy, the British Empire, economic and
social change.

327 Russian History since 1800 (3)
Characteristics of Tsarist society in the 19th century, attempts to reform the
nation, the revolutions of 1905 and 1917, and the Soviet system.

328 Viking History (3)
An examination of the political, military, social, technological, mythic, and cul-
tural aspects of the Scandinavians' expansion from Russia to Finland from 793 to
1100.

331 Colonial and Revolutionary America (3)
The colonial period of American history from the earliest settlements in North
America to independence and the U.S. Constitution; the European background
to colonization, colonial settlements, the development of colonial social, political,
and economic institutions, and the causes, course, and consequences of the
American Revolution.

332 Early National Period, 1789-1840 (3)
The Constitution and presidencies of George Washington and John Adams; the
War of 1812 and the emergence of nationalism; rise of the frontier; Jeffersonian
and Jacksonian democracy, emphasis on political, social, and economic develop-
ments that forged the new nation.

335 The Civil War and Reconstruction (3)
The Old South and the causes of the Civil War; the leaders; the chief political,
military, and economic developments from the Compromise of 1850 to the end of
Reconstruction.

336 The Gilded Age (3)
The United States from the end of the Civil War to 1900.

337 Progressive America: From TR to FDR (3)
An examination of the political, economic, cultural, and diplomatic forces that
shaped America in the early 20th century; topics include progressivism, World War
I, the roaring twenties, and the Great Depression.

338 Contemporary America Since 1945 (3)
An examination of political, economic, and social aspects of the recent past,
including post-World War II readjustments, the Cold War, the Kennedy years, the
Vietnam trauma, and the downfall of the "imperial presidency."

341 A History of the South (3)
The role of the South in the formation of the nation. Interpretations of the institu-
tions and developments that made the South unique.

343 History of Tennessee (3)
A study of the political, economic, social, and cultural development of the state
from the days of the Indians to the present.

346 Afro-American History (3)
A historical survey of Black Americans with some attention to African back-
grounds; emphasis on the reaction of blacks to their experience in the New
World.

350 War Through the Ages (3)
The evolution of war as an instrument of national policy and the effects of wars
on the world balance of power. Treatment will be episodic, concentrating on the
Persian and Peloponnesian Wars, the Punic Wars, the Hundred Years War, the
Seven Years War, the Wars of the American and Spanish Revolutions and
Napoleon, and the World Wars of the 20th century.

351 History of Classical Greece (3)
Greek social and political history from the period of the Persian Wars to the
Achaean War, covering Classical Athens and Sparta, the Peloponnesian War, and
the rise of Macedon and Alexander the Great, with an emphasis on the art, phi-
losophy, and religion of Greece's polis-based society during the 5th and 4th cen-
turies BC. May be registered as Classics 351. Credit not allowed in both History and
Classics 351.

352 History of the Roman Republic (3)
Roman social and political history from the 6th century to 44 BC covering,
through an analysis of their art, philosophy, and literature, the Romans' origins,
their city's development and growth into an imperial power, as well as the key fig-
ures involved in the break-up of the Republic. May be registered as Classics 352.
Credit not allowed in both History and Classics 352.

353 History of the Roman Empire (3)
Roman social and political history from 44 BC to AD 491, covering through an
analysis of their art, philosophy, and literature the rise of bureaucratic govern-
ment, the Roman economy, life under the Julio-Claudians, Flavians, Antonines,
Severans, Diocletian, and Constantine, Rome's interaction with barbarians and
Christians, and the fall of the Western empire. May be registered as Classics 353.
Credit not allowed in both History and Classics 353.

364 Traditional China: History and Culture (3)
A survey of Chinese history and culture prior to the impact of the West. Course
readings provide a basic political and chronological orientation, but emphasis
placed on literary and philosophical writings in translation, and on studies of the
social structure of traditional Chinese society.

365 Traditional Japan: History and Culture (3)
A survey of traditional Japanese history and culture prior to the impact of the
West. Course readings provide a basic political and chronological orientation, but
emphasis placed on literary, cultural, and artistic achievements, and on studies of
the social structure of traditional Japanese society.

367 Modern Japan (3)
A survey of Japan since Perry and the Meiji Restoration. Topics will include Meiji
industrialization, foreign policy and Japanese imperialism, economic and social
change, the rise of militarism, WWII, occupation, postwar economic growth,
political and cultural change, and Japan's role as an economic superpower.

368 East Asia in Modern Times (3)
East Asia since the mid-19th century and the effects of the West; the Opium War,
modernization, the Chinese Revolution of 1911, Japanese expansion, Pearl
Harbor and Hiroshima, Mao Tse-tung and the Chinese Communists.

370 The Middle East (3)
Background and setting of the modern Middle East; factors influencing Great
Power strategy; Islam; rise and decline of the Ottoman Empire; imperialism and
the breakup of the Ottoman Empire.

371 History of Subsaharan Africa to 1880 (3)
Geography and people of Africa; origin of traditional African societies; major
Sudanic empires; Islamic impact on Africa; oral traditions; slave trade and its con-
sequences; African artistic, musical, architectural, and religious traditions; Africa
and the age of discovery; Swahili city states; African commerce and technology;
major central and southern African political developments.

372 History of Subsaharan Africa, 1880-Present (3)
Partition of Africa; ideological underpinnings of imperialism; growth of colonial
systems and the African reaction; colonial devolution and independence;
apartheid; the European colonial legacy; response of traditional African social and
political structures to technological modernity; nature of modern African cultural
trends and developments.

375 Colonial Latin America (3)
Survey of colonial Latin America beginning with contact with Spain in the 16th
century until the movements for Latin America Independence in the first quarter of
the nineteenth-century.

376 Latin America from Independence to the Present (3)
This course is designed as a survey of Latin American history from the movements
for independence from Spain and Portugal beginning in the first quarter of the
nineteenth century until the present. Specific topics will include the colonial heritage of Latin America, the roots of independence, the growth of nationhood, nineteenth- and twentieth-century economic development, caudillismo, and twentieth-century politics (particularly instances of dictatorship).

385r National History (3)
A course dealing with a selected national history. Prerequisites: by special arrangement with the department head and instructor; specific prerequisites to be given when the topic is announced.

401 Senior Tutorial (3)
Directed readings, special study, and investigation. Primarily for senior majors in history and others interested in an intensive study of historical problems.

410 Classical Women (3)
A survey of the history of women and their representation from the heroic age and Homer to the Roman Empire of the 2nd century AD. Evidence from legal texts and literature along with epigraphic, numismatic and artistic depictions of women will be considered from several key periods, including 5th century Athens and Rome during the late Republic and early Empire. May be registered as Classics 410 or Women's Studies 410. Credit allowed in only one of the three courses.

411, 412 American Intellectual and Social History (3,3)
Survey and analysis of American assumptions, social attitudes, and institutions, and their effects on American life. First semester coverage extends to 1865.

415, 416 Economic History of the United States (3,3)
First half from colonial period to 1875. Origins, development, and expansion of the American economy with emphasis on roles of government and business. Relationship between economic growth and social development designed to provide perspective on problems of modern society. May be registered as Economics 415, 416.

419 The City in American History (3)
Role of the city in American history from colonial times to the present; emphasis on emergence of the 20th-century metropolis; city planning, problems of modern mass living, and other topics peculiar to urban history also considered.

422 European Women's History to 1800 (3)
A survey of the history of European women in the medieval and early modern eras. Topics covered will include pre-modern ideas about gender and women; women's role in and relationship to religion; women's work; women's position within the household; the effect of class, marital status, and urban vs. rural residence on women; the emergence of women's rights; and the effect of historical changes such as the Reformation and capitalism on the condition of women. May be registered as Women's Studies 422. Credit not allowed in both History 422 and Women's Studies 422.

423 African Americans in Popular Culture (3)
Presentation and inclusion of African Americans in mainstream (Anglo-American) popular culture from c1800 to present day. Emphasis on social purpose of racial stereotyping and its importance in transmitting attitudes and social values; and critical evaluation of progression of African Americans into mainstream culture.

424 African Americans Women's History (3)
Survey concentrating on the central themes in African American Women's history. Course includes such topics as gender roles in Africa, the slave experience, feminism, and popular culture. May be registered as Women's Studies 424. Credit not allowed in both History 424 and Women's Studies 424.

490 Internship in History (1-3)
Designed to provide practical experience with the materials and problems encountered by history professionals outside the traditional academic setting. Placements will be arranged on an individual basis. Prerequisites: junior standing, B average in history courses, and approval of instructor.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

Interdisciplinary Studies

Professor Herbert Burhenn, Head

The Department of Interdisciplinary Studies coordinates a number of programs leading to baccalaureate degrees as well as several other non-degree programs. Because of their interdisciplinary nature, these programs draw upon the varied resources of a number of departments.

Degree program: Humanities (B.A.). Concentrations in International Studies and in Women’s Studies are also available.

Humanities

Assistant Professor Bryan Hampton, Coordinator

The humanities generally comprise languages and literature, philosophy, religion, history, and the fine arts. With the approval of the Faculty Board for the Humanities, each major designs a program of study by selecting appropriate courses from those disciplines and from the humanities courses listed below.

Interdisciplinary Studies

Prerequisites: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

Geology

See Physics, Geology and Astronomy.

1440 - Humanities: Humanities (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: English 121, 122 (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.
112 :: Interdisciplinary Studies

Major and Related Courses
45 hours approved program of studies related to the culture of a time and place (America, Europe, or the non-Western world) or to a major idea or theme lending itself to analysis through the disciplines of the humanities. Focus on human experience as revealed in the religious, intellectual, artistic, linguistic, and social actions which characterize the chosen area of study. No more than 15 hours at 100-200 level and no more than 18 hours in any one discipline. Maximum of 15 of the 45 hours may be awarded by the Faculty Board for the Humanities for independent study on campus or for knowledge gained in travel or in work.

2.0 average in all courses within approved program of study
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements

1441 - Humanities: International Studies (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: English 121, 122 (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)
Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses
45 hours approved program of studies related to the culture of a time and place (excluding America) or to a major idea or theme lending itself to analysis through the disciplines of the humanities. Focus on human experience as revealed in the religious, intellectual, artistic, linguistic, and social actions which characterize the chosen area of study. No more than 15 hours at 100-200 level and no more than 18 hours in any one discipline. Maximum of 15 of the 45 hours may be awarded by the Faculty Board for the Humanities for independent study on campus or for knowledge gained in travel or in work.

2.0 average in all courses within approved program of study
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements

1442 - Humanities: Women’s Studies (B.A.)

Professor Marcia Noe, Coordinator

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: English 121, 122 (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)
Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses
30 hours approved Women’s Studies courses including Women’s Studies 200; 481 or 483r; 496; and 21 hours distributed among approved Women’s Studies Humanities and Women’s Studies Social Science courses with at least one course from each category.

Women’s Studies Humanities courses include: WSTU 301, 302, 331, 366, 422, 424, 445r, 455r, 480, 481, 482 and 483.


2.0 average in all Women’s Studies (WSTU) courses
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements

4577 - HUMANITIES MINOR

24 hours of course work selected from at least three different departments related to the culture of a time and place (excluding America) or to a major idea or theme lending itself to analysis through the disciplines of the humanities; 15 of those hours must be at the 300-400 level. After 9 completed hours, and in consultation with the Coordinator, minors must develop an approved Program of Study, as well as a Program Rationale that delineates the student’s interests and develops a unifying thematic or theoretical line of inquiry that focuses on human experience as revealed in the religious, intellectual, artistic, linguistic, and social actions which characterize the chosen area of study. A maximum 6 hours may be taken as independent study and/or study abroad.

Minimum 2.0 average required in all courses attempted for the minor.

4680 - WOMEN’S STUDIES MINOR

18 hours required with at least 8 hours at the 300-400 level.

Women’s Studies 200 and 15 hours Women’s Studies courses listed below.

However, no more than two courses (6 hours) in a single academic department can be applied toward the minor.

Minimum 2.0 average required in all courses attempted for the minor.

HUMANITIES COURSES (HUM)
199r Special Projects (1-4)
Individual and group studies. On demand.

219 African-American Literature (3)
See English 219.

230 Contemporary Francophone African Cinema (3)
An overview of recent African films from former French colonies with attention to issues of identity, heritage, and former colonial status. Prerequisite: English 121 or 122. May be registered as Modern Languages 230 or Theatre and Speech 230. No foreign language credit. Credit allowed in only one of the three courses.

257 The Romantic Experience (3)
See English 257.

300 The Vietnam Conflict: Then and Now (3)
An introduction to the Vietnam War, its development, its meaning, and its impact on the social, political, economic, and cultural identities of the U.S. and Vietnam.

311 Music of the World (3)
See Music 311.

335 African-American Slave Narrative (3)
See English 335.
336 The Development of Medieval Germanic Epic (3)
See English 336.

385r International Fiction (3)
A study of works of fiction by writers from the international community, exclusive of works from and about the British Isles, Canada and the United States. Content may vary. Prerequisite: English 122.

397 Music, the Arts, and Ideas (3)
See Music 397.

483 Feminist Theory (3)
See Philosophy 483.

490 Senior Educational Experience (3)
Thesis; oral and written presentation of progress required. The complete project will be presented for approval to the Faculty Board for the Humanities in the student’s final semester. On demand. Prerequisite: senior standing, final semester. May not be taken concurrently with 497r.

497r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of the coordinator and the department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of the coordinator and the department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of the coordinator and the department head.

WOMEN’S STUDIES COURSES (WSTU)

200 Introduction to Women’s Studies (3)
An examination of human experience from a feminist perspective. An exploration of the ways in which women have been defined and have defined themselves. A multi-disciplinary teaching context with focus on women’s self identity, women’s identity in families, and women’s identity in society. Prerequisite: English 121.

202 Women’s Issues in South Asia (3)
A survey of contemporary issues for women in South Asia. On demand.

222 Women’s Health Issues (3)
A review of current literature and discussion of issues affecting contemporary women's health. The course will introduce the biological, psychological, social, economic, and cultural factors which affect the health of women in Western society. Students will be challenged to examine their attitudes on controversial issues such as birth control, childbirth alternatives, abortion, women’s self image, and aspects of aging. On demand. Prerequisite: English 122 or its equivalent. Open to non-majors. May be registered as Nursing 222. Credit not allowed in both Nursing 222 and Women’s Studies 222.

295 Violence Against Women (3)
Examines a variety of forms of violence against women in the United States including domestic violence, sexual assault, sexual harassment and pornography. Explores how violence against women has been minimized in society and how the criminal justice system has rarely developed effective ways to address these types of crimes. May be registered as Criminal Justice 295. Credit not allowed in both Criminal Justice 295 and Women’s Studies 295.

301 French Women Writers in Translation (3)
Contributions of French women writers to the social, economic and political institutions of French culture. Readings from literary selections in several genres. Topics studied are gender roles, systems of authority, masculine/feminine representations of reality, and the concept of “feminine” writing. On demand. Prerequisite: English 121 or 122. No foreign language credit. May be registered as Modern Languages (MLNG) 301. Credit not allowed in both Modern Languages 301 and Women’s Studies 301.

302 Latin American Women Writers in Translation (3)
Contributions of Latin American women writers to the social, economic, and political institutions of Latin American culture. Readings from literary selections in several genres. Topics will include gender roles, systems of authority, masculine/feminine representations of reality, and the concept of “feminine” writing. On demand. Prerequisite: English 121 or 122. No foreign language credit. May be registered as Modern Languages 302. Credit not allowed in both Modern Languages 302 and Women’s Studies 302.

304 Gender in the Workplace (3)
The impact of gender in the workplace. A close study of cultural factors as they pertain to modern attitudes, beliefs, and practices concerning working men and women. Prerequisite: English 122. May be registered as PANM 304. Credit not allowed in both Women’s Studies 304 and PANM 304.

305 Sex and Gender (3)
Evolutionary and cross-cultural analysis of formation of sex and gender in human societies, with special focus on the relative status of women, and the development of masculine and feminine differences in communication and activities. Prerequisite: Anthropology 152 or 207 or 205 or 210, or approval of instructor. May be registered as Anthropology 305. Credit not allowed in both Anthropology 305 and Women’s Studies 305.

307 Gender and Society (3)
Analysis of how ideas about gender are socially constructed and the importance of women-centered theories on this approach; the interplay of gender and various social structures including education, religion, politics, family, health, work and sexuality. Prerequisite: 3 hours Sociology or approval of instructor. May be registered as Sociology 307. Credit not allowed in both Sociology 307 and Women’s Studies 307.

324 Race, Gender and the Media (3)
Examines U.S. mass media construction of race, ethnicity, gender, and sexuality within an historical context and investigates the role of women and minority groups in U.S. media industries. On demand. Lecture 3 hours. Prerequisite: junior standing or approval of instructor. May be registered as Women's Studies 324. Credit not allowed in both Communication 324 and Women's Studies 324.

331 American Women Writers (3)
A survey of American women writers of the 20th century. On demand. Prerequisite: English 122. May be registered as English 331. Credit not allowed in both English 331 and Women's Studies 331.

336 Women in Politics (3)
An examination of the role and status of women in the American political system. Special emphasis given to the impact of selected public policies upon women. On demand. May be registered as Political Science 336. Credit not allowed in both Political Science 336 and Women's Studies 336.

366 Goddess Traditions (3)
A cross-cultural survey of major goddess traditions of wide geographic distribution, this course addresses implications of what it means to talk about deities using female terminologies and associations. The seminar format involves reading, discussion, writing, and original research. May be registered as Religion 366. Credit not allowed in both Religion 366 and Women’s Studies 366.

410 Classical Women (3)
A survey of the history of women and their representation from the heroic age and Homer to the Roman Empire of the 2nd century AD. Evidence from legal texts and literature along with epigraphic, numismatic and artistic depictions of women will be considered from several key periods, including 5th century Athens and Rome during the late Republic and early Empire. May be registered as Classics 410 or Women’s Studies 410. Credit allowed in only one of the three courses.

417 Women in the Economy (3)
The role of women in the U.S. economy. An economic analysis of women's labor force participation, discrimination against women in the labor market, women's paid and unpaid work, the child care industry, and female poverty. On demand. Prerequisites: 101, 102 or approval of instructor. May be registered as History 417. Credit not allowed in both History 417 and Women's Studies 417.
422 European Women's History to 1800 (3)
A survey of the history of European women in the medieval and early modern eras. Topics covered will include pre-modern ideas about gender and women; women's role in and relationship to religion; women's work; women's position within the household; the effect of class, marital status, and urban vs. rural residence on women; the emergence of women's rights; and the effect of historical changes such as the Reformation and capitalism on the condition of women. May be registered as History 422 and Women's Studies 422.

424 African Americans Women's History (3)
Survey concentrating on the central themes in African American Women's history. Course includes such topics as gender roles in Africa, the slave experience, feminism, and popular culture. May be registered as History 422 and Women's Studies 424.

425 Gender, Crime and Criminal Justice (3)
This course is intended to provide an overview of women's involvement in the criminal justice system as offenders, victims and professionals. Considerable attention will be given to women as victims of crime, the social system and the criminal justice process. Prerequisite: Criminal Justice 110. May be registered as Criminal Justice 425.

434 Politics of Child Care (3)
An examination of child care policy in the United States and its implications for public policy making in general. May be registered as Political Science 434. Credit not allowed in both Political Science 434 and Women's Studies 434.

445r Major American Figures (3)
A reading course in the works of a major American writer or writers. Writers to be studied will be specified in the schedule of classes. On demand. Maximum credit 6 hours for the degree. May be registered as English 445r only when the content focuses on female authors.

451 Psychology of Women (3)
Analysis of empirical data and theoretical viewpoints concerning the psychological development of women. Psychological effects of sex roles, achievement motivation, and abilities of women; models of socialization practices, personality development, and stages of adjustment. Fall semester. Prerequisite: 6 hours of psychology and junior standing. May be registered as Psychology 451. Credit not allowed in both Psychology 451 and Women's Studies 451.

455r Topics in Women's Studies (1-4)
Specific topics, themes and subjects related to women's studies. On demand. Prerequisite: English 121.

4615 - Latin American Studies

470 Theatre and Feminism (3)
Readings, discussion and writing about a wide variety of plays by modern feminist playwrights. On demand. Prerequisite: English 121. May be registered as English 470 or Theatre and Speech 480. Credit allowed in only one of the three courses.

481 Feminist Literary Criticism (3)
The history, theory and practice of feminist literary criticism studied in cultural context. Prerequisite: English 121. Formerly WSTU 310.

482 Women's Rhetoric (3)
A theoretical, historical, and, primarily, rhetorical examination of women's discourse through the study of speeches, essays, and other rhetorical artifacts. Special attention will be given to the ways women have used traditional rhetorical strategies and how they have subverted this tradition and/or brought strategies from private life to bear on public discourses. On demand. Prerequisites: English 122 and 202, or approval of instructor. May be registered as English 482. Credit not allowed in both English 482 and Women's Studies 482.

483 Feminist Theory (3)
A history of feminist theory from the eighteenth century to the present. Extensive reading, papers. May be registered as Humanities 483 or Philosophy 483. Credit allowed in only one of the three courses.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

496 Senior Seminar (3)
Senior seminar for women's studies majors that comprises directed readings, presentations, and discussions that will inform a supervised research paper or a service learning project appropriate to the student's area of interest and experience. Prerequisite: senior standing and approval of coordinator.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Interdisciplinary Seminars (1-4)
Specific topics, themes, and subjects for which the interdisciplinary approach is useful. On demand.

INTERDISCIPLINARY STUDIES MINORS

4518 - Asian Studies
Bryan Hampton, Coordinator
18 hours selected from the following courses: Anthropology 333; English 233, 333r; Geography 405; History 208, 364, 365, 368, 369; Humanities 300. Not more than 6 hours may count toward both the major and this minor. Minimum 2.0 average required in all courses for the minor.

4522 - Africana Studies
Vic Bumphus, Coordinator
18 hours with a 6-hour core consisting of at least one course in Minority Studies (Criminal Justice 317; Political Science 322; Psychology 242; Sociology 305, 345), and at least one course in African Studies (Anthropology 332; English 316; History 371, 372; University Honors 219). The remaining 12 hours may be taken from any of the above courses, or from the following: Communication 324; English 219, 335; History 346, 375, 376, 417, 423; Music 317, 320. Minimum 2.0 average required in courses attempted for the minor.

4595 - International Studies
Bryan Hampton, Coordinator
18 hours including Political Science 102 or History 105, French or Spanish or German 212; plus 12 hours of course work selected from International Studies approved courses listed below. Courses must be chosen from outside the student's major, must be distributed over at least two different academic disciplines, and must include at least 8 hours at the 300-400 level. First year foreign language courses, as well as 213, 214, cannot be applied toward the minor. Corequisites: Initial three semesters of a modern foreign language related to the approved program of study, excluding 213, 214 foreign language courses. Minimum 2.0 average required in all courses attempted for the minor.

International Studies Approved Course list: Art 431, 432; Anthropology 208, 307, 311, 332, 333, 350, 440; Economics 404, 426, 444, 453; English 233, 333r, 431, 443r; French 323, 331, 332; Environmental Science 250; Geography 103, 104, 250, 305, 409; History 208, 318, 319, 324, 327, 364, 365, 367, 368, 370, 372, 385r; Humanities 300, 311, 385r, 499r; Music 311, Religion 211, 213, 313, 318, 362, 417; Political Science 242, 244, 343, 345, 346, 441r, 442r; Sociology 310, 365, 367; Spanish 323, 325, 331, 332; University Studies 202, 301; Modern Languages 100, 110, 120, 201, 301, 310, 320, 330; Business Accounting 481; Business Finance 482; Business Management 438, 439, 483; Business Marketing 318, 484.

4615 - Latin American Studies
18 hours including a 12-hour core consisting of: History 375 or 376, Geography 304, Anthropology 229, and Political Science 246. The remaining 6 hours to be selected from: Anthropology 228; History 375, 376 (excluding the one taken to satisfy core requirements); Modern Languages 302, 320; Political
Science 344; and any Special Topics courses with a focus on Latin America offered by any UTC department, subject to approval of the Latin American Studies Minor Advisory Council.

Corequisites: Proficiency in Spanish through the second college year, excluding Spanish 213 and 214, and a Study Abroad experience in a Latin American country for a minimum of six (6) weeks.

Minimum 2.0 average required in all courses attempted for the minor.

University Studies

Professor Herbert Burhenn, Head

University Studies offers a variety of interdisciplinary courses and seminars which may be taken for elective credit or, when approved, may satisfy certain major or general education requirements.

UNIVERSITY STUDIES COURSES (USTU)

100 Principles of Effective Study

(3 hours institutional credit)
The study and development of reading and study skills that are required for college level study. Every semester. Credit not applicable toward any degree. Prerequisite: approval of the instructor.

101 The Freshman Seminar (3)
An introduction to the nature of university education and a general orientation to the functions and resources of the University. Designed to help freshmen adjust to the University, to develop a better understanding of the learning process, and to acquire basic academic survival skills, and to enrich their appreciation for the University's commitment to development of the intellect. Elective available to all students with fewer than 30 hours. Recommended during initial semester for students who enter the University with fewer than 15 hours. Offered Fall and Spring semesters.

125 First Year Studies: The UTC Experience (1)
An introduction to the academic community including the nature and purpose of a college education, expectations for academic success, academic resources and opportunities, learning beyond the classroom, and special emphasis on academic and career planning. Elective available to all students with fewer than 30 earned hours. Recommended during the initial semester for students who enter UTC with fewer that 15 earned hours. A, B, C, No Credit grading. Credit not allowed in both USTU 125 and USTU 101.

199r Interdisciplinary Seminars (1-4)
Specific topics, themes, and subjects for which the interdisciplinary approach is especially useful. On demand.

201 The Disability Experience (3)
An introduction to the spectrum of disabilities and the impact of living with those disabilities. Perceptions about people with disabilities are examined as well as the accommodation process, and challenges and opportunities available. Focus is on contemporary theories of disability studies and current trends that impact the daily lives of people living with disabilities.

210 Death and Life in Literature (3)
The study of themes of death and dying in imaginative literature, with emphasis on the correlation between fictional representations of death and of life, its contents and values; and on the connection between metaphors of death and approaches to textual interpretation. Primary texts include poetry, short stories, essays, novels, and plays. On demand.

225 Education in East Asia (3)
A systemic study of education in three developed countries (Japan, South Korea, and Singapore) and a comparison of the influence of educational philosophies upon institutions of that region and the U.S.

311 Science Concepts and Perspectives (3)
Emphasis on understanding science from a personal and social perspective. Overall goal to develop values, attitudes, and skills through a study of science topics organized around themes rather than disciplines. Follows the recommendations of the National Research Council's National Science Education Standards. Prerequisites: Two laboratory science courses. Corequisite: Education 312.

320 Social Studies Topics, Concepts and Perspectives (3)
An examination of concepts, theories and principles of history, sociology, anthropology, geography, political science, and economics in curricula typically developed for children age 6-14. Emphasis on diverse presentation. Prerequisite: Education 306. Corequisite: Education 311.

330 Arts Integration (3)
Designed for pre-service education majors as an introduction to the philosophy and practice of arts integration. This course will provide students with basic knowledge of educational drama, dance, music and visual art, clear reasons for integration, specific integration principles applicable across the curriculum, and ongoing opportunities to develop, observe, lead and participate in arts integration instruction in elementary classrooms. Prerequisites: Education 306, 323 or PDS I, and two courses from Art 301, Music 111 and Theatre and Speech 115.

340 Concepts of Language Literacy: Acquisition, Development, and Usage (3)
Examines the theoretical framework underlying the development of language and the communication processes. Designed to build an understanding of the concepts and skills of language development with an emphasis on facilitating clear thinking and effective communication in children of differing abilities and cultural backgrounds. Emphasis placed on listening, speaking, writing, and reading and on synthesis of the literary elements acquired from college course work. Prerequisites: (for education majors only) Education 321 or 323 or equivalent, and Early Childhood 241 or 242 or equivalent. Corequisite: Education 313.

401 Laboratory Procedures and Safety (1)
Develop science laboratory and field teaching competencies appropriate for the pre-service secondary science teacher with emphasis on the content of the respective teaching major. Spring Semester. Prerequisites: Education 306, 323, English 228; Corequisite: Education 454.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Interdisciplinary Seminars (1-4)
Specific topics, themes, and subjects for which the interdisciplinary approach is useful. On demand.

Legal Assistant Studies

See Criminal Justice.

Mathematics

Professor John Graef, Head

The Department of Mathematics offers two degree programs, the B.A. and the B.S. in Applied Mathematics.

The B.A. is the traditional liberal arts degree with a major in mathematics.

The B.S. in Applied Mathematics is a degree program designed to examine the growing influence of mathematics in business and industrial practices. The student must select a concentration in one of the following two areas: actuarial science or general mathematics.

Students who plan to teach at the secondary school level must meet state licensure requirements. These students need to consult with advisors in the College of Health, Education and Professional Studies and the Department of Mathematics. Through careful course selection, such students should be able to
major in both Secondary Mathematics and Applied Mathematics: General.

In addition to its own degree programs, the Department provides extensive support for other programs requiring mathematics courses and for the University’s General Education requirements. It also offers a minor in mathematics.

All entering students must take the Mathematics Placement Test with the exception of those satisfying at least one of the following conditions: 1) transferring an appropriate college level mathematics course, 2) receiving advanced placement credit in mathematics, or 3) earning a Math ACT score of 24 or greater (Math SAT score 560 or greater). A student with a Math ACT score of 24 or greater (Math SAT 560 or greater) may take the Mathematics Placement Test without jeopardy in order to become eligible for more courses. For example, a student with an ACT Math score of 24 or 25 who wishes to take Math 136, Math 145 or Math 151 should take the Mathematics Placement Test. The UTC Department of Mathematics uses the ACT and placement test scores both to assess the student’s pre-college preparation and to determine whether prerequisites for certain of the 100 and 200 level courses are met. Test schedules are available online at the Mathematics Department web site.

Applied Mathematics (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course* (3 hours; approved courses listed below will apply)

Statistics: One approved course in statistics at the 300-400 level* (3 hours; approved courses listed below will apply)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours; approved related courses in the actuarial concentration below will apply)

Major and Related Courses

Computer Science 150, English 278, and one course from Theatre and Speech 109, 209, or University Honors 214

Mathematics 151#/152, 161/162, 212, 245, 255, 300, 350

NOTE: Mathematics sequence may begin with 144 and/or 145 rather than 151/152 depending on preparation.

One of the following concentrations:

2065 - General Mathematics

Mathematics 321 or 412; either Mathematics 307 plus 12 additional hours in Mathematics at the 300-400 level OR Mathematics 407 and 408 plus 9 additional hour in Mathematics at the 300-400 level excluding Mathematics 307.

In addition, the student must choose an established minor or design a program of study approved by the Mathematics Department Curriculum Committee consisting of 18 hours of courses in other disciplines, including at least 8 hours at the 300-400 level. A minimum grade point average of 2.0 must be achieved in these courses. Completion of a second major will satisfy this requirement.

2068 - Actuarial Science

Mathematics 407, 408, 412, 465; one of 414; 420 or 424; plus 9 additional hours in Mathematics at the 300-400 level excluding Mathematics 307; Accounting 201, 202; Economics 101, 102, 324, 325; Finance 302, 337. Strongly recommended electives include Mathematics 401, 420 and Economics 460.

2.0 average in all mathematics courses and also in all 300-400 level mathematics courses.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

1570 - Mathematics (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours; approved courses listed below will apply)

Statistics: Mathematics 307* or 408*

Natural Sciences: Physics 230/280*, 231/281*

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Foreign Language: Through second college year in one foreign language.

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses

Computer Science 150, English 278, and one course from Theatre and Speech 109, 209, or University Honors 214

Mathematics 151#/152, 161/162, 212, 245, 255, 300, 311, 321, 350

NOTE: Mathematics sequence may begin with 144 and/or 145 rather than 151/152 depending on preparation.

Mathematics 307# or 408#

Five additional courses at the 300-400 level (excluding 303) including:

At least one course from: 403, 407, 414, 440, 445, 460, 465, 470
At least one course from: 408, 410, 412, 422, 424, 428, 450, 454, 466

Physics 230/280#, 231/281#

Decisions concerning the most appropriate 300-400 level courses for each student should be made in consultation with mathematics advisers, particularly for those students who are seeking teacher certification in mathematics and students who are planning graduate study.

2.0 average in all mathematics courses and also in all 300, 400-level mathematics courses.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

4620 - MATHEMATICS MINOR

Required courses: Mathematics 151/152, 161/162, 212, 245, 255

Elective courses: Three courses totaling at least 9 hours from any 300-400 level mathematics courses

A 2.0 average on the 300-400 level courses as well as on all courses in the minor.

At least two of the 300-400 level courses must be taken at this institution.
145 Precalculus II (3)
This precalculus course is designed primarily for students majoring in Mathematics, the physical sciences, and Engineering who intend to take the calculus course Math 151/152. Topics include solving trigonometric identities, and equations; complex numbers; conic sections; sequences; and other selected topics. Every semester. Prerequisites: UTC Math Placement Level 30 or Mathematics 144 or 131 with minimum grade of C or Math ACT 26 or above. Credit will not be allowed in Mathematics 145 after 151 with a grade of C or better. Students wishing to use Mathematics 131 as a prerequisite must secure the approval of the Mathematics Department Head.

151 Calculus I (3)
The calculus of functions of one real variable for majors in Mathematics, the physical sciences, and Engineering. Precise definitions of limits, derivatives, and integrals including Riemann sums; applications of these concepts and the Fundamental Theorem of Calculus. Every semester. Prerequisites: UTC Math Placement Level 40 or Mathematics 145 with a minimum grade of C or Math ACT 28 or above with the equivalent of at least one semester of high school trigonometry. Corequisite: Mathematics 152.

152 Calculus I Laboratory (1)
Calculator and computer treatment of problems and topics in Math 151 using graphical, numerical, and symbolic methods. Laboratory, 2 hours. Pre- or Corequisite: Mathematics 151.

155 Honors Calculus (4)
Calculus of functions of one variable with applications; historical, biographical, philosophical material. Fall semester. Prerequisite: University Honors Scholar, others by approval of the Mathematics Department Head. Credit not allowed in both Mathematics 151 and 155 or in 136 after 155. May be substituted for Mathematics 151 in meeting all requirements.

161 Calculus II (3)
Additional topics in the calculus of functions of one real variable. Applications of integration, techniques of integration, infinite series, and convergence tests. Every semester. Prerequisite: Mathematics 151 with a minimum grade of C. Corequisite: Mathematics 162.

162 Calculus II Laboratory (1)
Calculator and computer treatment of problems and topics in Math 161 using graphical, numerical, and symbolic methods. Laboratory, 2 hours. Prerequisites: Mathematics 152 with a minimum grade of C. Pre- or Corequisite: Mathematics 160 or 161.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

203 Discrete Mathematics for Computer Science (3)
Designed primarily for students majoring in computer information systems. Topics will include logic, introduction to mathematical induction, sets, relations, counting methods, graph theory and trees. Prerequisites: Mathematics 136 or 151/152 with minimum grades of C; Computer Science 150. Credit not allowed in this course after completion of Mathematics 303 or 403 with a grade of C or better.

210 Introductory Statistics (3)
An introductory course suitable for students in a variety of disciplines. This course will teach students to interpret, develop, and use statistical and probabilistic models of real world phenomena; develop the concepts of uncertainty, probability, and statistical significance; and will indicate how these concepts arose and how they aid our understanding of the universe. Students will learn how to solve practical problems using statistical vocabulary, notation, and appropriate technology. Every semester. Prerequisites: UTC Math Placement Level 20 or Mathematics 106 with minimum grade of C or Math ACT 22 or above. Credit not allowed in 210 after completion of any other General Education statistics course with a grade of C or better.

212 Elementary Linear Algebra (3)
Systems of linear equations, matrix algebra, determinants, geometric vectors, vector spaces, linear transformations, eigenvalues and eigenvectors, inner product spaces. Every semester. Prerequisite: Mathematics 151/152 with minimum grades of C.

215 Mathematics for Elementary and Middle School Teachers I (3)
This is the first course in a two semester sequence designed for elementary, middle school, and special education majors. The purpose is to develop a thorough understanding of the mathematics taught in the schools. Topics include the arithmetic properties and operations for the natural numbers, whole numbers, integers, rational and irrational number systems; elementary number theory including prime and composite numbers, factors and divisibility criteria, the Fundamental Theorem of Arithmetic, greatest common divisors and least common multiples; place values, percents, decimals, and other number systems. Every semester. Prerequisites: UTC Math Placement Level 20 or Mathematics 106 with a grade of C or better or Math ACT 24 or above. Credit not allowed in both Math 214 and Math 215.
Mathematics 216 for Elementary and Middle School Teachers II (3)
This is the second course in a two semester sequence designed for elementary, middle school, and special education majors. The purpose is the continuation of the study of mathematical topics from Math 215 with an emphasis on algebraic notation, sets and functions, basic geometric concepts of measurement, length, area, perimeter, surface area, volume, and the Pythagorean Theorem. Some elementary probability and statistics, including some educational statistics, will be included. Every semester. Prerequisite: Mathematics 214 or 215 with a grade of C or better or Math ACT 26 or above or approval of the Mathematics Department Head. This course will meet General Education Mathematics requirement, but not General Education Statistics requirement.

245 Introduction to Differential and Difference Equations (3)
First order and second order linear differential and difference equations, systems of equations and transform methods. Every semester. Prerequisite: Mathematics 161 with a minimum grade of C. Prerequisite: Mathematics 212 with a minimum grade of C.

255 Multivariable Calculus (3)
Lines, curves, and surfaces; partial derivatives, gradients, divergence and curl; multiple integrals and vector analysis. Every semester. Prerequisites: Mathematics 161 and 212 with minimum grades of C.

256 Multivariable Calculus Laboratory (1)
Calculator and computer treatment of problems and topics in Math 255 using graphical, numerical, and symbolic methods. Spring semester. Laboratory 2 hours. Prerequisite: Mathematics 255.

300 Foundations of Mathematics (3)
Introduction to sets, functions, equivalence relations, ordering relations, logic, methods of proof, and axiomatic theories with topics from combinatorics, graph theory, or abstract algebra. Fall and spring semesters. Prerequisite: Mathematics 161 with a minimum grade of C. This course is a prerequisite for Mathematics 321, 350, 403, 410, 412, 422, 430 and 452. Mathematics majors should enroll in it at the end of the sophomore year or beginning of the junior year.

303 Discrete Structures (3)
Concepts and techniques of several areas of discrete mathematics with emphasis on areas often applied to computer science. Topics will include formal logic, induction, recursion, algorithms, counting methods, languages and grammars, and finite state machines. Fall and spring semesters. Prerequisites: Mathematics 161/162 and Computer Science 130 with minimum grades of C.

307 Applied Statistics (3)
Introduction to probability and statistical methods with applications to various disciplines. A study of some basic statistical distributions, sampling, testing of hypotheses, and estimation problems. Fall and spring semesters. Prerequisite: Mathematics 161 with a minimum grade of C. Credit not allowed in both Mathematics 307 and 407.

321 Introduction to Modern Algebra (3)
Integral domains, rings, fields, groups, elementary number theory, and other selected topics. Prerequisites: Mathematics 212 and 300 with minimum grades of C or approval of the Mathematics Department Head.

350 Fundamental Concepts in Analysis (3)
Classical treatment of the basic concepts of calculus: limits, continuity, differentiation, Riemann integration, sequences and series of numbers and functions. Prerequisites: Mathematics 255 and 300 with minimum grades of C.

401 Mathematics of Interest (3)
Mathematical theory of interest with applications, including accumulated and present value factors, annuities, yield rates, amortization schedules and sinking funds, depreciation, bonds and related securities. Recommended for students planning to take actuarial exams. Prerequisite: Mathematics 161 with a minimum grade of C, or approval of the Mathematics Department Head.

403 Introduction to Graph Theory (3)
An overview of graph theory and its applications including trees, planar graphs and graph invariants such as domination, coloring, and matchings. Prerequisites: Mathematics 300 with a minimum grade of C.

407 Introduction to Probability and Statistics (3)
Introduction to the theory of probability and its applications, counting techniques, sample spaces, random variables and their distributions, mathematical expectation, moment generating functions, binomial, Poisson, and normal distributions, Central Limit Theorem. Prerequisite: Mathematics 255 with a minimum grade of C.

408 Mathematical Statistics (3)
A continuation of Math 407 with an introduction to the theories of point and interval estimation, hypothesis testing, regression and correlation analysis, goodness-of-fit, chi-square, t and F distributions. Prerequisite: Mathematics 407 with a minimum grade of C.

410 Number Theory (3)
Divisibility, primes, congruencies, Fermat's Theorem, number theoretic functions, primitive roots and indices, the quadratic reciprocity law. Prerequisite: Mathematics 300 with a minimum grade of C.

412 Linear Algebra and Matrix Theory (3)
Vector spaces, linear transformations, eigenvalue and similarity transformations, orthogonal and unitary transformations, normal matrices, Jordan form. Prerequisites: Mathematics 212, 300 with a minimum grades of C.

414 Operations Research (Linear) (3)
Introduction to linear programming, duality, transportation and assignment problems, integer programming. Prerequisites: Computer Science 118 or 150, Mathematics 212 with a minimum grade of C, or approval of the Mathematics Department Head.

420 Applied Statistical Methods (3)
Intermediate applied statistical analysis and model building. Covers One and Two Factor Analysis of Variance, Simple and Multiple Regression and Correlation, and Time Series Analysis. This course is recommended for students planning to take actuarial exams. Prerequisite: Mathematics 307 or Engineering 322 with a minimum grade of C, or approval of the Mathematics Department Head.

422 Introduction to Point Set Topology (3)
Introductory set theory, topologies and topological spaces, continuous mappings, compactness, connectedness, separation axioms and metric spaces. Prerequisite: Mathematics 300 with a minimum grade of C.

424 Operations Research (Non-Linear) (3)
Network flows, Markov chains and applications, queuing theory and applications, inventory theory, decision theory, and games. Prerequisites: Computer Science 118 or 150 or equivalent, Mathematics 307 or 407 with minimum grades of C, or approval of the Mathematics Department Head.

428 Packages for Mathematical Computations (3)
The nature of libraries of procedures for solving mathematical problems, including the design parameters, selection of algorithms, problems with reliability and transportation. Several major mathematical packages will be examined in detail, including IMSL, LINPACK, EISPACK, MINPACK. On demand. Prerequisites: Computer Science 118 or approval of the department head; Mathematics 245 and Engineering 225 with minimum grades of C.

430 The Historical Development of Mathematics (3)
Examination of central ideas, major developments, and important issues in mathematics from ancient times to the present. Historical overview of the evolution of the discipline through comparative examination of specific theories and results. Prerequisite: Mathematics 300 with a minimum grade of C.

440 Applied Analysis (3)
Vector analysis through Stokes' Theorem and the Divergence Theorem. Topics in advanced calculus including implicit functions, Jacobians, interchange of limit processes, and uniform convergence of series of functions; introduction to power series solutions of differential equations. Prerequisites: Mathematics 245, 255 with minimum grades of C.

445 Advanced Differential Equations (3)
Systems of differential equations; existence and uniqueness theorems; linear systems; phase plane analysis; stability theory; applications. Prerequisites: Mathematics 245, 255 with minimum grades of C.
446 Partial Differential Equations (3)
Classification and derivation of some elementary partial differential equations arising in applications. Separation of variables, Sturm-Liouville problems and orthogonality, Fourier Series. Diffusion, wave, and Laplace’s equations in various coordinate systems with various boundary and initial conditions. Laplace transform methods and D’Alembert’s solution. First order equations and weak solutions. On demand. Prerequisite: Mathematics 245, 255 with minimum grades of C.

450 Modern Analysis (3)
Differences; inverse and implicit function theorems; functions of bounded variation. Integration and measure; integration on manifolds; Stokes’ and Green’s Theorems; other selected topics. On demand. Prerequisite: Mathematics 350 with a minimum grade of C.

452 Basic Concepts of Geometry (3)
Deficiencies in Euclidean geometry, Euclid’s parallel postulate, introduction to non-Euclidean geometry, consistency and validity of non-Euclidean geometry, incidence geometries, affine geometries, linear, planar, and spatial order properties. Prerequisite: Mathematics 300 with a minimum grade of C, or approval of the Mathematics Department Head.

454 Abstract Algebra (3)
A study of special topics from advanced algebra, various algebraic structures, and the applications of algebra. On demand. Prerequisite: Mathematics 321 or 412 with a minimum grade of C, or approval of the Mathematics Department Head.

460 Techniques of Applied Mathematics (3)
Additional topics in vector calculus; series of orthogonal functions; integral transforms; treatment of some elementary partial differential equations arising in applications. Prerequisites: Mathematics 245, 255 with minimum grades of C.

465 Numerical Analysis I (3)
Numerical solutions of equations in one variable; interpolation and polynomial approximation; numerical differentiation and integration; initial value problems for ordinary differential equations; direct methods for solving systems of linear equations. Prerequisites: Mathematics 212 and 245 with minimum grades of C, and Computer Science 118 or 150, or approval of the Mathematics Department Head.

466 Numerical Analysis II (3)
Iterative techniques for solving systems of linear equations; approximation theory; eigenvalue and eigenvector approximation; boundary value problems for ordinary differential equations; numerical solution to partial differential equations. Prerequisite: Mathematics 465 with a minimum grade of C, or approval of the Math Department Head.

470 Introductory Complex Variables (3)
Complex numbers; differentiation and integration of functions of a complex variable; analytic functions; Cauchy’s Theorem; power series; residues and poles; conformal mapping; contour integration. Prerequisites: Mathematics 245, 255 with minimum grades of C.

475 Research Seminar (1)
Investigation of special topics in mathematics using the directed research technique. On demand. Prerequisite: approval of the Mathematics Department Head. Graded satisfactory/no credit.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Military Science

Reserve Officers Training Corps (ROTC)
Major Benjamin Smith, Head

ROTC Military Science and Leadership Program is a deliberate, continuous, sequential, and progressive process, based on Army values, that develops Soldiers into competent and confident leaders. As the Army’s largest pre-commissioning source, ROTC lays the leadership foundation for thousands of cadets across hundreds of university campuses. ROTC is a leadership development program consisting of three interconnected components: (1) on-campus component, (2) off-campus component, and (3) Leadership Development Program (LDP). By design, the three components dovetail for seamless, progressive, and sequential leader development.

The Military Science Department offers courses in general military subjects which may be applicable to any student regardless of his or her career intentions. The overall objectives are:

• to provide general orientation courses open to all students in the basic course;
• to provide selected students for the advanced course an opportunity to seek a commission in the U.S. Army, the Army Reserve, the National Guard, Nurse Corps or Chaplain Corps;
• in conjunction with other college disciplines, to develop individual character and attributes essential to an officer.

Course Content
The basic course (Military Science I and II) is composed of the first four semesters of military science. No active duty commitment is required of students taking the basic course.

The advanced course (Military Science III and IV) is composed of the last four semesters of military science. It includes a six-week summer camp at an army installation at the end of the junior year. The student successfully completing the advanced course with a grade of C or better will, upon graduation, be commissioned a Second Lieutenant in the U.S. Army.

Freshman and Sophomore Years
The general requirements for admission in the basic course ROTC program are:

a. be physically qualified;
b. be not less than seventeen years of age.

Junior and Senior Years
Continuation Standards
All cadets enrolled in the advanced course of the Army ROTC who seek a commission must:

a. Have either completed the basic course, three (3) years junior ROTC, have the required amount of prior military service or completed the four-week basic summer camp. The basic summer camp is designed specifically to fill the needs of community and junior college graduates and students of four-year colleges who have not taken ROTC during their first two years. By attending the four-week camp, students qualify to enter ROTC directly as a junior simultaneously earning approximately $600. Attendance does not obligate an individual to enter the advanced ROTC program. Applicant must contact
the Military Science Department to process early during the spring semester.

b. Have two academic years of college remaining, either graduate or undergraduate.

c. Be enrolled as a full-time student at UTC or other accredited institution in the Chattanooga area.

d. Maintain a 2.0 cumulative GPA or higher to remain in program.

f. Meet military screening and physical requirements.

Regularly enrolled students who meet the academic prerequisites and do not desire commission may take individual courses as electives with the approval of the department head and their academic advisor.

Uniforms and Pay

Uniforms are not issued to basic course students; textbooks for ROTC are provided. Issue items must be returned at the end of the school year or upon disenrollment from the ROTC program.

Advanced course ROTC students sign a contract with the U.S. Government which requires them to complete the advanced course and accept a commission upon graduation. Students receive $100 each month while enrolled in the advanced course and approximately $500 for attending summer camp plus travel pay to and from summer camp.

For information about Army ROTC scholarships, see the financial aid section of this catalog.

**Military Science Curriculum**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Basic Military Studies</td>
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<tr>
<td>MILS 104 Foundations of Officership</td>
<td>2</td>
</tr>
<tr>
<td>MILS 106 Basic Leadership</td>
<td>2</td>
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<tr>
<td>MILS 108 Army ROTC Fitness Program</td>
<td>1</td>
</tr>
<tr>
<td>MILS 204 Innovative Team Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MILS 206 Foundations of Tactical Leadership</td>
<td>3</td>
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<tr>
<td>MILS 210 Leader's Training Course</td>
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**Advanced Military Studies**

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>MILS 304 Adaptive Team Leadership</td>
<td>4</td>
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<tr>
<td>MILS 306 Leadership in Changing Environments</td>
<td>4</td>
</tr>
<tr>
<td>MILS 308 Military History</td>
<td>3</td>
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<tr>
<td>MILS 404 Leadership and Management</td>
<td>4</td>
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<tr>
<td>MILS 406 Officership</td>
<td>4</td>
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<tr>
<td>MILS 410 National Advanced Leadership Camp</td>
<td>0</td>
</tr>
<tr>
<td>MILS 490 Military Leadership Topics</td>
<td>1</td>
</tr>
</tbody>
</table>

1. On the basis of previous honorable active military service in any branch of the armed services, or attendance at the basic summer camp, participation in the junior ROTC program in secondary schools, a student may be exempt from all or portions of the basic course.

2. With approval of the department head (Professor of Military Science).

**MILITARY SCIENCE COURSES (MILS)**

**104 Foundations of Officership (2)**

Discusses organization and role of the Army. Emphasizes basic life skills pertaining to fitness and communication. Analyzes Army values and expected ethical behavior. Adventure training skills lab introduces land navigation, rifle marksmanship, mountaineering, and optional field-training exercises.

**106 Basic Leadership (2)**

Develops basic skills that underlie effective problem solving. Examines factors that influence leader and group effectiveness. Emphasizes communication skills to include active-listening and feedback techniques. Adventure training skills lab introduces land navigation, rifle marksmanship, mountaineering, and optional field-training exercises.

**108 Army ROTC Fitness Program (1)**

Develops individual muscular strength, muscular endurance, and cardio-respiratory endurance. Classes are divided into groups based on ability and exercises are geared toward personal improvement. Primary evaluation is the Army Physical Fitness Test which consists of pushups, sit-ups and a two-mile run. May be repeated. Maximum 8 hours.

**204 Innovative Team Leadership (3)**

Develops knowledge of self, self-confidence, and individual leadership skills. Concentrates on problem-solving and critical thinking skills. Emphasizes communication skills such as feedback and conflict resolution. Adventure training skills lab introduces land navigation, rifle marksmanship, mountaineering and optional field training exercises.

**206 Foundations of Tactical Leadership (3)**

Focuses on self-development through understanding of self and group processes. Examines leadership through group projects and historical case studies. Adventure training skills lab introduces land navigation, rifle marksmanship, mountaineering and optional field training exercises.

**210 Leader's Training Course (0)**

A 28-day leadership practicum at Fort Knox, Kentucky. Familiarizes students with Army physical fitness, land navigation, rifle marksmanship, and military problem-solving/decision-making.

**304 Adaptive Team Leadership (4)**

Examines the basic skills that underlie effective problem solving. Analyzes the role of Army officers played in the transition of the Army from Vietnam to the 21st century. Introduction on analyzing and planning military operations. Emphasis on small unit tactics with a concentration on squad battle drills. Lab practicum concentrates on competency in land navigation, rifle marksmanship, and small unit operations. Lecture 3 hours, laboratory 1 hour. Prerequisites: Military Science 104, 106, 204 and 206 with grades of C or better and 2.00 cumulative GPA, or approval by the Professor of Military Science.

**306 Leadership in Changing Environments (4)**

Examines responsibilities that foster an ethical command climate. Applies principles of effective writing and oral communication. Builds on previous instruction to further develop leadership competencies. Lab practicum concentrates on preparation for Military Science and Leadership 400 National Advanced Leaders Camp. Emphasis on land navigation, rifle marksmanship, and small unit operations. Prerequisite: Military Science 304, or approval by the Professor of Military Science.

**308 Military History (3)**

Primary emphasis on 21st-century warfare. Examines critical thinking in the study of military history and the relevance of military history to the modern day professional soldier. Provides framework for lifetime study of military history.

**404 Leadership and Management (4)**

Discusses Army staff organization, functions, and processes. Analyzes counseling responsibilities and methods. Examines principles of subordinate motivation and organizational change. Applies leadership and problem-solving principles to complex case studies and simulation. Lecture 3 hours, laboratory 1 hour. Prerequisite: Military Science 304 with a grade of C or better.

**406 Officership (4)**

A capstone course designed to explore topics relevant to second lieutenants entering the Army. Examines common platoon leader actions. Discusses leader responsibilities and actions that foster an ethical command climate. Familiarizes students with Army administrative and logistics management functions. Examines legal aspects of decision-making and leadership. Lecture 3 hours, laboratory 1 hour. Prerequisite: prior approval of the Professor of Military Science.
410 National Advanced Leadership Camp (0)
A 31-day leadership practicum held at Fort Lewis, Washington. Students are evaluated in varied leadership positions, rifle marksmanship, land navigation, field leadership reaction course, and tactical small unit leadership. Prerequisites: Military Science 304 and 306.

490r Military Leadership Topics (3)
Independent studies on the principles and styles of military leadership. Students research and write in-depth profiles of a contemporary or historic military leader. Maximum 4 hours. Prerequisite: approval of instructor.

Typical course of study for ROTC Commission *
Freshman Year: Preparing for Success as an Army Officer
Fall Semester—MILS 104: Foundations of Officership; MILS 108: Army ROTC Fitness Program
Spring Semester—MILS 106: Basic Leadership; MILS 108: Army ROTC Fitness Program

Sophomore Year: The Role of an Officer
Fall Semester—MILS 204: Innovative Team Leadership; MILS 108: Army ROTC Fitness Program
Spring Semester—MILS 206: Foundations of Tactical Leadership; MILS 108: Army ROTC Fitness Program

Junior Year: Leading Small Tactical Units
Fall Semester—MILS 304: Adaptive Team Leadership; MILS 108: Army ROTC Fitness Program
Spring Semester—MILS 306: Leadership in Changing Environments; MILS 108: Army ROTC Fitness Program

Senior Year: Transition to Becoming an Officer
Fall Semester—MILS 406: Leadership and Management; MILS 108: Army ROTC Fitness Program
Spring Semester—MILS 493: Officership; MILS 108: Army ROTC Fitness Program

*Alternate Entry for Admission into the Advance Course:
Leader’s Training Course (LTC) is four weeks of intense classroom and field training held in the summer at Fort Knox, KY. This course is an accelerated version of the two year of leadership development training Cadets receive in the Basic Course. By transforming yourself through this rigorous training, you will qualify for enrollment in Advanced Army ROTC on campus—provided you have two years of college remaining (undergraduate or graduate).

Music

Cadek Department of Music
Associate Professor Lee Harris, Head

The Cadek Department of Music serves the entire University community by offering General Education Fine Arts elective courses, a course in Non-Western Cultures and Civilizations, opportunities for group musical performance, individual lessons, and beginning classes in piano, voice and guitar, as well as majors and minors in Music.

The requirements for entrance to and graduation from the Cadek Department of Music are in accordance with the published regulations of the National Association of Schools of Music and the Tennessee regulations for certification of teachers.

The Cadek Department of Music offers the following degree programs at the undergraduate level: Bachelor of Arts (B.A.) with a major in Music, the Bachelor of Music (B.M.), and the Bachelor of Music (B.M.) in Music Education. The B.M. degree provides three concentrations: instrumental performance, vocal performance, and theory or composition. The B.M. in Music Education provides two different concentrations: instrumental and vocal.

The B.A. degree is offered for students who desire a strong liberal arts background with a major in music. Approximately one third of the four-year B.A. program is in music, and numerous elective hours outside the department permit study in other academic areas.

The B.M. degree is a more concentrated course of study in the major area. Approximately two thirds of the four-year program is in music. The B.M. degree in music education is appropriate for students who plan to teach music in elementary, middle, or high schools. It combines general education with music content and teaching methodology in a highly structured course of study. Students who successfully complete the program are awarded teaching certification upon graduation. All music degree programs represent appropriate preparation for graduate study.

Admission to the Music Program
Freshmen, transfer, and current UTC students intending to change their major to Music must first enroll as Pre-Music majors. They must perform a live audition on their primary applied instrument or voice, and complete either a Music Theory Diagnostic or Proficiency Examination in order to eligible for admission into the Bachelor of Arts degree program in Music or a Bachelor of Music degree program.

The music audition determines both the student’s readiness for college-level applied music instruction and potential for a career in music. Entering students will perform their audition on the spring audition dates or on the Friday before classes begin each semester. Current UTC students may audition on semester-end performance juries. The Music Theory Diagnostic Exam is a placement test indicating whether the student is prepared for college-level music theory. This exam is administered on spring audition dates, at summer Orientations sessions and on the Friday before classes begin in the fall semester. Students transferring to UTC as juniors must take the Sophomore Theory Proficiency Examination and audition for upper-level applied study (300-level or 400-level).

The Music Department will notify students of the results of the audition and diagnostic exam. Students who are successful in both areas will be admitted as music majors and the Records Office will be officially notified. Students who meet with partial success must remain Pre-Music majors. Deficiencies in applied performance must be addressed through appropriate applied study at the 100- or 200-level. They must later re-audition for admission to the major. Any student who does not achieve the required minimum score on the Theory Diagnostic Exam must complete a music fundamentals course with a grade of C or better before they will be admitted as a music major. Students whose performance on the audition and the diagnostic exam indicates no real potential for success in the major will counseled to seek another major.

Requirements
All music majors are required to participate in an ensemble appropriate to the concentration during each semester of residence, for a minimum of eight credit hours (seven for music education majors). For all music majors, a 2.0 minimum grade point average in all music courses is required. For licensure in music education, a 2.5 cumulative average is required with no grade lower than a C; see Music Education (B.M.). A senior recital or other senior educational experience is required of all majors as specified for the music degree program. See the Music Student Handbook for more information on this and other additional requirements of the Music Department.

On the following pages, suggested courses of study are offered for the various music degree programs. Most courses are listed only by course number or referred to generically as Ensemble and Applied Music study. More specific degree plans, broken down by semester, are printed in the Music Student Handbook.

An ensemble is defined as any group of two or more performers. Large ensembles include Chamber Singers, Chattanooga Singers, Choral Union, Concert Band, Marching Band, Master Chorale, University Orchestra, and Opera Workshop. Any other ensemble, including a soloist with accompanist, is considered a small ensemble.
"Applied Music" and "Applied Study" refer to individual lessons in voice or an instrument. An audition is required before registering for any level of applied music study. For information on scheduling an audition, please contact the Music Office at (423) 425-4601. Applied study at the 100-level is appropriate for non-majors and for those who wish to major in music but need remedial study. 100-level applied music may be taken for 1 or 2 credit hours as instructors are available. For 1 credit hour, the student receives a 30-minute individual lesson per week; for 2 credit hours, the lesson is 60 minutes. The latter is subject to instructor approval. 200-level, 300-level, and 400-level applied music study are reserved for music majors, qualified minors and advanced non-majors with instructor's approval. These levels may be registered for 1 - 4 credit hours. For 1 credit hour, the student receives a 30-minute lesson each week. For 2 - 4 credit hours, the lesson is 60 minutes. Please see the Music Student Handbook for further information.

Bachelor of Music Continuation Standards
In order to assure the professional competence of graduates in Bachelor of Music programs, students must demonstrate their mastery of both theoretical and applied aspects of music at the midpoint of their degree programs. Successful completion of these standards is prerequisite to enrollment in upper-division music courses.

Performance (Instrumental and Vocal):
• 2.0 grade point average in all music courses.
• While enrolled in Music 208, pass the Theory Proficiency Exam as prerequisite to upper-division music courses with the following exceptions: 311, 315, 316, 317, 332, 404, 405, 406.
• Audition for admission to 400 level before Division Jury in the semester during which student is registered for his/her sixteenth hour of 200-level study.
• Audition requirements for continuation include 15 minutes of solo repertoire (memorized as required), demonstrating at least two distinct stylistic periods. Students must also demonstrate techniques as mandated by each applied area. See the Undergraduate Music Student Handbook for further details regarding this audition.

Theory and Composition:
• 2.0 GPA in all music courses.
• While enrolled in Music 208, pass the Theory Proficiency Exam as prerequisite to upper-division music courses with the following exceptions: 311, 315, 316, 317, 332, 404, 405, 406.
• Audition on primary instrument for admission to 300 level before applied faculty in semester juries at the end of the fourth semester of 200-level study.
• Audition requirements for continuation include 10 minutes of solo repertoire (memorized as required), demonstrating at least two distinct stylistic periods. Students must also demonstrate techniques as mandated by each applied area. See the Undergraduate Music Student Handbook for further details regarding this audition.
• Written evaluation by theory/composition faculty of aptitude for career in theory/composition submitted to department head and the semester jury panel prior to the audition.

Music Education: Instrumental or Vocal
• For graduation, 2.0 grade point average in music courses and 2.0 average in College of Health, Education and Professional Studies courses. For licensure, 2.5 overall average, 2.5 average at UTC, 2.5 average in education courses with no grade lower than a C, and 2.5 average in content area courses with no grade lower than a C.
• Audition on primary instrument for admission to 300 level before applied faculty in semester juries at the end of the fourth semester of 200-level study.
• Audition requirements for continuation include 10 minutes of solo repertoire (memorized as required), demonstrating at least two distinct stylistic periods. Student must also demonstrate techniques as mandated by each applied area. See the Undergraduate Music Student Handbook for further details regarding this audition.

Theory Proficiency Exam Requirements:
Demonstrate thorough grasp of basic concepts, symbols, and procedures taught in the music theory and ear training sequence. This will include:
• writing and identifying scales, key signatures, modes, intervals, triads, seventh chords, “borrowed” chords;
• correct division of beats/pulses and beaming in various meters;
• the ability to write tonal harmonic progressions in four parts, using good voice leading;
• The ability to recognize and describe with appropriate terminology the elements of musical form in a brief composition or portion thereof;
• The ability to accurately sing at sight a tonal melody, and to accurately perform a rhythmic passage at sight;
• The ability to complete brief melodic and harmonic dictations.

Conditional Provision for Theory Proficiency Exam and Performance Standards
If a student passes the Theory Proficiency Exam but does not meet the performance standards, he or she may enroll in upper-division courses on a provisional basis for one semester. At the end of that semester, the student must re-audition and pass the performance standards in order to continue in the degree program.

Conversely, if a student meets the performance standards but fails the Theory Proficiency Exam, he or she may enroll in upper-level applied study on a provisional basis for one semester. At the end of that semester, the student must retake and pass the theory exam in order to continue in the degree program.

1640 - Music (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved course in statistics (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Music 111* and one approved humanities or fine arts course (6 hours). Note: Music 111 should be completed with the first four semesters of study.
Cultures and Civilizations: Option A: Western Humanities I and II and Music 311* (9 hours)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)
Foreign Languages: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average

Major Requirements
Music 103, 104, 107, 108, 111#, 203, 204, 207, 208, 311#, 315, 316 (Note: Music 111 should be completed within the first four semesters of study.)

Large ensemble participation required each semester of residence, minimum 8 hours credit, with the exception of piano and guitar majors who may substitute up to 4 semesters of small ensemble participation.
8 semesters (8 hours) primary applied instrumental or vocal study
4 hours music electives in music history, music theory, or composition
4 hours music electives
2.0 average in all music courses
Senior Educational Experience
Seminar is required each semester of residence. A minimum of 8 semesters with a grade of "satisfactory" is required.

Minimum of 39 hours of 300 and 400 level courses
Electives to complete a minimum of 120 hours
See page 67 for additional requirements
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Music (B.M.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Music 111* and one approved humanities or fine arts course (6 hours). Note: Music 111 should be completed with the first four semesters of study.
Cultures and Civilizations: Option A: Western Humanities I and II and Music 311* (9 hours)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major Requirements
Music 103, 104, 107, 108, 111#, 203, 204, 207, 208, 311#, 315, 316 (Note: Music 111 should be completed within the first four semesters of study.)
4 semesters (4 hours) piano study for nonkeyboard majors;
Performance majors required to present a half-recital in junior year, full recital in senior year (Music 392 and 492);
Students must be registered for the appropriate applied instruction course in the semester of the recital.

One of the following concentrations:

3641 - Instrumental Performance
8 semesters (32 hours) primary applied study, 16 hours at the 200 level and 16 hours at the 400 level
Large ensemble participation required each semester of residence, minimum 8 hours credit. Piano and guitar majors may substitute up to 4 semesters of small ensemble participation.
Two semesters of small ensemble participation required.
Music 303, 392, 492
Music 330, 331, 332 (for piano majors)
8 - 10 hours music electives other than primary applied study
Minimum of 39 hours of 300 and 400 level courses
Electives to complete 120 hours
See page 67 for additional requirements
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

3655 - Theory and Composition
4 semesters (8 hours) of 200 level primary applied study
4 semesters (8 hours) of 300 level primary applied study
Large ensemble participation required each semester of residence, minimum 8 hours credit. Piano and guitar majors may substitute up to 4 semesters of small ensemble participation.
Two semesters of small ensemble participation are required.
Music 302, 305# (4 hours), 307
4 hours from Music 303, 310, 328
One course from Music 370r or Music 465
Philosophy 336 or equivalent course

Complete one of the following lines:
Composition: 8 hours of Music 401r; one course from Music 415 or 416; Music 490; Music 492 (1/2 Recital)

Music Theory: Music 407, 408, 409, 410; one course from Music 411, 412, 413, 414, 415, 416; Music 490; Music 492 (1/2 Recital)

Minimum of 39 hours of 300 and 400 level courses
Electives to complete 124 hours
See page 67 for additional requirements
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

3660 - Vocal Performance
8 semesters (24 hours) voice study, 12 hours at the 200 level and 12 hours at the 400 level
Voice majors must take Music 028, Choral Union, in the first two semesters. The remaining semesters must include 2 semesters of Music 040, Opera Workshop, and a minimum of 4 semesters of appropriate large choral ensemble. Total credit hours will be a minimum of eight.
Two semesters of small ensemble participation are required.
Music 217, 333, 392, 450 and 492
One year each of two languages, chosen from French, Italian or German (16 hours)
2.0 average in all music courses
Successful completion of Continuation Standards is prerequisite to enrollment in upper-division music courses.
Seminar is required each semester of residence. A minimum of 8 semesters with a grade of "satisfactory" is required.

Minimum of 39 hours of 300 and 400 level courses
Electives to complete 124 hours
See page 67 for additional requirements
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Music Education (B.M.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Music 111* and one approved humanities or fine arts course (6 hours). Note: Music 111 should be completed with the first four semesters of study.
Cultures and Civilizations: Option A: Western Humanities I and II and Music 311* (9 hours)
Behavioral and Social Sciences: Psychology 101* and one approved behavioral or social science course (6 hours)

Major and Related Courses
Psychology 101# and 221 or Early Childhood 242
Music 103, 104, 107, 108, 111, 131, 132, 141, 142, 203, 204, 207, 208, 303, 311#, 315, 316, 321, 432 and 492 (Note: Music 111 should be completed within the first four semesters of study.)
NOTE: Music 131, 132, 141, 142 for piano proficiency (4 hours). All Music Education majors must pass a Piano Proficiency Examination as described in The Music Department Undergraduate Student Handbook.
21 hours from the College of Health, Education and Professional Studies including Education 201, 400, 433, 444a.

One of the following concentrations:

3670 - Instrumental
Music 228, 325, 336 and 328;
6 hours from Music 221, 223, 224, 225
Large ensemble participation is required each semester of residence, with exception of the student teaching semester (minimum 7 hours).

One choral ensemble course selected from Music 022r or 028r (in addition to instrumental large ensemble participation that is required).

Two semesters of small ensemble participation required

4 semesters (8 hours) of 200 level primary applied study
3 semesters (6 hours) of 300 level primary applied study

Students must pass an Instrumental Methods Proficiency Examination for their major instrument family. Failure to pass will require the student to take the corresponding course (221, 223, 224, or 225) as a deficiency.

Minimum of 39 hours of 300 and 400 level courses
Electives to complete 136 hours.
See page 67 for additional requirements
See College of Health, Education and Professional Studies section for teacher education, licensure and student teaching requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

3672 - Vocal Music
Music 209, 210, 221, 222
Music 310, 333, 334 and 336

Vocal music education majors must take Music 028r, Choral Union, in the first two semesters. Large choral ensemble participation required each remaining semester of residence, with exception of the student teaching semester (minimum 7 hours).

4 semesters (8 hours) of 200 level primary applied study
3 semesters (6 hours) of 300 level primary applied study

Vocal music education majors must pass a Foreign Language Diction Proficiency Examination. Failure to pass will require the student to take Music 217 as a deficiency.

Minimum of 39 hours of 300 and 400 level courses
Electives to complete 135 hours.
See page 67 for additional requirements
See College of Health, Education and Professional Studies section for teacher education, licensure and student teaching requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Additional requirements for all Music Education Majors:
Successful completion of Continuation Standards is prerequisite to enrollment in upper-division music courses.

Seminar is required each semester of residence. A minimum of 7 semesters with a grade of “Satisfactory” is required.

Music Education majors are required to present a half-recital or full recital in the senior year (Music 492). The student must be registered for the appropriate applied course the semester of the recital.

For graduation: 2.0 average in music and 2.0 average in College of Health, Education and Professional Studies courses
For licensure: 2.5 average cumulative, 2.5 average at UTC, 2.5 average in education courses with no grade less than C, 2.5 average in content area course work with no grade lower than C.

MUSIC MINORS
4622 - Music Performance
22 hours of music including a core of 14 hours: 105, 106, 315, 316, and 4 hours (4 semesters) of applied instruction at the 200 level or above; at least 3 of the elective hours must be at the 300 level or above with the remainder at the 200 level or above. A maximum of 2 hours of ensemble credit will be accepted.
Music 107 and 108 may be substituted for 105 and 106.
Minimum 2.0 average in the minor.

4624 - Music History
20 hours of music including a core of 14 hours: 105, 106, 315, 316, and 4 hours (4 semesters) of applied instruction; two courses from 411, 412, 413, 414, 415.
Class instruction may satisfy the applied music requirement. Music 107 and 108 may be substituted for 105 and 106.
Minimum 2.0 average in the minor.

4626 - Music Composition
23 hours of music including a core of 14 hours: 105, 106, 315, 316, and 4 hours (4 semesters) of applied instruction; additional requirements to include 103, 104, 205r (1 hour), 305r (4 hours), 370r (2 hours). Class instruction may satisfy the applied music requirements. Music 107 and 108 may be substituted for 105 and 106.
Minimum 2.0 average in the minor.

Performing Organizations (MUS)
The performing organizations mentioned below are open to University students with sufficient technical ability. Attendance at public performances and rehearsals is required.

020r Chattanooga Singers (1)
Study of music of all periods for large mixed chorus. Rehearsal and extensive performance experience emphasized. Performances in Chattanooga and throughout the world. Every semester.

022r Chamber Singers (1)
Study of repertoire for small choruses through rehearsal and performance. Every semester. Prerequisite: audition.

026r Women's Chorale (1)
A non-auditioned chorus concentrating on a wide variety of music for female voices, music reading ability, and group instruction in healthy singing technique. Public concerts will be presented at the conclusion of each semester.

027r Men's Chorus (1)
A non-auditioned chorus concentrating on a wide variety of music for male voices, music reading ability, and group instruction in healthy singing technique. Public concerts will be presented at the conclusion of each semester.

028r Choral Union (1)
A non-auditioned chorus for female and male voices and is a combination of Chattanooga Singers and Men's Chorus or Women's Chorale. The chorus meets four days per week concentrating on a wide variety of music for mixed voices, music reading ability, and group instruction in healthy singing technique. Public concerts will be presented at the conclusion of each semester.

029r Master Chorale (1)
A non-auditioned chorus for female and male voices performing major choral works from the standard repertoire.

030r Marching Band (1)
Study of marching band functions and literature through performances at University athletic and other events which could appropriately utilize the participation of a marching musical group. Fall semester. Prerequisite: audition.

031r Concert Band (1)
Reading, rehearsing, and performing contemporary and traditional band literature. Laboratory organization for instrumental conducting and band arranging classes. Spring semester. Prerequisite: audition.

035r Wind Ensemble (1)
A select ensemble which rehearses and performs literature for larger Wind Ensembles of all periods with emphasis on music of the 20th century. On demand. Prerequisite: audition.

036r Jazz Band (1)
Study of types of styles of big band jazz. Emphasis on sight reading, improvisation, and performance. Every semester. Prerequisite: audition.

040r Opera Workshop (1)
Study of and practical experience in preparation and performance of operas and opera scenes. Attention to requirements of various style periods. Emphasis of development of musical and dramatic skills and stagecraft techniques. Every semester. Prerequisite: audition.
050r University Orchestra (1)
Rehearsal and performance of selected works from the symphonic repertoire from 1700 to the present. Every semester. Prerequisite: audition.

053r Cadek Community Orchestra (1)
Development of basic skills in performance while exploring music literature from various stylistic periods. Provides opportunities for inexperienced players to develop greater proficiency in a noncompetitive atmosphere. Every semester. For music majors, no more than 2 hours credit will be counted toward degree requirement.

061r Percussion Ensemble (1)
Accompanying, chamber, and other ensemble music. On demand. Prerequisite: audition.

MUSIC COURSES (MUS)
100r Seminar (0)
Every semester.

102 Fundamentals of Music (3)
For students intending to major in music but not yet ready for Theory I (Music 107). An intensive review of note-reading in all currently used clefs; scales and keys; meter and rhythm. Also an introduction to intervals, triads, and aural skills. Spring semester. Music Theory Placement exam required before enrolling. Corequisite: Applied Music study as appropriate and as determined by audition; Large Ensemble participation.

103, 104 Ear Training I (1,1)
Studies in sight singing and dictation. Interval, melody, counterpoint, diatonic, and chromatic harmonic materials. 103 fall/104 spring semester. Class hours 2. Prerequisite: Music 105 or placement; 103 is prerequisite to 104.

105 Elements of Notation, Dictation, and Sight Singing (2)
Fundamentals of music theory. Designed for those taking music theory without previous experience and as the first course in music theory for music minors. Fall semester. May not be included as a music elective for music majors.

106 Conceptual Overview of Music Theory (2)
An elements-based approach to the analysis of music from a broad spectrum of styles, genres, and historical periods. A continuation of Music 105 for music minors. Spring semester. Prerequisite: Music 105.

107, 108 Theory I (3,3)
A comprehensive approach to the study of melody, counterpoint, diatonic and chromatic harmony, basic instrumentation and aural skills. Performance, composition, and analysis of music from all periods and styles. 107 fall/108 spring semester. Class hours 4. Prerequisite: Theory 105 or placement examination; Music 103 is prerequisite to Music 107; Music 104 is corequisite to Music 108. Music 107 is prerequisite to Music 108.

110 Music Literature for Children (3)
Study of music for children; fundamentals of the musical language and basic concepts of music. Repertoire selected from a broad range of styles and media. On demand.

111 Introduction to Music (3)
Designed to promote awareness of western art music as a mode of communication and a major component of western culture, this course will examine styles, significant works and prominent musicians in an historical context. The relationships among political, religious, scientific and philosophical issues and styles in western music will be considered.

121 Piano Class (1)
For persons without keyboard or music reading experience. Every semester. Class hours 2.

131, 132 Piano Class (1,1)
For persons without keyboard experience. 131 fall semester/132 spring semester. Class hours 2. Music 131 is prerequisite to 132.

133, 134 Voice Class (1,1)
For persons without vocal experience. Focus on basic techniques of vocal production in singing: diction; range extension; pitch accuracy. 133 fall/134 spring semester. Class hours 2. Music 133 is prerequisite to 134.

135, 136 Guitar Class (1,1)
For persons without guitar experience. An introduction to the technique and classical literature of the guitar. 135 fall/136 spring semester. Class hours 2. Music 135 is prerequisite to 136.

141, 142 Piano Class (1,1)
141 fall/142 spring. Class hours 2. Prerequisite: Music 132 or audition. Music 141 is prerequisite to 142.

143 Proficiency Studies (0)
An intensive practicum which stresses the development of general musicianship skills necessary for the piano proficiency examination. Prerequisites: Music 142 and approval of instructor.

151r Keyboard Instruction (1-2)
Individual instruction for students with limited applied music experience. Will not be accepted as applied credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

153r String Instruction (1-2)
Individual instruction for students with limited applied music experience. Will not be accepted as applied credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

155r Voice Instruction (1-2)
Individual instruction for students with limited vocal experience. Will not be accepted as applied music credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

157r Woodwind Instruction (1-2)
Individual instruction for students with limited applied music experience. Will not be accepted as applied credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

159r Brass Instruction (1-2)
Individual instruction for students with limited applied music experience. Will not be accepted as applied credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

161r Percussion Instruction (1-2)
Individual instruction for students with limited applied music experience. Will not be accepted as applied credit for any music degree program or Performance Music Minor. Every semester. For 1 hour credit, student will receive a 30-minute lesson. For 2 hours credit, student will receive a 1-hour lesson. Prerequisite: audition. Instructor’s approval is required to register for the 1-hour lesson.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

200r Seminar (0)
Every semester.

201r Ensemble (1)
Accompanying, chamber, and other ensemble music. On demand.

203, 204 Ear Training II (1,1)
Continued studies in sight singing and dictation. Aural structural analysis, advanced melodic and harmonic studies, twentieth century techniques. 203 fall/204 spring semester. Class hours 2. Prerequisite: Music 104. Music 203 is prerequisite to 204.
205r Fundamentals of Music Composition (1)
Basic skills of music composition designed to prepare promising lower division students for advanced study. Analysis focusing on applied compositional skills. Modeled composition. Spring semester. Prerequisite: Music 107 or approval of instructor.

207, 208 Theory II (3,3)
A comprehensive approach to the study of musical structure. Continued study of melody, harmony, counterpoint, and aural skills. Introduction to 20th-century compositional techniques. Performance, composition, and analysis. 207 fall; 208 spring semester. Class hours 4. Prerequisite: Music 108. Music 203 is corequisite to 207; 204 is corequisite to 208.

209, 210 Keyboard Harmony (1,1)
The use of harmonic materials at the keyboard. 209 fall/210 spring. Music 209 is prerequisite to 210.

212 America’s Musical Heritage (3)
An historical study of musical development in the United States from the Colonial period to the emergence of the native American composer and performer of distinction in the 20th century. On demand.

213 A History of Rock (3)
A consideration of the history of rock music in a social context. Fall semester only. Prerequisite: Music 111 or University Honors 103; open to music majors.

217 Diction for Singers (2)
An introduction to the pronunciation of Italian, German, French, and English based on the International Phonetic Alphabet. Fall semester. Open to voice majors; others by approval.

221 String Methods (2)
Class instruction of string instruments: tuning and care of instruments; teaching techniques. Violin, viola, cello, and double bass. Fall semester. Class 2 hours, laboratory 1 hour.

222 Instrumental Methods for Vocal Music Education Majors (2)
Class instruction of woodwinds, brass, and percussion instruments; tuning and care of instruments; teaching techniques. Flute, single, and double reed instruments; trombone, horn, and valve instruments; drum and mallet instruments. Spring semester. Class 2 hours, laboratory 1 hour. Prerequisite: Vocal Music Education Major status.

223 Woodwind Methods (2)
Class instruction of woodwind instruments; tuning and care of instruments. Teaching techniques. Single reed instruments, double reed instruments, and flute. Fall semester. Class 2 hour, laboratory 1 hour.

224 Brass Methods (2)
Class instruction of brass instruments; tuning and care of instruments. Teaching techniques. Piston valve instruments, horn, and trombone. Spring semester. Class 2 hour, laboratory 1 hour.

225 Percussion Methods (2)
Class instruction of percussion instruments; tuning and care of instruments; teaching techniques. Spring semester. Class 2 hour, laboratory 1 hour.

228 Marching Band: Design and Arrangement (2)
A study of basic arranging and designing principles for inexperienced marching bands. Primary instrumental choirs will be arranged to perform melody, basic accompaniment and rhythmic production. Students will apply construction principles to create a clear visual interpretation of their assigned arrangement. Prerequisite: Music 208.

230r Orchestra Literature for Elementary and Secondary School Students (1)
A survey of literature available for teaching orchestral music to students from elementary through secondary levels. On demand. Class hours 2. Prerequisite: Music 108 or permission of the instructor. Only one hour credit may apply to a degree.

231r Wind and Percussion Literature for Elementary and Secondary Students (1)
A survey of music literature available for teaching wind and percussion instruments to students from elementary through the twelfth grade. On demand. Class hours 2. Prerequisite: Music 108 or approval of instructor. Only one hour credit may apply to degree.

232r Choral Literature for Elementary and Secondary School Students (1)
A survey of literature for choral ensembles from elementary through secondary levels. On demand. Class hours 2. Prerequisite: Music 108 or approval of the instructor. Only one hour credit may apply to a degree.

251r Keyboard Instruction (1-4)
Every semester. Prerequisite: audition.

253r String Instruction (1-4)
Every semester. Prerequisite: audition.

255r Voice Instruction (1-4)
Every semester. Prerequisite: audition.

257r Woodwind Instruction (1-4)
Every semester. Prerequisite: audition.

259r Brass Instruction (1-4)
Every semester. Prerequisite: audition.

261r Percussion Instruction (1-4)
Every semester. Prerequisite: audition.

300r Seminar (0)
Every semester.

302 Counterpoint (2)
An analytical survey of contrapuntal techniques. Spring semester alternate years. Prerequisite: Music 108, or approval of instructor.

303 Basic Conducting (2)
Techniques of the baton, basic score reading and transposition, fundamentals of conducting. Fall semester. Prerequisites: Music 207, 208.

304 Arranging and Composing for Percussion Instruments (1)
Aspects of composing and arranging peculiar to instruments of the percussion family. Nature of sound as related to specific available instruments, technical problems, and notation practice. Investigation of percussion instruments in combination with other instruments, solo contexts, and in ensembles composed entirely of percussion instruments. On demand. Prerequisite: Music 208 and approval of instructor.

305r Composition (1-4)
Beginning composition study concentrating on small groups and short forms. Every semester. Prerequisites: Music 208.

307 Orchestration (2)
Scoring for strings, woodwinds, brasses and full orchestra. Piano transcriptions from orchestral scores. Fall semester alternate years. Prerequisite: Music 208.

310 Choral Conducting (2)
Designed to teach the student to train choral groups, read choral scores, and conduct effective rehearsals; basic patterns for choral and orchestral conducting, interpretation and building of repertoire of both secular and sacred choral composition. Actual conducting of works of all periods with and without instrumental accompaniment. Spring semester. Prerequisites: Music 207, 208, 303.

311 Musics of the World (3)
An introduction to the folk and ethnic music of various world cultures. Consideration of how musical styles relate to social, cultural and aesthetic practices and attitudes. Spring semester. May be registered as Anthropology 311 or Humanities 311. Credit allowed in only one of the three courses.
315, 316 History of Music (3, 3)
A general survey of the history of music in western civilization. 315 fall/316 spring semester. Prerequisite: Music 106 or 108 and Music 111.

317 Survey of Jazz (3)
A introductory survey course in jazz from its ethnic origins, through its chronological development, to its current styles. Emphasis placed on the relationship of the music to the individuals who create this form of human expression. Every semester. Prerequisite: English 122

320 African American Music: An Introduction (3)
An overview of vocal and instrumental genres rooted in the African American experience, spotlighting African American contributions from slavery to the present. Prerequisite: English 122

321 Elementary School Music Methods, Materials, and Observation (3)
A study of music teaching-learning methods and strategies. Basic concepts of musical organization, musical skills, and literature for the classroom. Fall semester. Prerequisite: Piano Proficiency Exam

322 Music Education in Early Childhood (3)
Methods and materials designed to involve the infant and young child in musical experiences as an outgrowth of play. Developmental paths to music making and learning explored through informal and formal settings. Activities including music and movement, rhythmic speech, song, imitation and improvisation, music-drama, and music pictures. On demand.

325 Band Organization and Management (2)
The techniques used in the organization, administration, and preparation of school bands. The selection, care, and repair of materials, instruments, and other equipment. Fall semester. Prerequisite: Music 303.

328 Instrumental Conducting (2)
First semester: includes techniques of the baton; basic score reading; fundamentals of conducting. Second semester: includes style, nuances, musical interpretations, advanced score reading, and actual band conducting. Spring semester. Prerequisite: Music 303.

330, 331 Survey of Piano Repertoire (2,2)
This course consists of a basic survey of the piano repertoire written by major composers from different stylistic periods. Prerequisites: Music 208.

332 Piano Pedagogy (2)
Piano methods and materials. For advanced students planning to teach piano. Fall semester alternate years.

333 Vocal Pedagogy (2)
A comparative study of the major concepts in current vocal training for soloist, choral group, and voice class; analysis of corrective procedure for vocal problems; elementary study of vocal anatomy, vocal acoustics, and the psychology of singing. Spring semester.

334 Choral Arranging (2)
The study of the methods, materials, techniques of arranging and adapting choral music for elementary, secondary, and adult voices with attention to vocal ranges, score arrangement, developmental and psychological considerations, and musical style. Prerequisite: Music 207, 208.

336 Choral Methods (2)
A study of techniques used in the recruiting, training and administration of secondary school choral ensembles. Special emphasis on choosing literature appropriate for musical growth and vocal development in young singers. Prerequisite: Music 303. Corequisite: Music 028r or 022r. Large ensemble participation is required each semester of residence (includes Music 022r or 028t).

351r Keyboard Instruction (1-4)
Every semester. Prerequisite: 4 semesters of 251r and successful audition for the semester jury.

353r String Instruction (1-4)
Every semester. Prerequisite: 4 semesters of 253r and successful audition for the semester jury.
413 Music from 1725 to 1825 (3)  
A study of works characteristic of the period and illustrative of musical trends in the era. Extensive examination of representative scores. On demand. Prerequisite: Music 208 or approval of instructor.

414 Nineteenth Century Music (3)  
A study of works characteristic of the period and illustrative of musical trends in the era. On demand. Prerequisite: Music 208 or approval of instructor.

415 Twentieth-Century Music (3)  
A study of works characteristic of the period and illustrative of musical trends in the era. On demand. Prerequisite: Music 208 or approval of instructor.

416 Symphonic Literature (3)  
A survey of the development of symphonic literature, in particular the development of the symphony. Prerequisites: Music 208 and 316 or approval of department head.

426 Jazz Arranging (2)  
Fundamentals of composing and arranging for the contemporary jazz ensemble. On demand. Prerequisites: Music 208 and 307 or 326, or approval of instructor.

430 Kodály Level I (3)  
An introduction to the Kodály methods of music education. Focus on solfege, ear training, conducting, folk song analysis and teaching methodology in grades K-1. Prerequisite: approval of instructor.

432 Teaching Strategies and Evaluation in Secondary School Music (3)  
Theories and practices in secondary school music, attention to the exceptional student, curricular developments in music education, evaluation procedures appropriate to music education. Fall semester. Prerequisite: admission to teacher education program. May not be used for graduate credit.

450 Vocal Literature (2)  
Historical review of art-song with particular emphasis on Italian, German, French, British and American literature.

451r Keyboard Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 251r and successful audition for the semester jury.

453r String Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 253r and successful audition for the semester jury.

455r Voice Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 255r and successful audition for the semester jury.

457r Woodwind Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 257r and successful audition for the semester jury.

459r Brass Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 259r and successful audition for the semester jury.

461r Percussion Instruction (1-4)  
Every semester. Prerequisite: 16 hours of 261r and successful audition for the semester jury.

465 Practicum in Music Technology (3)  
Focuses on practical skills in using professional-level software for music notation, sequencing and computer-assisted instruction (CAI); in setting up and using a MIDI/computer workstation; and in basic audio recording and sound reinforcement. Prerequisite: Music 208 or equivalent.

490 Senior Project in Music Theory or Composition (1)  
Culminating projects for students in the Theory and Composition concentration. Prerequisite: approval of instructor.

492 Senior Recital (0)  
Every semester. Prerequisite: approval of department head. Corequisite: enrollment in appropriate 300- or 400-level applied instruction. Graded Satisfactory/No Credit.

495r Departmental Thesis  
(1-3 hours per term, 4 hours for the two terms)  
On demand. See Departmental Honors. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)  
On demand. Prerequisite: approval of department head. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)  
On demand. Prerequisite: approval of department head. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)  
On demand. Prerequisite: approval of department head.

Nursing

See College of Health, Education and Professional Studies, School of Nursing.

Philosophy and Religion

Professor John Phillips, Head

The Department of Philosophy and Religion offers a 30-hour undergraduate major (B.A.) with separate concentrations in philosophy, religious studies, and philosophy and religion; and an 18-hour minor with separate concentrations in philosophy and religious studies. Through its curricular and extracurricular programs the department seeks to expose the student to a wide variety of influential philosophical and religious thinkers in both Western and Asian cultures.

The department sponsors a student organization, the Philosophy Club, which schedules a program of speakers throughout the year.

Philosophy and Religion:

Philosophy, Religious Studies, and Combined Concentrations (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities (other than Philosophy and Religion) and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)
An exploration and elucidation of questions concerning the human condition. The following philosophical courses may count toward the 27 hours in Religion:

\[ \text{2.0 average in all philosophy and religion courses.} \]

1723 - Religious Studies

Total of 30 hours including Philosophy 498r or Religion 498r; and also including 27 hours religion with at least two courses chosen from each of the following groups:

- Religion 211, 314, 315, 317, 319, 320, 321, 322, 417, 493r
- Religion 318, 334, 337, 351, 352, 362, 366, 369, 467, 484, 492r

The following Philosophy courses may count toward the 27 hours in Religion: Philosophy 351 and Philosophy 353

\[ \text{2.0 average in all philosophy courses and religion courses.} \]

1721 - Combined: Philosophy and Religion

Total of 30 hours

- 15 hours philosophy beyond 100 level including 351, 353, 498r
- 15 hours religion including two courses from 318, 334, 337, 351, 362, 366, 369, 467, 484, 492r

\[ \text{2.0 average in all philosophy and religion courses.} \]

One course outside the department may count toward major with any concentration if approved by department head.

All majors in Philosophy and Religion are required to complete a senior project under the supervision of a member of the faculty. Students register for this project by taking at least three hours of Philosophy 498r or Religion 498r. Completion of a Departmental Honors project will also satisfy this requirement.

\[ \text{2.0 average in all philosophy and religion courses.} \]

Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours. See page 67 for additional requirements.

PHILOSOPHY AND RELIGION MINORS

4640 - Philosophy

18 hours of philosophy beyond 100 level including Philosophy 211, 351, 353; 9 of these hours must be earned in courses at 300 level or above.

\[ \text{Minimum 2.0 average in the minor.} \]

4650 - Religious Studies

Total of 18 hours in religion, with at least one course from each of the following groups:

- Religion 211, 314, 315, 317, 319, 320, 321, 322, 417, 493r
- Religion 318, 334, 337, 351, 352, 362, 366, 369, 467, 484, 492r

One of the following Philosophy courses may count toward the Religious Studies minor: Philosophy 351 or Philosophy 353.

\[ \text{Nine of the 18 hours must be earned in courses at 300 level or above.} \]

\[ \text{Minimum 2.0 average in the minor.} \]

PHILOSOPHY COURSES (PHIL)

101 Western Philosophical Traditions I (3)

A survey of Western philosophical thought from Antiquity to the Renaissance. An exploration and elucidation of questions concerning the human condition and values. \( \text{Pre-} \text{ or Corequisite: English 121.} \)

102 Western Philosophical Traditions II (3)

A survey of Western philosophical thought from the Renaissance to the 20th Century. An exploration and elucidation of questions concerning the human condition and values. \( \text{Prequisite: English 121;} \text{ Pre- or Corequisite: English 122.} \)

106 Philosophy and Human Nature (3)

Interpretations of human nature and analyses of the human condition from Plato to Russell and others in the 20th century. Lectures and discussions aimed at clarification of present meanings and values. Every semester.

113 Western Humanities I (3)

An historical approach to the pivotal ideas, systems of thought, and creations of the Western world from approximately 1600 C.E. Emphasis on philosophical and religious themes. \( \text{Corequisite: English 121.} \)

115 Western Humanities II (3)

An historical approach to the pivotal ideas, systems of thought, and creations of the Western world from approximately 1600 C.E. to the present. Emphasis on philosophical and religious themes. \( \text{Prequisites: English 121. Corequisite: English 122.} \)

199r Special Projects (1-4)

Individual or group projects. On demand. \( \text{Maximum credit 4 hours.} \)

201 Introduction to Philosophy (3)

An introduction to the nature of philosophical thinking through the exploration of a selection of classic philosophical problems such as the possibility of knowledge, the existence of God, the problem of evil, the nature of the human mind, or the possibility of freedom. Selection of problems varies from year to year. Alternate years.

211 Logic, Language, and Evidence (3)

An examination of accepted forms of reasoning and of the varied ways in which language functions; fallacy, definition, metaphor, and theories of meaning; examples from such areas as science, law, politics, theology, and philosophy; classical and symbolic logic; deductive techniques; induction and deduction contrasted. Fall semester.

221 Introduction to Ethics (3)


322 Ethical Theory (3)

A critical analysis of contemporary ethical theories. Emphasis on the writings of philosophers such as Moore, Stevenson, Dewey, Rawls, Baier, Hare, and Searle. Alternate years.

325 Biomedical Ethics (3)

An examination of moral and ethical issues that arise in both the practice of medicine and in medical research.

333 Philosophy of Religion (3)

A philosophical examination of religion, including traditional and modern arguments for the existence and nature of God, the nature of religious experience and belief, and the functions of religious language. Alternate years. \( \text{May be registered as Religion 333. Credit not allowed in both Philosophy 333 and Religion 333.} \)

336 Aesthetics (3)

A study of the nature and value of art, of human creativity, and of aesthetic response. Close attention to theoretical analysis and to the interpretation and critique of important artistic achievements. On demand.

341 Metaphysics (3)

A study of classical and contemporary approaches to the question of what is ultimately real; consideration of modern challenges to the legitimacy of metaphysics. Alternate years.

345 Epistemology (3)

A critical examination of the nature of knowledge and the philosophical problems concerning skepticism; knowledge of the self, material objects, other minds; the past, present, and future; universal and necessary truth. Selections from both historical and recent writings. Alternate years.
348 Philosophy of Science (3)
An introduction to philosophical problems in the natural and social sciences: the nature of explanation, induction, evidence, probability, verification, causation; the role of observation; the relations among the sciences. Spring semester alternate years.

351 History of Ancient Philosophy (3)
Selections from the pre-Socratic through the late Greco-Roman writers, including Plotinus. Emphasis on Plato and Aristotle. Fall semester.

352 Medieval Philosophy (3)
This course will trace the development of philosophy from late Antiquity through the High Middle Ages. Texts will be drawn from medieval Christian, Jewish, or Muslim authors. May be registered as Religion 352. Credit not allowed in both Philosophy 352 and Religion 352.

353 History of Modern Philosophy (3)
Rationalism and empiricism as developed by leading thinkers; selections from chief representatives from Hobbes and Descartes through Kant. Spring semester.

360 American Philosophy (3)
Earlier American thought in its reaction to European movements; the emergence of a genuinely American philosophy. Emphasis on James, Pierce, Santayana, Royce, Dewey, and Whitehead. Alternate years.

364 Existentialism and Phenomenology (3)
Presentations on the major figures and themes of this movement; discussions of selected passages from Kierkegaard, Nietzsche, Husserl, Heidegger, Sartre, and Ricoeur. Alternate years.

425 Ethics and the Professions (3)
An examination of ethical issues and principles related to problems and standards in the professions. Special attention to professional codes and case studies in relation to traditional and contemporary moral philosophy. Designed as a general course for students not majoring in philosophy and religion. Fall semester.

442 Philosophy of Mind (3)
A history of the philosophy of mind, from Aristotle and Descartes through Kant. Spring semester.

481r Interdisciplinary Seminar (3)
Critical inquiry into the most comprehensive questions raised by particular disciplines; reading and discussion of significant primary sources from scholars in the special field and philosophers. Two faculty members. On demand.

483 Feminist Theory (3)
A history of feminist theory from the eighteenth century to the present. Extensive reading, papers. May be registered as Humanities or Women's Studies 483. Credit allowed in only one of the three courses.

484 Values and the Environment (3)
An examination of the personal and social values at issue in the environmental problems of urban and nonurban regions. Attention to the emerging concern for an environmental ethic. Fall semester alternate years. Prerequisite: Environmental Science 150. May be registered as Environmental Science 484. Credit not allowed in both Philosophy 484 and Environmental Science 484.

491r Individual Studies (1-4)
Must be taken for at least three hours in one semester by all majors. Every semester. Prerequisite: approval of department head. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.

RELIGION COURSES (REL)
103 Introduction to the Study of Religion (3)
Consideration of the various elements of religion and the methods for studying them; attention to beliefs, world-views, and sacred literature; rituals, myths, symbols; religious communities and organizations; types of religious experience. Every semester.

110 Introduction to Western Religions (3)
An introduction to the major religious traditions emerging in Western cultures, with emphasis on Judaism, Christianity, and Islam.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours. Prerequisite: approval of department head.

211 Religions of the East (3)
An introduction to major world religious traditions of Asia, with emphasis on Hinduism, Buddhism, and Confucianism. Every semester.

221, 222 Biblical Literature (3,3)

236 Religion in American Life (3)
Attention to distinctly American phenomena, with the intention of assessing the present role and status of religion; consideration of such topics as separation of church and state, revivalism, the influence of immigration, sects, and cults. Fall semester.

314 Primitive Religion (3)
The place of religion in the social and cultural settings of selected peoples as evidenced through magic, myth, totemism, fetish, sacrifice, shamanism, and initiation rites; an attempt to delineate the common elements of primitive religion. On demand.

315 Islam (3)
An examination of the history, teachings and practices of Islam. Attention will also be paid to the interaction between Islam and the West, and to the various issues facing Islam in the modern world.

317 Buddhism (3)
This course examines the history, teachings and practices of Buddhism in India, China, Japan and Tibet. Major scriptures of the Theravada, Mahayana and Tantric traditions are studied in depth.

318 Modern Judaism (3)
Exploration of religious, social, and political developments in modern Judaism, including the appearance of Zionism, the impact of the Holocaust, and efforts to overcome the tension between Zionism and the religious culture of contemporary Jews. Alternate years.

319 Taoism (3)
This course examines the history, teachings and practices of Taoism, from China's Warring States Period (403-222 B.C.E.) up to the present. The philosophy of the Lao-tzu and Chuang-tzu will be studied in depth, along with the beliefs, practices and rituals of the Taoist religion.
320 Religions of India (3)
Examination of the conceptual and historical development of religions on the Indian subcontinent. Attention will also be paid to the interaction among religions of India and their relationships to Indian culture. Alternate years.

321 Religions of China (3)
Examination of the conceptual and historical development of religions in China. Attention will also be paid to the interaction among religions of China, the impact of Indian religions and culture on China, and the relationship of religion to Chinese culture. Alternate years.

322 Religions of Japan (3)
Examination of the conceptual and historical development of religions in Japan. Attention will also be paid to the interaction among religions of Japan, the impact of continental Asian religions and culture on Japan, and the relationships of religion to Japanese culture. Alternate years.

333 Philosophy of Religion (3)
A philosophical examination of religion, including traditional and modern arguments for the existence and nature of God, the nature of religious experience and belief, and the functions of religious language. Alternate years. May be registered as Philosophy 333. Credit not allowed in both Religion 333 and Philosophy 333.

334 Religion in Southern Culture (3)
Examination of the role of religion in Southern culture, past and present. Attention to the evangelical influence, African-American religion, mountain religion, Southern-based sects, the Pentecostal experience, and the cultural impact of religion in the South. Alternate years.

337 Interpretations of Religion (3)
An examination of ways in which religious belief and practice may be understood; sympathetic and opposing views drawn from several fields and represented by such authors as Feuerbach, Freud, James, Malinowski, Berger, Levi-Strauss, Zinger, Fromm, and N.O. Brown. Alternate years.

351 Early Christian Thought (3)
The development of central issues in Christian thought in the first millennium, with an emphasis on how these emerged from a historical context as responses both to the demands of faith and to the social and intellectual concerns of the time. Consideration of such figures as Tertullian, Arius, Augustine, Gregory the Great, and Bede. Alternate years.

352 Medieval Philosophy (3)
This course will trace the development of philosophy from late Antiquity through the High Middle Ages. Texts will be drawn from medieval Christian, Jewish, or Muslim authors. May be registered as Philosophy 352. Credit not allowed in both Religion 352 and Philosophy 352.

362 Modern Christian Thought (3)
Selected movements and figures that have shaped the Christian theological tradition in the nineteenth and twentieth centuries. Alternate years.

366 Goddess Traditions (3)
A cross-cultural survey of major goddess traditions of wide geographic distribution, this course addresses implications of what it means to talk about deities using female terminologies and associations. The seminar format involves reading, discussion, writing, and original research. May be registered as Women’s Studies 366. Credit not allowed in both Religion 366 and Women’s Studies 366.

369 Satanism, Witchcraft, and Spirit Possession (3)
“Witchcraft” and “Satanism” refer to occult bodies of traditional knowledge enabling practitioners to manipulate and/or respond to postulated superhuman forces. “Spirit possession” refers to perceived invasion of the human body by benign or malign supernatural forces. This course seeks to understand the cross-cultural range of these reported phenomena and of the conditions under which these reports occur.

417 Mysticism East and West (3)
The place of mysticism in the Eastern and Western religious traditions; discussion of the writings of major historical and contemporary mystics. On demand.

467 Contemporary Religious Issues (3)
Analysis of selected issues, such as church-state relations, fundamentalism, and debates over abortion, that are central to contemporary religious life. Primary attention to the American scene and some cross-cultural comparisons. Alternate years.

470 Psychology of Religion (3)
Analysis of empirical data and psychological theories involving religious beliefs, practices, and experiences. Every semester. Prerequisites: 6 units psychology or philosophy-religion. May be registered as Psychology 470. Credit not allowed in both Religion 470 and Psychology 470.

484 Holocaust and Genocide (3)
Examination of the Holocaust, the state-sponsored effort of the Nazi regime to destroy the Jewish people between 1933 and 1945, and the relationship between the Holocaust and the more general category of genocide. Consideration of the causes of genocide and the Holocaust and their persistent presence in contemporary society. Alternate years.

491r Studies in Religion (3)
A seminar or tutorial for the intensive consideration of one problem, movement, or figure in the field of religion. On demand.

492r Studies in Western Religious Thought (3)
A seminar or tutorial for the intensive consideration of one problem, movement, or figure in Western religious thought. On demand.

493r Studies in the History of Religions (3)
A seminar or tutorial for the intensive consideration of one problem, movement, or figure in the history of religions. On demand.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Must be taken for at least 3 hours in one semester by all majors. Every semester. Prerequisite: approval of department head. Student Must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.

Physics, Geology, and Astronomy
Professor Habte Churnet, Head

The Department of Physics, Geology, and Astronomy offers two degree programs for its majors: the B.S. in physics, and the B.S. in geology. The department also contributes to programs leading to degrees in other sciences, engineering, and professional areas. In addition, the department offers minors in geology and physics.

The geology program emphasizes hands-on experience. Many courses are supported by field examination of sedimentary, metamorphic, and igneous rocks.

The geology curriculum is designed to train students to pursue graduate degrees or enter the work force, particularly in the area of environmental geology.
As a fundamental science, physics is required for the education of students in many disciplines. The physics program emphasizes mathematics, but to accommodate students in less quantitative disciplines the department also offers introductory algebra-based physics. Physics majors are qualified to seek opportunities in graduate school, education, government, and industrial research.

The astronomy program is augmented by specialized equipment for astrophotography. The off-campus UTC Clarence T. Jones Observatory provides astronomy presentations to the community at large.

The department offers several introductory courses which fulfill the natural science requirement with lectures and corresponding laboratories: Physics 103/183, 104/184, 230/280, 231/281, Geology 111/181, 112/182, General Science 111/181, and Astronomy 101/181, 102/182 all contain a strong laboratory emphasis, and are excellent choices to increase one’s appreciation of nature and the physical universe. Geology 116, 225, General Science 115, and Astronomy 101 are approved non-lab courses in Natural Science.

Geology (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours; approved related courses below will apply)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Major and Related Courses

English 278
Geology 111/181, 112/182, 354, 341, 342, 451, 480, 490
Any two of the following sequences: Biology 121 and 122, Chemistry 121/123 and 122/124, Physics 103/183 and 104/184, or Physics 230/280 and 231/281.

2.0 average in all geology courses.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

Each geology major must also complete the requirements for either the Geology option or the Environmental Geology option.

2380 - Geology
Geology 353, 452, plus 7 hours of geology electives, including at least one course at the 400-level; Mathematics 151/152.

2382 - Environmental Geology
Geology 123, 445, plus 8 hours of geology electives, including at least one course at the 400-level; Mathematics 136 or 151/152.

Field Work
Geology majors are encouraged to enroll in a field geology course (field camp) during the summer following the junior or senior year. In the latter case, graduation will be postponed until August and the requirement that the last 30 hours be completed at UTC will be waived. It is still required, however, that at least 30 hours be completed at UTC.

Graduate Study Preparation
Most graduate schools in geology require a minimum of 1 year of calculus, 1 year of calculus-based physics, and a good background in courses from biology, chemistry, and computer science, and a geology field camp. Therefore, students intending to pursue a graduate degree in geology should take those courses that will best prepare them for the graduate program of their choice. It is strongly recommended that the prospective graduate student also take Geology 497e.

Mathematics 106, 144, and 145 may be recommended to precede Mathematics 151/152, depending on preparation of the individual student. Students taking the Environmental Geology option may substitute Mathematics 136 for Mathematics 151/152.

Mathematics 106 and 131 may be recommended to precede Mathematics 136, depending on the preparation of the individual student.

GEOLOGY MINOR
18 hours of geology including 111/181, 112/182, and 407. At least 8 hours 300 level or above.

Minimum 2.0 average in all geology courses.

GEOLOGY COURSES (GEOL)
100 Earth Science (4)
Interdisciplinary overview of the planet Earth, including the origin and evolution of its physical features, the role of modern technology in refining plate tectonic theory, and a look toward Earth’s future. On demand. Lecture 3 hours, laboratory 2 hours.

108 Geomorphology (3)
Scientific account of the general configuration of Earth’s surface and the evolution of land forms. On demand. Lecture 3 hours.

111 Physical Geology (3)
Introduction to geology with emphasis on the origin of Earth, geological materials (minerals, rocks), geological processes and events (mountain building, erosion, earthquakes, volcanic activity) and geological features (oceans, land forms). Field trips. Every semester. Prerequisite: Math Placement Level 20 or Mathematics 106. Corequisite: Geology 181 laboratory, or approval of department head.

112 Historical Geology (3)
Geologic history of Earth, with emphasis on geologic time and the evolution of life as gleaned from the fossil record. Field trips. Spring semester. Prerequisite: Geology 111 or approval of the instructor. Corequisite: Geology 182 laboratory, or approval of department head.

116 Current Geological Perspectives of Earth (3)
Geological perspectives of Earth and the ways in which it enhances and limits our life styles, including natural disasters and basic issues of sustainability. Promotes an understanding of Earth and the insights necessary to making conscientious environmental decisions. Specific topics may vary in keeping with current issues. On demand. Prerequisite: Math Placement Level 20 or equivalent college math course. Cannot be used to satisfy Geology major requirements.

123 Environmental Geology (4)
Natural, mining, and industry-related environmental hazards, including interactions of water, rock, and air, and the attempts of humanity to remedy these problems. On demand. Lecture 5 hours, laboratory 1 hour.

181 Physical Geology Laboratory (1)
Laboratory to accompany Geology 111. Laboratory studies of minerals and rocks, topographic maps and geologic processes and events. Every semester. Two hours per week. Corequisite: Geology 111 or approval of department head. Laboratory/studio course fee will be assessed.
182 Historic Geology Laboratory (1)
Laboratory to accompany Geology 112. Laboratory studies of rocks, geologic maps and geologic structures, stratigraphic data sets, selected fossil and recent specimens of major taxonomic groups of organisms. Spring semester. Two hours per week. Corequisite: Geology 112, or approval of the head of the department. Laboratory/studio course fee will be assessed.

199r Special Projects (1-4)
Individual or group projects. On demand. Prerequisites: receipt of an acceptable proposal, and approval of the instructor and department head. Graded on a satisfactory/no credit basis. Cumulative limit of 4 hours.

225 Oceanography (3)
Study of the oceans, including chemical and physical properties of sea water, patterns of seawater circulation, life zones, origin and physiography of ocean basins, and mineral and energy resources of the oceans. On demand. Lecture 3 hours. May be registered as Environmental Science 225. No credit in both Geology 225 and Environmental Science 225.

226 Oceanography Laboratory (1)
Laboratory exercises in oceanography. On demand. Corequisite: Geology 225. Laboratory/studio course fee will be assessed.

307 Geology of Tennessee (3)
Geologic resources, structure, and history of Tennessee and adjacent areas. Lecture and field trips. On demand. Prerequisite: a previous course in geology.

330 Sedimentation (4)
Interpretation of interpretation of depositional environments from outcrop observations, well logs, and modern-day analogs. Extensive field work. On demand. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 303 or approval of instructor. Laboratory/studio course fee will be assessed.

341 Mineralogy (4)
Crystalllography, descriptive and determinative mineralogy, mineral chemistry, and methods of chemical analysis. Fall semester. Lecture 3 hours, laboratory 3 hours. Prerequisites: Geology 111/181, Chemistry 121/123. Laboratory/studio course fee will be assessed.

342 Petrology (4)
In-depth study of igneous and metamorphic rocks, including classification, genesis, and evolution. Field trips. Spring semester. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 341 with a minimum grade of C. Laboratory/studio course fee will be assessed.

353 Paleontology (4)
Study of animals that are preserved in the fossil record, particularly taxonomy and population, interpretation of faunal assemblages, and the concept of biostratigraphy. Laboratory exercises emphasize morphology and time ranges of major fossil groups. Field trips. Spring semester, alternate years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 112/182 with a minimum grade of C. Laboratory/studio course fee will be assessed.

354 Sedimentary Rocks and Stratigraphy (4)
Sedimentary rocks and stratigraphic correlation with emphasis on the classic stratigraphy of eastern North America, the facies concept, and paleogeographic reconstructions of the continents. Field trips. Fall semester, alternate years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 341 with a minimum grade of C. Laboratory/studio course fee will be assessed.

405 Principles of Geochemistry (4)
Origin, distribution, and behavior of chemical elements on Earth. Applications of chemistry to geologic problems. On demand. Lecture 3 hours, laboratory and recitation 2 hours. Prerequisites: Geology 111/181 and 1 year of college chemistry. Calculus level math is highly recommended.

406 Lithology: Study of Rocks (4)
Identification and study of common rocks and their plate tectonic environments. Lecture 3 hours, laboratory 2 hours. Prerequisite: approval of instructor.

407 The Dynamic Earth (3)
History, theory, and application of plate tectonics models to explain the dynamic character of the Earth. On demand. Lecture 3 hours. Prerequisite: Geology 111/181 or approval of instructor.

431 Sedimentary Petrology (3)
In-depth study of sedimentary rocks, including genesis and classification of clastic and chemical varieties. Field work. On demand. Variable lecture and laboratory time dependent on topic. Prerequisite: Geology 330.

436 Fossil Fuels (3)
Stratigraphic and sedimentological study of fossil-fuel deposits and the scientific basis for fossil-fuel exploration, including interpretation of gamma-ray well logs and preparation of panel diagrams, structure contour maps and isopach maps. On demand. Prerequisite: Geology 111/181.

442 X-Ray Diffraction Methods (1)
Theory and use of X-ray diffraction to identify and characterize minerals. Powder diffraction methods are emphasized. Fall Semester. Lecture 1 hour. Pre- or Corequisite: Geology 341, or approval of instructor. Laboratory/studio course fee will be assessed.

445 Hydrology (3)
Occurrence and behavior of water in the geologic environment, including drainage systems, erosional and depositional processes, causes and controls of flooding, groundwater systems, and water quality problems. Field work. On demand. Prerequisites: Geology 111/181 and Chemistry 121/123.

450 Economic Geology (4)
Origin, distribution, and classification of mineral deposits found in igneous, sedimentary, and metamorphic rocks with an introduction to methods of exploration and mining. On demand. Lecture 3 hours, laboratory 3 hours. Prerequisites: Geology 342, Chemistry 122/124. Laboratory/studio course fee will be assessed.

451 Structural Geology (4)
Theory and principles of rock deformation, description and classification of common geologic structures, and laboratory methods to solve structural problems. Field trips. Fall semester, alternate years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 342 with a minimum grade of C. Laboratory/studio course fee will be assessed.

452 Field Methods in Structural Geology (4)
Methods of gathering data in the field and interpretation of field relationships, as necessary to geologic mapping and analysis of geologic structures. Extensive field work. Spring semester, alternate years. Lecture 3 hours, laboratory 3 hours. Prerequisite: Geology 451. Laboratory/studio course fee will be assessed.

454 Geologic Mapping (3)
Mapping of lithology and structural features in sedimentary and crystalline rocks. Extensive field work. On demand. Prerequisites: Environmental Science 340 or Geology 352 and approval of the instructor.

474 Water Quality Survey (3)
Concepts of water quality, including sampling methods, units of concentration, and simple analytical procedures. Concepts are augmented by field and laboratory studies of ground and surface water. Field work. On demand. Prerequisites: Geology 111/181 or 125; Chemistry 121/125, 122/124; senior standing, and approval of the instructor. Chemistry 351/353 and Geology 341 are recommended.

480 Geology Seminar (1)
Seminar and discussion of topics of current interest in the earth sciences. Student presentations required. Spring semester. Prerequisites: English 278, Geology 342 with a minimum grade of C.

490 Senior Seminar (2)
Culminating senior experience giving students an opportunity to design and conduct research related to geologic problems. Fall semester. Prerequisites: Geology 480 and approval of the instructor.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
On demand. Graded on satisfactory/no credit basis. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.
496r Geology Field Experience (1-4)
Participation in the examination of the geology of a region based on a department-sponsored geologic expedition. Pre- and post-trip written reports are required. On demand. Prerequisites: introductory course in the natural sciences, and approval of the instructor.

497r Research (1-4)
On demand. Prerequisites: receipt of acceptable research proposal, and approval of the instructor and department head. Graded on a satisfactory/no credit basis. Cumulative limit of 4 hours. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisites: approval of instructor, receipt of an acceptable proposal, and approval of the department head. Graded on a satisfactory/no credit basis. Cumulative limit of 4 hours. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Approval of instructor. Cumulative limit of 4 hours.

2732 - Physics (B.S.)
General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours; approved related courses below will apply)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines. (6 hours)

Major and Related Courses
English 278
One approved oral communications course
Mathematics 151/152, 161/162, 212, 245, 255; Chemistry 121/123, 122/124; Physics 230/280, 231/281, 232/282, 341, 342, 398, 399, 411
27 additional hours from physics, astronomy, chemistry, engineering, or mathematics at the 200 level or above or from geology and biology or other fields with prior approval by the department.
Recommended: Physics 303, 307, 310, 412, and 414r are recommended for students who plan on graduate study in physics/astronomy.

Minimum of 39 hours of 300 and 400 level courses, which includes a minimum of 30 hours in physics and/or astronomy at the 300 and 400 level.
2.0 average in all physics courses.
Electives to complete 120 hours.
See page 67 for additional information.

2641 - PHYSICS MINOR
Required courses: Physics 230/280 (or Engineering 103 and 104), Physics 231/281, Physics 232/282 (or 104/184).
Elective courses: A planned program of at least 12 hours of physics at the 300-400 level selected with the prior approval of the department.
Minimum 2.0 average in the minor.

PHYSICS COURSES (PHYS)
103 General Physics - Mechanics and Heat (3)
Algebra-based introduction to forces and uniform motion, conservation principles, sound and thermodynamics, with applications to problems of modern science and technology. Every semester. Lecture 3 hours. Prerequisite: Mathematics 136 or 145 (145 preferred) or UTC Math Placement Level 40. Corequisite: Physics 183 laboratory, or approval of department head.

104 General Physics - Electromagnetism and Optics (3)
Algebra-based introduction to classical electricity and magnetism, optics, and the concepts of modern physics. Required in premedical, preprofessional, prepharmacy, and physical therapy programs. Every semester. Lecture 3 hours laboratory 2 hours. Prerequisite: Physics 103/183 or approval of the instructor. Corequisite: Physics 184 laboratory, or approval of department head.

119 Light and Life (4)
Examines the methods of investigation that lead to our understanding of light and its role in nature and human development. Lecture 3 hours, laboratory 2 hours. Prerequisite: Math Placement level 20. Credit not allowed toward the chemistry, physics, geology, biology or environmental sciences majors. May be registered as Biology 119 or Chemistry 119. Credit allowed in only one of the three courses. Laboratory/studio course fee will be assessed.

183 General Physics Laboratory - Mechanics and Heat (1)
Laboratory to accompany Physics 103. Experiments investigate various aspects of forces and uniform motion, conservation, principles, sound and thermodynamics. Every semester. Two hours per week. Corequisite: Physics 103 or approval of the head of the department. Laboratory/studio course fee will be assessed.

184 General Physics Laboratory - Electromagnetism and Optics (1)
Laboratory to accompany Physics 104. Experiments investigate various aspects of electromagnetism, electrical currents, instrumentation, optics, and radioactivity. Every semester. Two hours per week. Corequisite: Physics 104 or approval of department head. Laboratory/studio course fee will be assessed.

199r Special Projects (1-4)
Individual or group projects. On demand. Prerequisites: approval of the instructor and head of the department. Cumulative limit of 4 hours.

230 Principles of Physics - Mechanics and Heat (3)
Calculus-based introduction to the laws of classical dynamics, kinematics, and thermodynamics, with applications to simple physical systems. Every semester. Lecture 3 hours. Prerequisite: Calculus 136/162 or approval of the instructor.

231 Principles of Physics - Electricity and Magnetism (3)
Calculus-based introduction to electric and magnetic fields, electric currents, electromagnetic induction and waves. For all engineering students. Every semester. Lecture 3 hours, laboratory 2 hours. Prerequisites Engineering 103 and 104, or Physics 103/183 and 104/184; or Physics 230/280: Mathematics 151/152, 161/162, or approval of the head of the department. Corequisite: Physics 281 laboratory.

232 Principles of Physics - Optics and Modern Physics (3)
Calculus-based survey of principles of optics, and of the early conceptual advances in 20th-century physics: the Bohr atom, quantum theory, relativity, nuclear physics and elementary particles. Every semester. Lecture 3 hours, laboratory 2 hours. Prerequisites: Engineering 103 and 104, or Physics 103/183 and 104/184. or Mathematics 151/152, 161/162, or approval of the instructor. Corequisite: Physics 282 laboratory, or approval of the head of the department.

280 Principles of Physics Laboratory-Mechanics and Heat (1)
Laboratory to accompany Physics 230. Experiments investigate basic laws of motion, conservation principles, waves and oscillations, and heat measurements with emphasis given to error analysis. Every semester. Two hours per week. Corequisite: Physics 230 or approval of the head of the department. Laboratory/studio course fee will be assessed.

281 Principles of Physics Laboratory - Electricity and Magnetism (1)
Laboratory to accompany Physics 231. Experimentation investigate basic electronic circuitry and electromagnetic induction, with emphasis given to error analysis. Every semester. Two hours per week. Corequisite: Physics 231 or approval of the head of the department.
Prerequisites: Physics 103/183, 104/184; Mathematics 161/162; or approval of the instructor. Laboratory/studio course fee will be assessed.

304 Electronic Circuits (4)
Theory and use of basic electronic instruments for electrical measurement or control. Multistage amplification, feedback, oscillators, and digital/logic circuitry treated with varying emphasis. On demand. Lecture 3 hours laboratory 2 hours. Prerequisite: Physics 303 or approval of the instructor. Laboratory/studio course fee will be assessed.

307 Optics (4)
Basic aspects of geometrical and physical optics, including interference, diffraction, and polarization; optical systems; wave equations and superposition; laser basics. Fall semester alternate years. Lecture 3 hours, laboratory 2 hours. Prerequisites: Physics 230/280, 231/281, 232/282 or Physics 103/183, 104/184; Mathematics 161/162; or approval of the instructor. Laboratory/studio course fee will be assessed.

310 Introduction to Thermal Physics (4)
Laws of thermodynamics, kinetic theory, and statistical mechanics with applications to basic thermodynamic systems. Fall semester alternate years. Lecture 3 hours, recitation 2 hours. Prerequisites: Physics 230/280, 231/281, 232/282 or Physics 103/183, 104/184; Mathematics 161/162. Corequisite: Mathematics 255; or approval of the instructor. Laboratory/studio course fee will be assessed.

318 Radiation Physics and Introductory Health Physics (3)
Introduction to ionization radiation, its production and interaction with matter, its biological effects and its measurement. Radiation protection practices and regulatory guidelines. The uses of radiation in biology, chemistry, environmental sciences, and medicine. Benefits and hazards of nuclear energy. Nuclear weapons and the effects of nuclear warfare. On demand. Prerequisite: Physics 104/184 or 232/282; or approval of the instructor. Laboratory/studio course fee will be assessed.

341 Classical Mechanics (4)
Dynamics of particles and continuous media; Newton's law of motion, conservation laws, generalized coordinates, Lagrange's equations, and the principle of least action; the mechanics of continuous media, wave motion, sound, hydrostatics, rotational and irrotational flow, the equation of continuity, Laplace's equation. Fall semester. Lecture 3 hours, recitation 2 hours. Prerequisites: Physics 230/280, 231/281 or 103/183, 104/184; or approval of the instructor. Corequisite: Mathematics 245 or 255. Laboratory/studio course fee will be assessed.

342 Electricity and Magnetism (4)
Basic laws of electromagnetism, electric and magnetic properties of materials, Maxwell's equations, boundary value problems, electromagnetic waves. Spring semester. Lecture 3 hours, recitation 2 hours. Prerequisite: Physics 341; Mathematics 245, 255; or approval of the instructor. Laboratory/studio course fee will be assessed.

398 Methods of Experimental Physics I (3)
Experimental methods based on classical physics experiments, selected from such topics as as harmonic motion, gravitation, measurement of thermodynamic properties, electrical and magnetic measurements, optics, thermodynamics, and materials science. Fall semester. Lecture 1.5 hours, laboratory 3 hours. Prerequisites: Physics 230/280, 231/281; or Physics 103/183, 104/184; Mathematics 245. Corequisites: Physics 341 or 342, 307 or 310; or approval of the instructor. Laboratory/studio course fee will be assessed.

399 Methods of Experimental Physics II (3)
Experimental methods based on modern physics experiments, selected from such topics as atomic emission and absorption spectra, the Franck-Hertz experiment, the Stern-Gerlach experiment, quantum optics, electron-spin resonance, nuclear magnetic resonance, X-ray diffraction, and nuclear radiation measurements (utilizing Geiger-counters and multichannel analyzers). Spring semester. Lecture 1.5 hours, laboratory 3 hours. Prerequisites: Physics 230/280, 231/281, 232/282; or Physics 103/183, 104/184; Mathematics 245; or approval of the instructor. Cumulative limit of 4 hours. Laboratory/studio course fee will be assessed.

404r Physics Seminar (1)
Reports and reviews of selected physics research, including the abstracting of publications. On demand. Enrollment limited to juniors or above or approval of the instructor. Cumulative limit of 2 hours.

411 Introduction to Quantum Mechanics (3)
Basic elements and principles of quantum physics: probability waves, the Schrodinger equation, expectation values and operator formalism, the hydrogen atom, radiation processes. Fall semester. Prerequisites: Physics 230/280, 231/281, 232/282; or Physics 103/183, 104/184; Mathematics 245 or 255; or approval of the instructor.

412 Nuclear Physics (3)
Theory of nuclear structure; nuclear radiation characteristics; the interaction of radiation with matter; nuclear binding forces; the control and use of nuclear radiation. Spring semester. Prerequisites: Physics 230/280, 231/281, 232/282; or Physics 103/183, 104/184; Mathematics 245 or 255; or approval of the instructor.

414r Advanced Modern Physics (3)
Topics selected from biophysics, elementary particles, quantum mechanics, relativity, solid state physics, statistical mechanics, or superconductivity. Emphasis on the relation of the assumptions and predictions of the theories to the experimental evidence. Consequences of the theories illustrate the nature of physics and its applications in modern science. On demand. Prerequisites: Physics 341; Mathematics 245, 255; or approval of the instructor. Cumulative limit of 9 hours.

419 Introduction to Nuclear Reactor Physics (3)
Nuclear reactions and radiation; fission processes, neutron diffusion, reactor design variables, reactor materials and shielding, reactivity coefficients. On demand. Prerequisite: Physics 412 or equivalent, or approval of the instructor. Laboratory/studio course fee will be assessed.

424 Instrumentation, Interfacing, and Microcomputers (3)
Interfacing instruments, measuring devices, and controls to mini and microcomputers. Includes voltmeters, counters, timers, temperature and other sensors, CRTs, floppy-disks, keyboards, music synthesizers, and control devices such as relays, thermostats, stepper motors, oscillators, and power supplies. Consider standard S100, IEE-488, and RS232C bus structures. Survey of microcomputer applications. Projects involving interfacing instruments with microcomputers. On demand. Lecture 2 hours, laboratory 2 hours. Prerequisites: Physics 104/184, 232/282 or equivalent; Computer Science 110 or equivalent; or approval of the instructor. Laboratory/studio course fee will be assessed.

425 Computer-Based Materials Development in Science (3)
Basic principles and practice of developing computer-based materials for science education. Projects to be chosen from a pool of topics in a specific area of science. Each module to include documentation, a tutorial, a pretest, a post test, explanatory material, a question set, a problem set, a graphics segment, etc. Modules to be prepared to publication standards. Prerequisite: Computer Science 102 or equivalent. Enrollment limited to juniors or above or approval of the instructor.

430 Physics of Living Systems (3)
Introduction to basic biophysical processes occurring at the cellular level. Emphasis on energy transformations, and experimental techniques of biophysics. On demand. Prerequisites: Physics 230/280, 231/281, 232/282, 310; or approval of the instructor.

441 Radiation Dosimetry (3)
Introduction to the theory and methodology of determining exposure and dose from ionizing radiation. Topics include: radioactivity and radioactive decay processes; the interaction of ionizing radiation with matter; exposure, dose and KERMA; cavity chamber theory; and instrumentation for radiation and dose measurement. On demand. Prerequisites: Physics 104/184 or 232/282, or approval of the instructor. Laboratory/studio course fee will be assessed.
442 Radiation Biology (3)
Molecular effects of ionizing radiation and the relationship between molecular events and the acute and chronic effects of ionizing radiation. The human data base for estimates of the effects of low levels of ionizing radiation. Risk assessment of exposure to populations. On demand. Prerequisites: Physics 104/184 or 232/282, or approval of the instructor.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.

ASTRONOMY COURSES (ASTR)
101 Introduction to Astronomy - The Solar System (3)
Descriptive and conceptual introduction to the nature and origin of the solar system. Topics include models of the night sky, natural laws describing celestial objects and light, telescopes, the Earth-Moon system, planets and satellites, and the Sun. Spring semester. Prerequisite: UTC Math Placement level 20 or Math 106 equivalent. Recommended laboratory: Astronomy 181.

102 Introduction to Astronomy - Stars to Galaxies (3)
Nature of stars and galaxies; evolution and structure of the observable universe with emphasis on the experimental foundations of the science. Fall semester. Prerequisite: two years of high school algebra or Mathematics 106. Corequisite: Astronomy 182 laboratory or approval of the head of the department.

181 Astronomy Laboratory - The Solar System (1)
Optional laboratory to accompany Astronomy 101. Illustrates concepts of practical astronomy such as measuring planetary rotation rate and mass, using telescopes, deep sky observation session. Spring semester. Two hours per week. Corequisite: Astronomy 101 or approval of the head of the department. Laboratory/studio course fee will be assessed.

182 Astronomy Laboratory - Stars to Galaxies (1)
Laboratory to accompany Astronomy 102. Exercises and observations include learning to set up and use a telescope, spectroscopy, a deep sky observing session, a visit to Jones Observatory and Planetarium, photometry, and the Hubble Redshift-Distance relation. Fall semester. Two hours per week. Corequisite: Astronomy 102 or approval of the head of the department. Laboratory/studio course fee will be assessed.

199r Special Projects (1-4)
Individual or group studies. On demand. Prerequisites: approval of the instructor and head of the department. Cumulative limit of 4 hours.

300r Advanced Astronomy Laboratory (1)
Laboratory techniques in astronomy. Applications of spectroscopy, optics, modern photographic techniques, and photometry to observational astronomy. Use of the university’s observatory. On demand. Prerequisite: Astronomy 101/181 or 102/182 or approval of the instructor. Cumulative limit of 2 hours.

401 Solar System Astrophysics (3)
Application of basic physical laws to the problem of the origin and evolution of the solar system. Solar structure and energy sources, radiative transfer, the solar magnetic field, the interplanetary medium, celestial mechanics, comets, meteors, asteroids, the planets, and their satellites. On demand. Prerequisite: Physics 342 or approval of instructor.

498r Individual Studies (1-4)
On demand. Prerequisites: approval of the instructor and head of the department. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisites: approval of the instructor and head of the department.

GENERAL SCIENCE COURSES (GNSC)
111 The Physical Environment: Atoms to Galaxies (3)
Description of physical science from three viewpoints: its historical and sociological significance, the processes of science, and the present content of scientific fact and theory. Topics include physics, chemistry, geology, and astronomy. Prerequisite: 2 units of college preparatory mathematics or Mathematics 106, or approval of the head of the department. Corequisite: General Science 181 Laboratory, or approval of department head.

115 Science and Society (3)
Explores the interrelationship of science and society through discussion of scientific issues that are vitally important to our society and everyday life. Specific topics may vary in keeping with current issues, but are likely to include the technology revolution, the energy crisis and possible solutions, the importance of science to our economy and defense, the impact of politics and the economy on scientific research, and space science. On demand. Prerequisite: Two units of college preparatory Math or Math 106, or approval of department head.

181 General Science Laboratory (1)
Laboratory to accompany General Science 111. Studies involve error analysis, circuits, optics, nuclear radiation, heat and temperature, pH Measurements, astronomy measurements, identification of minerals, a geological field trip, and a visit to Jones Observatory. Every semester. Two hours per week. Corequisite: General Science 111 or approval of department head. Laboratory/studio course fee will be assessed.

Political Science, Public Administration and Nonprofit Management
Professor Fouad Moughrabi, Head

Students majoring in political science may earn a B.S. degree, choosing one of five concentrations: Public Policy and Administration, American Studies, International and Comparative Studies, Legal Studies or Public Administration and Nonprofit Management.

The department offers courses in six major subfields of the discipline: political behavior and methodology (200, 202, 203, 302, 303, 401r); political theory (213, 314, 316, 411r, 424); public law and administration (221, 223, 224, 320, 321, 322, 323, 421r, 422r, 423, 434r); American institutions and processes (233, 234, 330, 331, 333, 335, 336, 431r, 432, 436); international relations and comparative government (242, 244, 246, 341, 343r, 345, 346, 347, 348, 441r, 442r); and public administration and nonprofit management (PANM 205, 225, 301, 304, 320, 324, 325, 330, 340, 405, 410, 420, 450). Some students may also participate in the State Government Internship Program, the Metropolitan Government Internship Program, the National/International Government Internship Program, the Judicial Honors Internship, or the nonprofit internship.
Political Science (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses one, from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses other than Political Science. (6 hours)

Minor Requirement

All Political Science majors must complete a minor with a minimum 2.0 grade point average.

Major and Related Courses

Requirements depend upon the concentration declared.

2855 - Public Administration and Nonprofit Management Concentration
6 hours including Political Science 101 and Psychology 101
6 hours in Public Administration and Nonprofit Management at the 200 level including PANM 200 and 225
15 hours in Public Administration and Nonprofit Management at the 300 level including PANM 320, 325, 330, 340, and one of the following: PANM 301 or PANM 324 or POLS 331
18 hours in Administration and Nonprofit Management courses at the 400 level including PANM 405, 410, 420, 450, 470
Related course: English 279 or 300

2853 - Public Policy and Administration Concentration
6 hours Political Science at the 100 level including 101 and one course from Political Science 102 or 103
12 hours in Political Science at the 200 level, including Political Science 200, 225, and 6 hours from Political Science 202, 203, 213, 221, 233, 234, 244
9 hours in Political Science at the 300 level including Political Science 324 and 6 hours from 320, 322, 330, 333, 336, 345, 348, 350
15 hours in Political Science courses at the 400 level including at least 6 hours from the Public Policy and Administration approved by the departmental advisor and no more than 6 hours from Political Science 461r, 462r, 463, 464, 471r, 472, 473r, 474, 475, 476, 481, 495r, 497r, 498r or 499r
Related courses (12 hours):
English 279 or 300 or Political Science 495;
Economics 101; History 203 and 204

2851 - International and Comparative Studies Concentration
9 hours including Political Science 101, 102, 200
9 hours in Political Science courses at the 200 level (excluding 200). Must include at least 3 hours from Political Science 242, 244 or 246
9 hours in Political Science at the 300 level with at least 6 hours from 341, 343r, 345, 346, 347
15 hours in Political Science courses at the 400 level including at least 6 hours of International and Comparative Studies courses approved by the departmental advisor and no more than 6 hours from Political Science 461r, 462r, 463, 464, 471r, 472, 473r, 474, 475, 476, 481, 495r, 497r, 498r or 499r
Related courses (20 hours):
English 279 or 300 or Political Science 495;
2 years of one foreign language at the college level;
Economics 101

2852 - Legal Studies Concentration
9 hours including Political Science 101, 102, 200
9 hours in Political Science courses at the 200 level (excluding 200). Must include Political Science 221.
9 hours in Political Science courses at the 300 level with at least 6 hours from 320, 321, 322, 323
15 hours in Political Science courses at the 400 level including at least 6 hours of courses from the public law subfield approved by the departmental advisor and no more than 6 hours from Political Science 461r, 462r, 463, 464, 471r, 472, 473r, 474, 475, 476, 481, 495r, 497r, 498r or 499r
Related courses (12 hours):
English 279 or 300 or Political Science 495;
Economics 101 and 102; Philosophy 211

Minimum of 2.0 in all POLS and PANM courses
Minimum of 19 hours of 300 and 400 level courses
Electives to complete 120 hours.
See page 67 for additional requirements.

4642 - Political Science Minor
18 hours including Political Science 101, 102 and 12 hours electives in Political Science. At least nine hours must be at the 300-400 level with no more than three hours from 461r, 462r, 463, 464, 471r, 472, 473r, 474, 475, 476, 481, 498r and 499r.
Minimum 2.0 average in minor.

4638 - Public Administration and Nonprofit Management Minor
9 hours including PANM 225, 330, 340.
9 additional hours Public Administration and Nonprofit Management course work with at least 6 hours at the 400 level.
Minimum 2.0 average in the minor.

POLITICAL SCIENCE COURSES (POLS)

101 American Government (3)
The foundations, institutions, processes and policies of American national government with attention to the Constitution and such topics as elections, political and civil rights and liberties, federalism, public policy, public opinion, political culture, interest groups, and the role of citizens in governance. Every semester.

102 World Politics (3)
The evolution, nature, and operation of the contemporary world political system with attention to the behavior of states, the impact of ideology, culture, and domestic politics on foreign policy, the behavior of transnational political and economic actors, the effects of international competition, and the impact of international institutions on promoting cooperation. Every semester.
103 Controversies in Public Policy (3)
Contemporary policy issues in American politics with attention to current problems, proposed solutions, and competing viewpoints.

104 Politics, Culture and Society: Non-Western Views (3)
A study of culture, politics, and society in the non-western world with emphasis on significant intellectual contributions, modes of inquiry, value systems, structures of belief and practices of everyday life.

199r Special Projects (1-4)
Individual or group projects. Every semester.

200 Research Methods (3)
Basic models and skills for research in political science and public administration. Required for political science majors. Prerequisite: One course from Mathematics 210, Psychology 201/204, Sociology 250, or PANM 205. May be registered as PANM 200. Credit not allowed in both POLS 200 and PANM 200.

202 Political Behavior (3)
Political attitudes, beliefs, and behaviors; their sources and effects. Emphasis primarily on the United States with selected examples from Western European democracies. On demand.

203 Public Opinion (3)
Sources, content, and impact of public opinion on the political process. On demand.

213 American Political and Constitutional Thought (3)
A study of the major political and constitutional ideas that have influenced the development of the United States since its founding. On demand. Recommended for prelaw majors.

221 Introduction to Judicial Process (3)
An examination of the role, operation and decision-making processes of the U.S. Supreme Court and lower federal courts. On demand. Recommended for pre-law majors.

224 Justice and the American Trial Process (3)
An in-depth analysis of the modern trial process in the United States. Emphasis on assessing the weak points of the American judicial system and on preparing an actual mock trial case for argument. Recommended for pre-law majors.

225 Introduction to Public and Nonprofit Administration (3)
Introduction to public and nonprofit administration, including its organization, basic processes, history, theoretical foundations, political context, and role in government. Provides a foundation for further study of public administration and nonprofit management. May be registered as PANM 225. Credit not allowed in both POLS 225 and PANM 225.

233 State and Local Government and Politics (3)
Tennessee state and local government and politics with comparisons to government and politics in the other states. On demand.

234 The Presidency (3)
The nature of the presidency as an institution. Presidential decision-making and relations with other branches of government. On demand.

242 International Relations (3)
An examination of the theoretical, historical and behavioral causes of war and peace. Focus on the role of power, sovereignty, and international law on world politics. On demand.

244 Comparative Public Policy (3)
The formation and implementation of social welfare policies in developed and developing nations. On demand.

246 Comparative Latin American Politics (3)
An introduction to the study of Latin American politics with emphasis on alternative theoretical explanations for patterns of development involving the roles of elected leaders; the Church; military and economic elite; and workers and peasants.

302 Political Psychology (3)
Psychological bases for political action. On demand.

303 Politics and Communication (3)
Propaganda and other means of political and social control. On demand.

314 Contemporary Political Ideas (3)
The competing ideologies of the 20th century with emphasis on contemporary political and social thought including Marxism and Fascism. On demand.

316 Theories of Politics (3)
An introduction to such theoretical concerns of Western political science as sovereignty, rights, justice, property, liberty, and equality. Readings from Plato, Aristotle, Locke, Montesquieu, Mill and Marx. On demand.

320 Philosophy of Law (3)
A study of law and legal reasoning with emphasis on the nature and sources of law, moral theory and its relation to law, definitions of rights and justice, and the nature of legal and moral obligation. Recommended for prelaw majors.

321 American Constitutional Law (3)
Case studies of key Supreme Court decisions affecting the distribution of power in American society. On demand. Recommended for prelaw majors.

322 Civil Liberties (3)
Case studies of key Supreme Court decisions affecting the rights and freedoms of the individual in American society. On demand. Recommended for prelaw majors.

323 Law and Politics (3)
Lawyers, judges, police, and the political process. On demand. Recommended for prelaw majors.

324 Public Policy (3)
An examination of the public policy processes with an emphasis on actors, formation, implementation, evaluation, and cross-disciplinary theories of public policy. On demand. May be registered as PANM 324. Credit not allowed in both POLS 324 and PANM 324.

330 Urban Public Policy (3)
An introduction to the different approaches, ideas and programs advanced to address public policy urban problems. On demand.

331 Urban Politics (3)
An examination of political competition and relations among groups, institutions and classes in urban areas. Particular attention is given to how economic and fiscal concerns impact the political process. On demand.

333 Political Parties and the Election Process (3)
An examination of America's two-party system, political machines, third parties, modern campaign techniques, electoral behavior, and election administration. On demand.

335 Congress (3)
The contemporary Congress. The roles of congressmen and women, the distribution of power within Congress, relations with other branches of government, and prospects of reform. On demand.

336 Women in Politics (3)
An examination of the role and status of women in the American political system. Special emphasis given to the impact of selected public policies upon women. On demand. May be registered as Women's Studies 336. Credit not allowed in both Political Science 336 and Women's Studies 336.

341 Inter-American Relations (3)
Historical and contemporary relations between the United States and Latin America with emphasis on U.S. hegemonic rule; economic relations; the war on drugs; national security issues; democracy and human rights; and the impact of Latin America on U.S. politics and policy.

343r Comparative Government and Politics (3)
The study of the governmental structures, processes, and ideologies of different regions of the world, comparing their political, economic, and social policies. May be repeated to focus on different regions of the world. On demand.
345 American Foreign Policy (3)
The basic foreign policy problems confronting the United States. On demand.

346 Comparative Politics: China (3)
A study in comparative culture, history and politics as applied to the current government in the People's Republic of China with an emphasis on the factors which have shaped the government and politics of China since World War II. On demand.

347 Politics of the Middle East (3)
A study of the contemporary politics in the Middle East with emphasis on the evolution of the Arab State System after World War II, the creation of Israel, the Arab-Israeli and other regional conflicts, and the peace process from Camp David on.

348 Politics of Immigration (3)
An examination of immigration policy in the United States with an emphasis on historical patterns, policy debates, legal ramifications, and rules and regulations of the Immigration and Naturalization Service.

350 Technology, Politics and Society (3)
An examination of the impact of technology on politics and society, with special focus on public policy shifts resulting from changes in technology. On demand.

401r Advanced Topics in Political Behavior (3)
Selected topics in political behavior. May be repeated once. On demand. Prerequisite: Political Science 200 or approval of instructor.

411r Advanced Topics in Political Theory (3)
Selected topics in political theory. May be repeated once. On demand. Prerequisite: Political Science 200 or approval of instructor.

421r Special Topics in Public Law (3)
Selected topics in public law. On demand. Recommended for pre-law majors. Prerequisite: Political Science 200 or approval of instructor.

422r Special Topics in Public Administration (3)
Selected topics in public administration. On demand. Prerequisite: Political Science 200 or approval of instructor.

423 Crime and Punishment (3)
An examination of the nature and implications of the major philosophies of punishment with emphasis on their ramifications for assessing the legitimacy of capital punishment. Recommended for prelaw majors. Prerequisite: Political Science 200 or approval of instructor.

424 Jefferson (3)
An examination of the political and social ideas of Thomas Jefferson with attention to their influence on American politics and public policy. Prerequisite: Political Science 200 or approval of instructor.

425 Policy Issues in Aging (3)
An introduction to the political, economic, social and health policy questions raised by the phenomenon of an aging population. On demand. Prerequisite: Political Science 200 or approval of instructor.

426 Philosophy of Punishment (3)
An examination of the major philosophies of punishment with attention to principles of sentencing and to three strikes legislation. Prerequisite: Political Science 200 or approval of instructor.

427 Religion, Liberty, and the Law (3)
An examination of the theory and practice of religious liberty in the United States with attention to theories of toleration and religious liberty and to key free exercise cases decided by the Supreme Court of the United States. Prerequisite: Political Science 200 or approval of instructor.

428 First Amendment (3)
An examination of the case law, rules and regulations emanating from the specifications of the first amendment. Prerequisite: Political Science 200 or approval of instructor.

431r Advanced Topics in American Institutions and Processes (3)
Selected topics in American institutions and processes. On demand. Prerequisite: Political Science 200 or approval of instructor.

432 Southern Politics (3)
A study of the South's role in national politics with an emphasis on the demographic, economic, social and political forces which give shape to the political values and partisan preferences of the region's electorate. On demand. Prerequisite: Political Science 200 or approval of instructor.

434 Politics of Child Care (3)
An examination of child care policy in the United States and its implications for public policy making in general. Prerequisite: Political Science 200 or approval of instructor. May be registered as Women's Studies 434. Credit not allowed in both Political Science 434 and Women's Studies 434.

436 Presidential Leadership (3)
An examination of the dynamics of presidential leadership in domestic and foreign affairs with emphasis on historical examples of executive leadership in times of crisis in the post-World War II period. Prerequisite: Political Science 200 or approval of instructor.

441r Advanced Topics in International Relations and Foreign Policy (3)
Selected topics in international relations and foreign policy. May be repeated once. On demand. Prerequisite: Political Science 200 or approval of instructor.

442r Advanced Topics in Comparative Government (3)
Selected topics in comparative government. On demand. Prerequisite: Political Science 200 or approval of instructor. May be repeated once.

461r, 462r, 463, 464 State Government Internship Program (3)
Internship conducted during the legislative session in government and legislative offices in Nashville. Spring semester. No more than 6 credit hours may apply toward the major degree requirements in the department. Prior approval of instructor.

471r, 472 Metropolitan Government Internship Program (1-3)
Internship conducted in various governmental offices in Chattanooga. Fall semester. Prerequisites: minimum 2.75 cumulative grade point average and prior approval of instructor. No more than 6 credit hours may apply toward the major degree requirements in the department.

473r, 474, 475, 476 National/International Government Internship Program (3)
Internship conducted in various national and international government offices, departments, or agencies. Prerequisites: minimum 60 earned hours, 2.75 grade point average, and prior approval of instructor. No more than 6 credit hours may apply toward major degree requirements in the department.

481 Judicial Honors Internship (3)
Internship conducted in the office of a local judge. Student applicants (any major) must have earned at least a 3.0 grade point average, completed 60 hours of course work and taken and passed either Political Science 221 or Political Science 321. Selection by a Political Science Department committee.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Enrollment limited to students with a 3.0 average in the major. On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.
PUBLIC ADMINISTRATION AND NONPROFIT MANAGEMENT COURSES (PANM)

199r Special Projects (1-4)
Individual or group projects. Every semester. Prerequisite: approval of the department head. Maximum credit 4 hours.

200 Research Methods (3)
Basic models and skills for research in political science and public administration. Required for political science majors. Prerequisite: One course from Mathematics 210, Psychology 201/204, Sociology 250, or PANM 205. May be registered as POLS 200. Credit not allowed in both PANM 200 and POLS 200.

205 Introduction to Statistics for Public Administration and Nonprofit Management (3)
A course on descriptive and inferential statistical analysis emphasizing applications in health and human services. Students will have the opportunity to interpret, develop and use statistical and probabilistic models of phenomena in health and human services. Statistical techniques will be practiced (such as descriptive, correlation and regression analysis, probability concepts, analysis of variance and power analysis) illustrating how statistics affects our understanding of social phenomena. Prerequisite: UTC Mathematics Placement Level of 20 or equivalent.

225 Introduction to Public and Nonprofit Administration (3)
Introduction to public and nonprofit administration, including its organization, basic processes, history, theoretical foundations, political context, and role in governance. Provides a foundation for further study of public administration and nonprofit management. May be registered as POLS 225. Credit not allowed in both PANM 225 and POLS 225.

301 Social Change and Social Policy (3)
A cross-disciplinary examination of basic theories of social change. Analysis of social indicators as determinants of social policy for effecting social reform in the United States. Fall semester.

304 Gender in the Workplace (3)
The impact of gender in the workplace. A close study of cultural factors as they pertain to modern attitudes, beliefs, and practices concerning working men and women. Formerly Human Services 204. Prerequisite: English 122 or equivalent. May be registered as Women’s Studies 304. Credit not allowed in both PANM 304 and Women’s Studies 304.

320 Public Administration and Nonprofit Management Supervision (3)
Concepts and techniques appropriate to supervision in human services and governmental agencies and organizations. Fall semester. Prerequisite: PANM 200 or approval of instructor.

324 Public Policy (3)
An examination of the public policy process with an emphasis on actors, formation, implementation, evaluation, and cross-disciplinary theories of public policy. On demand. May be registered as POLS 324. Credit not allowed in both PANM 324 and POLS 324.

325 Legal Aspects of Nonprofit Management (3)
The course examines the emerging legal issues facing nonprofit agencies by studying pertinent constitutional, statutory and case law. Moreover, students will be exposed to case studies to assist them in connecting law and agency practice. Fall semester. May also be registered as LAS 325. Credit not allowed in both PANM 325 and LAS 325. Formerly Human Services 425.

330 Public Administration and Nonprofit Management Program Planning (3)
Principles of agency and program planning. Consideration of the role or community needs assessments. Emphasis on skills leading to basic competence in designing and implementing human services. Prerequisite: PANM 200 or approval of instructor.

340 Public Administration and Nonprofit Management Program Evaluation (3)
Introduction to the concepts and practices of program evaluation. Emphasis on program evaluation as a research process. Hands-on experience with the techniques, procedures, computer applications, and conclusions and reports of evaluation. Spring semester. Prerequisite: PANM 330 or approval of instructor.

405 Interpersonal Skills Laboratory (3)
A supervised laboratory experience designed to enhance the student’s development of communication skills, interpersonal functioning, and the understanding of group processes. Every semester. Prerequisite: junior or senior standing.

410 Fiscal Management (3)
This course is designed to acquaint students with the basic concepts of budgeting and fiscal management needed for the successful management of a public or nonprofit agency. Fall semester. Prerequisites: PANM 200 and 340 or approval of instructor.

420 Resource Development (3)
An examination of various ways to increase the resource base of public and nonprofit organizations. Emphasis is on generating additional funds through effective use of available resources both internal and external to the organization. Spring semester. Prerequisite: PANM 410 or approval of the instructor.

450 Seminar in Public Administration and Nonprofit Management (3)
Administrative procedure, processes, planning, and decision-making in government and nonprofit settings. Spring semester. Prerequisites: PANM 225, 320, 330, 410, or approval of instructor.

470 Internship (6)
Supervised internship in a public or nonprofit organization related to a student’s academic and career goals. Students must apply to the PANM faculty for admission to field placement. The application for admission must be completed by October 15 of the semester prior to enrollment in PANM 470. Criteria for admission are a minimum 2.0 overall grade point average, a 2.5 grade point average in all PANM courses, senior standing, and recommendation of the faculty. Students seeking internships will be expected to adjust their schedules to accommodate the work environment and hours of the host agency. Spring semester. Prerequisites: PANM 410. Graded on a satisfactory/no credit basis.

495r Departmental Thesis (1-3 hours per term; 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Psychology

Professor Paul Watson, Head

The Department of Psychology has developed a curriculum that meets the needs of a wide spectrum of interests. The degree options allow for choosing pre-professional or direct work entry, both in the context of a strong liberal arts background. The focus is on developing reading, reciting, and critical thinking while learning the context of psychology. It is designed, moreover, to provide a broad but intensive educational experience for students in other fields who have an interest in particular areas of psychology which may bear upon other career plans or goals. The department offers both undergraduate and graduate degrees. Requirements for the B.A. and B.S. degrees follow.
1810 - Psychology (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: 2 approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: Psychology 201/204 (4 hours)*

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines other than Psychology (6 hours)

Major and Related Courses

34 hours psychology including Psychology 101, 201 or equivalent†, 204 and one course from Psychology 412, 460 or 461

One computer literacy course from Business Management 100, Computer Science 110, 150

One oral communication course from Theatre and Speech 109, 110, 209 or University Honors 214

Methods courses involving processes of analysis, interpretation, and research in the Liberal Arts to include one course from each of the two following lines:
1. Philosophy 211, 345, 348, 364
2. English 350, 400

Completion of a minor in one of the Liberal Arts (English, Fine Arts, Philosophy, History, Foreign Languages, or Religion) with a minimum 2.0 grade point average. The Philosophy or English methods courses can be applied toward the minor.

No more than 6 hours in one psychology course labeled “s” and no more than 9 hours of all psychology courses labeled “s” will count towards the 34 hours required for the major.

2.0 average in all psychology courses.

Minimum of 39 hours of 300 and 400 level courses

Electives to complete 120 hours.

See page 67 for additional requirements.

† An approved statistics course taken from another department or institution can satisfy this requirement if a grade of C or better was earned. In these circumstances, Psychology 204 must still be completed in order to meet degree requirements.

* Also satisfies requirement in the major.

# Also satisfies general education requirement.

2810 - Psychology (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: Psychology 201/204 (4 hours)*

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines other than Psychology (6 hours)

Major and Related Courses

One computer literacy course from Business Management 100, Computer Science 110, 150

One oral communication course from Theatre and Speech 109, 110, 209 or University Honors 214

35 hours of psychology including:

101, 201 or equivalent†, 204, 202 and one course from 412, 460 or 461

Two courses from each of the following lines:
1) Psychology 311, 312, 313, 314, 345
2) Psychology 221, 241, 308, 331, 448

One course from the following line:
3) Psychology 309, 345, 456, 407, 425, 427

No more than 6 hours of all psychology course labeled “s” will count toward the 35 hours required for the major.

Either Option A or Option B below:

Courses fulfilling the options may not be used to fulfill other requirements, including general education requirements.

Option A

An established minor in another department.

Option B

18 hours from one of the areas of academic concentration listed below. At least three of these courses (minimum of 9 hours) must be from the 200 level or above.

1. Natural Science Concentration: astronomy, biology, chemistry, environmental science, geology, physics
2. Social Science Concentration: criminal justice, economics, political science, sociology/anthropology, social work
3. Organizational Concentration: communication, legal assistant studies, management, marketing, public administration and nonprofit management
4. Education Concentration: education, health and human performance
5. Basic and Applied Mathematics Concentration: computer science, mathematics, engineering (including all rubrics)
6. Liberal Arts Concentration: English, fine arts, foreign language, history, philosophy, religion
7. Health Care Concentration: biology, nursing, physical therapy

2.0 average in psychology courses

Minimum of 39 hours of 300 and 400 level courses

Electives to complete 120 hours

See page 67 for additional requirements.

† An approved statistics course taken from another department or institution can satisfy this requirement if a grade of C or better was earned. In these circumstances, Psychology 204 must still be completed in order to meet degree requirements.

* Also satisfies requirement in the major.

# Also satisfies general education requirement.

4645 - PSYCHOLOGY MINOR

18 hours psychology including Psychology 101 and either 412, 460 or 461; 9 hours must be upper level.

Minimum 2.0 average in the minor.

PSYCHOLOGY COURSES (PSY)

100 Psychology Study Skills Laboratory (1 hour institutional credit)

Intensive study of introductory psychology with demonstrations, computer simulations, and audiovisual study aids. Focus on study skills and behaviors, derived from psychological research, and applied to Psychology 101 lecture and textbook material to enhance learning. Fall and spring semesters. Credit not applicable toward any degree. Co-requisite: Psychology 101.

101 Introduction to Psychology (3)

Introduction to contemporary psychology as a basic and applied social science; analysis of biological, mental, and social determinants of human behavior from
the standpoint of psychological theory, research, and practice. Every semester. May not be taken for credit if Psychology 103 has been taken previously.

199r Special Projects (1-4)
Individual or group projects. Every semester. Maximum credit 4 hours.

201 Research Methodology: Introductory Statistics in Psychology (3)
Descriptive and inferential statistics with computer analysis of data from psychological and other social sciences. Traditional and modern descriptive techniques, correlation and regression analysis, probability concepts, inferential techniques on means through analysis of variance, power analysis, and selected nonparametric techniques are presented. The use of state-of-the-art computer programs for analysis of data is emphasized in the corequisite laboratory. Every semester. Prerequisite: UTC Math Placement level 20 or Mathematics 106; Psychology 101 or equivalent. Corequisite: Psychology 204.

202 Research Methodology: Laboratory and Field Research Techniques (4)
General introduction to research methods in psychology with an emphasis on basic strategies for empirically identifying causal and correlational relationships. Topics will include laboratory and field techniques, quasi-experimental and non-experimental models, and the ethical issues involved in research. Every semester. Lecture 3 hours, laboratory 1 hour. Corequisite: Psychology 202 laboratory. Prerequisites: Psychology 101, 201 or equivalent, and 204.

204 Statistics in Psychology Laboratory (1)
Tutorial and laboratory exercises to help students master use of professional quality computer software to solve statistical problems. Prerequisites: UTC Math Placement Level 20 or Mathematics 106. Prerequisite or Corequisite Psychology 201 or equivalent.

221 The Psychology of Child Development (3)
Infancy through childhood. Concepts of development and functioning derived from both research and clinical observation. Emphasis on cognitive, social, and emotional development. Child-rearing applications. Every semester. Prerequisite: Psychology 101 or equivalent. Credit not allowed in both Education 203 and Psychology 221.

222 The Psychology of Adolescence and Adulthood (3)

223 Psychology of Aging (3)
Theoretical and empirical introduction to the psychological development of older adults. Discussion of cognition, personality, social behavior, and sensorimotor changes as they evolve at the adult end of the life span. Examination of psychological issues in adult coping, death and dying, and work and family roles. On demand. Prerequisite: Psychology 101 or equivalent.

241 Psychology of Individual Differences (3)
Develops an understanding of the most difficult aspect of human behavior to comprehend: differences. Investigating the three major causes of differences. Looking at the nature of these differences in temperament, intelligence, personality, interest and pathologies. Learning to change from judging to valuing diversity. Exploring the implications the course perspective has for personal, educational, work and political choices/policies. Every semester.

242 Psychology of Black Experience (3)
Impact of cultural differences from a psychological perspective. Principles, theories, and research in psychology applied to black experience. Differences in socialization, personality, and social processes. Topics include intelligence, racial identity, and psycholinguistics. Every semester.

308 Principles of Abnormal Psychology (3)
A biosocial approach to theories of causation, development, and symptomatic behavior in emotional disorder; theoretical bases of the various therapies and of positive means of prevention. Every semester. Prerequisite: 6 hours psychology.

309 Contemporary Psychotherapies (3)
A comprehensive review of psychotherapeutic techniques practiced to help alleviate individuals’ behavioral, cognitive, and emotional disabilities. Reviews practices derived from the behavioral, cognitive, humanistic, psychodynamic perspectives. In addition, the course emphasizes the empirical research demonstrating the efficacy of these techniques. Prerequisite: Psychology 308.

311 Learning and Motivation (3)
Study of the effective conditions for various learning phenomena; roles of motivation, reinforcement, and punishment in learning. Prerequisite: Psychology 101, 201 or equivalent, 202, and 204 or approval of instructor.

312 Sensation and Perception (3)
Study of sensory and perceptual processes; examination of the sense organs and related neurophysiological mechanisms, and the necessary stimulus conditions for particular perceptual phenomena. Laboratory. Spring semester. Prerequisite: Psychology 101, 201 or equivalent, 202, and 204 or approval of instructor.

313 Cognitive Processes (3)
Examination of the ways in which people process information; with an emphasis on attention, memory, problem-solving, and language. Every semester. Prerequisite: 101, 201 or equivalent, 202, and 204 or approval of instructor.

314 Physiological Psychology (3)
The study of the physiological bases of behavior with emphasis on the functional nervous systems of the brain which mediate behavior. Laboratory designed to familiarize students with basic neuroanatomy and neurophysiological techniques used in the investigation of brain functions and behavior. Fall semester. Prerequisite: Psychology 101 or 6 hours of college biology courses, or approval of instructor.

315 Primate Behavior (3)
A comparative survey of the ecology, social behavior, and cognitive ability of non-human primates, especially monkeys and apes, with emphasis on the evolutionary factors that have shaped primate behavior. Prerequisites: Any of the following: Anthropology 152, 207, Psychology 101, or approval of instructor. May be registered as Anthropology 315. No credit in both Psychology 315 and Anthropology 315.

331 Social Psychology (3)
Survey of the general concepts and research areas in social psychology. Emphasis upon the interactions between the individual and society with consideration of such topics as attitudes, prejudices, conformity, deviance, socialization, and interpersonal attraction. Every semester. Prerequisite: 6 hours of psychology or sociology. May be registered for as Sociology 331. Credit not allowed in both Psychology 331 and Sociology 331.

340 Applied Developmental Psychology (3)
An in-depth examination of processes among 1) processes in cognitive, language, social, and emotional development and 2) environmental experiences of children, form birth through adolescence. Emphasis on analysis of the implications of these interactions for the welfare of current and future generations of children. Prerequisites: Psychology 221 or equivalent.

345 Psychological Tests and Measurements (3)
Principles of psychological measurements including reliability, validity, errors of measurement, techniques of test construction, and problems in assessment and prediction. Laboratory use of selected tests. Fall semester. Prerequisites: Psychology 101, 201 or equivalent, 202, and 204 or approval of instructor.

360 Ape Language (3)
A review and critical analysis of sign language, speech, computer language, and other symbol systems with great apes and other intelligent animals. Examines the origins of culture, language, and intelligence in humans, and the ethical treatment of great apes and other intelligent animals in nature and under human care. Prerequisites: Any of the following: Anthropology 152, 207, Psychology 101, or approval of instructor. May be registered as Anthropology 360. No credit in both Psychology 360 and Anthropology 360.

365 Medicine and Disease: A Cross-Cultural Perspective (3)
Cross-cultural study of medicine and disease; the relationship between the development of medicines and medical care, including non-Western medical systems, and cultural beliefs, social systems, ecological adaptions, and cultural changes of human groups. May be registered as Anthropology 365 or Sociology 365. Credit allowed in only one of the three courses.
401 Intermediate Statistics in the Behavioral Sciences (3)
The use of a popular statistical package for the conduct of statistical analyses in psychology. Applications include common descriptive and inferential techniques, the analysis of variance and multiple regression. On demand. Prerequisite: Psychology 201 or equivalent and 204.

406 Industrial/Organizational Psychology (3)
Introduction to the study of organizations with emphasis upon personnel selection, criteria, and training. Special consideration of work motivation, job satisfaction, and the role of the organization in behavior. Every semester. Prerequisite: Introductory statistics course.

407 Professional Psychology (3)
Role models of the psychological practitioner in community settings. Discussion of the foundations, methods, ethics, legal issues, and relationships with other specialists involved in professional psychology. On demand. Prerequisite: 9 hours of psychology or approval of instructor.

410r Advanced Topics in Personality Research (3)
Intensive study of selected topics of current theoretical and research interest in personality, abnormal psychology, and individual differences as they relate to personality. On demand. Prerequisite: Psychology 201 or equivalent; 6 hours of upper division psychology, including 448; and approval of the instructor.

412 Advanced Seminar for Psychological Processes (3)
A comprehensive review of the field as summary experience, especially for senior major students planning to enter graduate study. On demand. Prerequisite: 18 hours of psychology or by approval of instructor.

421 Advanced Developmental Psychology (3)
An in-depth investigation of particular topics in human development, childhood through high school years. Focus on research methodology and findings in relation to social or cognitive development. On demand. Prerequisites: Psychology 101 or equivalent, 221 or 222, or equivalent.

424 Applied Social Research (3)
Examination of the various issues faced by applied social researchers when developing a framework for conducting the research and when determining which data collection and analysis methods are most suitable given the research objectives and needs of the client. Focus on both quantitative and qualitative methods, but with special emphasis on the latter. Every second semester. Prerequisite: Sociology 314 or Psychology 202 or Political Science 200 or other approved course in social research. May be registered as Sociology 424. Credit not allowed in both Psychology 424 and Sociology 424.

425 Psychology and Law (3)
A comprehensive review of how psychological theory and research influences social policy and law. Topics include, but are not limited to eyewitness memory, lie detection, jury behavior and selection, trial process, death penalty, children in the court, and the punishment and rehabilitation of criminals. Emphasis on psychologists' use of the scientific method to understand various phenomena related to legal processes. Prerequisites: 6 hours of behavioral and social sciences; Mathematics 210 or Psychology 201 or equivalent; junior standing.

427 Psychology and Contemporary Life (3)
Examination of how psychological research and perspectives are relevant to an increasingly diverse array of issues in contemporary life. Illustration of that relevance by focusing on a specific topic that will include, but will not be limited to the psychology of money, film, sports, health, multiculturalism, and positive functioning. Prerequisites: 6 hours of behavioral and social sciences, Mathematics 210 or Psychology 201, or approval of instructor.

431 Advanced Social Psychology (3)
Intensive treatment of selected research areas in social psychology. Emphasis upon the interrelationship between current theoretical perspectives and appropriate methodological procedures. On demand. Prerequisite: 331 or equivalent. May be registered as Sociology 431. Credit not allowed in both Psychology 431 and Sociology 431.

448 Theories of Personality (3)
Survey of basic theories of personality including the psychoanalytic, sociocultural, factor analytic, the biosocial, and the phenomenological. Strongly suggested for guidance majors. Prerequisites: 6 hours of psychology.

451 Psychology of Women (3)
Analysis of empirical data and theoretical viewpoints concerning the psychological development of women. Psychological effects of sex roles, achievement motivation, and abilities of women; models of socialization practices, personality development, and stages of adjustment. Fall semester. Prerequisite: 6 hours of psychology and junior standing. May be registered as Women's Studies 451. Credit not allowed in both Psychology 451 and Women's Studies 451.

456r Individual Practicum (1-3)
Supervised contact program in community schools or social service agencies. Academic and personal development sought in the individual or small group activities conducted in this program. An activities log and final written report required. Every semester. Prerequisites: 6 hours of upper division psychology and approval of instructor. Maximum credit 6 hours. Course graded on a satisfactory/no credit basis.

460 Systems of Psychology (3)
The historical development, major theses, elements of strength, shortcomings, and current trends of the principal schools of psychological thought. Reading and discussion course for psychology majors and graduate students. Every semester. Prerequisites: 9 hours of psychology.

461 Philosophical Psychology (3)
Critical analysis of philosophical aspects of current systems of psychology. Particular focus upon assumptions and consequences of various modes of explanation and description. Fall semester.

470 Psychology of Religion (3)
Analysis of empirical data and psychological theories involving religious beliefs, practices, and experiences. On demand. Prerequisites: 6 units psychology or philosophy-religion. May be registered for as Religion 470. Credit not allowed in both Psychology 470 and Religion 470.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

499r Group Studies (1-4)
On demand.

Sociology, Anthropology, and Geography:: 143

Any student in good standing with the University may be admitted to the major program. Students may earn either a B.A. degree or a B.S. degree with concentrations in either sociology or anthropology. In addition to the major programs, students may earn a minor in sociology, anthropology, or geography.

To enhance opportunities for the anthropology major and to provide services to the community, the University established the Institute of Archaeology in 1976. The Institute is an instructional and research facility located in Brock Hall that specializes in archaeological investigations of prehistoric and historic sites in the Southeast. Students may use the collections and archives of the institute for academic projects. By enrolling in specified
courses, students may also engage in archaeological survey and excavation, the analysis of archaeological data, the conservation of artifacts, and the organization of museum collections.

The department’s Center for Applied Social Research also offers students the opportunity to participate in applied research projects.

Sociology and Anthropology:

Anthropology; Sociology (B.A.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course; Sociology 250* recommended (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humans and Fine Arts: Two approved humanities and fine arts courses, other than Anthropology, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations other than Anthropology OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines other than Sociology and Anthropology (6 hours)

Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average.

Major and Related Courses
One approved intensive writing course; English 279 recommended.

Completion of one of following concentrations:

1888 - Anthropology
33 hours including Anthropology 152, 208, 207 or 210, 211, 302, 314 and 414; 3 hours of approved anthropology field and laboratory courses; 3 hours of sociology; additional hours of anthropology electives to complete concentration.

1892 - Sociology
33 hours including Sociology 151, 312, 313, 314, 414; Anthropology 152 or 208; plus 15 hours of sociology/anthropology electives of which at least 9 hours are in sociology at the 300-400 level. These 15 hours must include at least 3 hours selected from Sociology 305, 307, 345.

2.0 average in all anthropology and sociology courses.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.

Sociology and Anthropology:

Anthropology; Sociology (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (Sociology 250* recommended) (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humans and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations other than Anthropology OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines, other than Sociology and Anthropology (6 hours)

Major and Related Courses
One approved intensive writing course; English 279 recommended.

Completion of one of following concentrations:

2880 - Anthropology
33 hours including Anthropology 152, 208, 207 or 210, 211, 302, 314 and 414; 3 hours of approved anthropology field and laboratory courses; 3 hours of sociology; additional hours of anthropology electives to complete concentration.

2892 - Sociology
33 hours including Sociology 151, 312, 313, 314, 414; Anthropology 152 or 208; plus 15 hours of sociology/anthropology electives (at least 9 hours at 300-400 level) with 12 of the 15 hours in sociology. These 15 hours must include at least 3 hours selected from Sociology 305, 307, 345.

2.0 average in all anthropology and sociology courses.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.

SOCIeLOGY, ANTHROPOLOGY, AND GEOGRAPHY MINORS

4660 - Sociology
A student may obtain a minor in sociology by successfully completing Sociology 151 plus 15 other hours in sociology, at least 9 of which are at the 300 or 400 level.
Total: 18 hours.
Minimum 2.0 average in all courses attempted for the minor.

4510 - Anthropology
A student may obtain a minor in anthropology by successfully completing Anthropology 152; 6 hours from Anthropology 207, 208, 210 and 211; and 9 hours of anthropology at the 300 or 400 level. Total: 18 hours.
Minimum 2.0 average in all courses attempted for the minor.

4570 - Geography
A student may obtain a minor in geography by successfully completing Geography 101 and 104 plus 12 other hours in geography, at least 9 of which are at the 300 or 400 level. Total: 38 hours.
Minimum 2.0 average in all courses attempted for the minor.

ANTHROPOLOGY COURSES (ANTH)

152 Introduction to Anthropology (3)
Cultural and biological development of human society as interpreted by the anthropologist from the remains of prehistoric life and the culture of contemporary humans. Every semester.

199r Special Projects (1-4)
Individual or group projects. On demand. Prerequisite: approval of Department Head.

207 Physical Anthropology (3)
An examination of the biological origins and current diversity of humans and their closest primate relatives (monkeys and apes). This is achieved through the scientific study of evolution, particularly human evolution, using genetics, fossils, animal studies and data on human variation through the world. Every semester. Lecture 3 hours.
208 Cultural Anthropology (3)
The comparative study of culture, social organization, economics, government, education, religion, language, and arts in various primitive and present societies; cultural integration and change. Every semester.

210 Anthropological Linguistics (3)
A first course in the nature of language and the analysis of linguistic structures with special reference to non-western languages. Fall semester.

211 Introduction to Archaeology (3)
The study of human prehistoric and historic past as derived from the archaeological record. Basic techniques, methods, theoretical approaches, and major conclusions of archaeological investigation. Every semester.

229 Peoples and Cultures of Latin America (3)
This course is a general introduction to the peoples and cultures of Latin America. Topics cover the sociopolitical and economic systems of indigenous peoples, rural-urban migration, peoples of the rainforests and their interaction with the local ecology, labor migration to the United States, and the survival of native culture in Latin America.

302 Anthropological Theory (3)
A systematic survey of the development of major theories in anthropology with particular attention to theories of culture. Spring semester. Prerequisite: 9 hours of anthropology or approval of instructor.

305 Sex and Gender (3)
Evolutionary and cross-cultural analysis of formation of sex and gender in human societies, with special focus on the relative status of women, and the development of masculine and feminine differences in communication and activities. Prerequisite: Anthropology 152 or 207 or 208 or 210, or approval of instructor. May be registered as Women’s Studies 305. No credit for both Anthropology 305 and Women’s Studies 305.

306 World Prehistory (3)
Topics of world prehistory, covering the Paleolithic in the old and new worlds and the search for the prerequisites of civilization. On demand.

308 Applied Anthropology (3)
A systematic inquiry of various applications of anthropology to solve human problems, both internationally and within the United States. Discussions include the history of applied anthropology, ethical considerations, methods and the roles of anthropologists in contemporary cultural and economic development. Prerequisite: Anthropology 208 or approval of instructor.

311 Music of the World (3)
An introduction to the folk and ethnic music of various world cultures. Consideration of how musical styles relate to social, cultural and aesthetic practices and attitudes. Spring semester. May be registered as or Humanities 311 or Music 311. Credit allowed in only one of the three courses.

314 Research Methods (3)
The nature of the scientific method and research as applied to the collection, analysis, and interpretation of social and cultural data. An introduction to selected basic techniques in research and the preparation of research papers. Fall semester. Prerequisite: A statistics course (Sociology 250 recommended); Sociology 151, or Anthropology 152 or 208, or approval of instructor. May be registered as Sociology 314. Credit not allowed in both Sociology 314 and Anthropology 314.

315 Primate Behavior (3)
A comparative survey of the ecology, social behavior, and cognitive ability of non-human primates, especially monkeys and apes, with emphasis on the evolutionary factors that have shaped primate behavior. Prerequisites: Any of the following: Anthropology 152, Psychology 101, Anthropology 207 or approval of instructor. May be registered as Psychology 315. No credit in both Anthropology 315 and Psychology 315.

320 Tennessee Archaeology (3)
The archaeology of prehistoric and historic Tennessee. Based on archaeological research, an overview of the history of human occupation in the state of Tennessee is presented. Emphasis on local sites whenever possible. Every third semester. Prerequisite: Anthropology 208 or 211 or 340 or approval of instructor.

328 The Archaeology of Latin America (3)
This course is designed to familiarize students with the prehistory of their Latin American neighbors, highlighting some of the major cultural groups of Mexico, Guatemala and Belize, including the Olmec, Maya, Zapotec and Aztec. It will provide the foundation needed to understand contemporary Latin America, highlighting continuities between the region’s prehistoric cultures and today’s indigenous groups.

330 Anthropology Through Film (3)
Perspectives on cultural and biological anthropology through documentary film, Hollywood popular culture feature films, television, and other media. The theory and methods of anthropological filmmaking, and the analysis of documentary and Hollywood popular culture films screened in class. Students will have the option of producing their own short documentary film. Every third semester. Prerequisites: Anthropology 152 or 208 or approval of the instructor.

331 Chinese Society and Culture (3)
This course provides a general introduction of the culture and social structure of China. Topics of discussions include the origin of the Chinese culture, family and social organization, religion, ideology, and tradition vs. modernization. Every third semester. Prerequisites: Anthropology 208 or approval of the instructor.

332 Peoples and Cultures of Sub-Saharan Africa (3)
Social and ethnological study of the peoples and cultures of Africa. Traditions and modernization analyzed in light of the contact with Western cultures. Similarities and differences among societies in Africa. African cultures compared and contrasted with the West. Every fourth semester.

334r American Indians (3)
Prehistory, ethnography, and contact history of indigenous peoples of the New World. May be repeated for credit when different topics have been specified as topics for different semesters. Every third semester. Prerequisite: any general education Behavioral or Social Science course or approval of instructor.

335 Archaeological Field Methods (3 or 6)
Theory, method, and techniques of field research in archaeology, training and practice in surveying, photography, field recording, and other basic skills. Every summer. Prerequisite: approval of instructor.

340 Southeastern Indians (3)
Native Americans of the Southeast, their subsistence patterns, social organization, political structures, and belief systems, as derived from archaeological, documentary, and ethnographic sources. Emphasis is given to the late prehistoric and early historic periods. Every third semester. Prerequisites: Anthropology 208 or 211 or approval of the instructor.

357 Social and Cultural Studies of Aging (3)
A basic course in social and cultural studies of aging using multidisciplinary and comparative approaches to provide a comprehensive introduction to the human experience of aging. Prerequisite: Anthropology 152 or 208 or Sociology 151 or 215 or approval of instructor. May be registered as Sociology 357. Credit not allowed in both Anthropology 357 and Sociology 357.

360 Ape Language (3)
A review and critical analysis of sign language, speech, computer language, and other symbol studies with great apes and other intelligent animals. Examines the origins of culture, language, and intelligence in humans, and the ethical treatment of great apes and other intelligent animals in nature and under human care. Prerequisites: Any of the following: Anthropology 152, 207 or Psychology 101, or approval of instructor. May be registered as Psychology 360. No credit in both Anthropology 360 and Psychology 360.

365 Medicine and Disease: A Cross-Cultural Perspective (3)
Cross-cultural study of medicine and disease; the relationship between the development of medicines and medical care, including-non-Western medical systems, and cultural beliefs, social systems, ecological adaptations, and cultural changes of human groups. May be registered as Sociology 365 or Psychology 365. Credit allowed in only one of the three courses.

366r Communications Laboratory (3)
Laboratory methods and field techniques of research in human and animal communication. Individual or group projects. Every third semester. Prerequisite: any
412 Forensic Anthropology (3)
An introduction to the application of physical anthropology in forensic investigations. Emphasis is given to the role of the forensic anthropologist within the environment of a medical examiner’s office. Topics include the osteological assessments of age, sex, race, stature, trauma, pathology, taphonomy, and the estimation of the postmortem interval, combining lectures, readings, and anatomical laboratory exercises to understand the medicolegal importance of the human skeleton. Spring and Fall. Prerequisite: 3 hours Anthropology or approval of instructor.

414 Research Seminar (3)
The use of social research techniques to report on social and cultural phenomena; data collection and analysis, writing of a research report. Research project required of all students. Spring semester. Prerequisites: Sociology 314 or Anthropology 314. May be registered as Sociology 414. Credit not allowed in both Sociology 414 and Anthropology 414.

494r Anthropology Internship (3-6)
Intended to provide majors an opportunity to experience “hands on” activities in a human services setting, learn the operation and policies of an agency, integrate classroom theory with practice, and develop the requisite competencies necessary for a sociological/anthropological practitioner. Prerequisites: Sociology 151 and 312 or Anthropology 152 and 302, junior standing, completed at least one semester at UTC, minimum cumulative GPA of 2.75, completion of additional Sociology/Anthropology courses relevant to the internship and approval of the internship coordinator.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.

GEOGRAPHY COURSES (GEOG)

101 Physical Geography (3)
The physical environment with emphasis on processes that influence the distribution and pattern of landforms, water, climate, vegetation, and soil. Every semester.

103 World Geography (3)
Description and analysis of selected world regions, their internal characteristics and problems, and the nature of their interrelationships in a global context. Every semester.

104 Cultural Geography (3)
Systematic study of the distribution and locational processes of population, nutrition and health, disease, religion, agriculture, industry, cities, geopolitics, and other topics in human geography. Every semester.

199r Special Projects (1-4)
Individual or group projects. On demand.

206 Atmosphere, Weather and Climate (3)
The atmosphere about us and its interactions with human society. Atmospheric origin, composition, moisture, temperature, general circulation, and pollution problems. Jet streams and variations of weather and climate over time and space. Every fourth semester.

221 Maps and Mapping (3)
Introduction to types of maps, map construction, aerial photographs, remote sensing, digital image processing, computerized cartography, computerized map applications, and geographic information systems. Every semester.

250 World Resources (3)
Location, utilization, production, consumption, and significance of resources to society. Introduction to the vast, interlocking network of activities that produce and affect the world’s use and consumption of resources. May be registered as Environmental Science 250. Credit not allowed in both Geography 250 and Environmental Science 250.

303 Geography of North America (3)
Introduction to the physical and cultural geography of North America. Every fourth semester. Prerequisite: Geography 103 or approval of the instructor.

304 Geography of Latin America (3)
A systematic and regional survey of Latin America and the Caribbean. Topics include Latin America issues, physical environments, aboriginal and colonial geography, agricultural, population growth and migration, the Latin American city, mining and manufacturing. The regional analysis focus on Mexico, Central America, the West Indies, Andean American, Brazil, and the Southern Cone. The unique perspectives of Latin Americans will be traced from pre-culture through language, films, music, and food activities. Every third semester. Prerequisite: Geography 103 or 104 or approval of instructor.

305 Geography of Asia (3)
Introduction to the physical and cultural geography of Asia. Every fourth semester. Prerequisite: Geography 103 or approval of instructor.

306 Geography of Southeast United States (3)
Introduction to the physical and human geography of Appalachia and the South. Topics to be emphasized using a geographic perspective include the natural environment, regional definitions, history, population, culture, economics and politics. Prerequisite: Geography 103 or approval of instructor.

307 Geography of Europe (3)
A regional analysis of contemporary Europe. The physical geography, population, the unrolling political map, economic and urban geography are examined prior to an in-depth study of the British Isles, Western Europe, the European North, Southern Europe, West Central Europe and East Central and Southeastern Europe. Prerequisite: Geography 103 or approval of instructor.

308 Environmental Conservation (3)
Theories, methods, and practices of environmental management and resource utilization. Emphasis on soil, forest, water, mineral, and human resources. Spring semester. May be registered as Environmental Science 407. Credit not allowed in both Geography 407 and Environmental Science 407.

309 Economic Geography (3)
Spatial influences on economic behavior, analysis of the location and spatial structure of world economic activities. Prerequisite: Geography 104.

415 Urban Geography (3)
History of urbanism, study of patterns of cities, spatial distribution of cities, and social and physical structure of cities of the Western world. Every third semester. Prerequisite: Geography 104 or Sociology 151. May be registered as Sociology 415. Credit not allowed in both Geography 415 and Sociology 415.

465 Remote Sensing and Imagery Analysis (3)
Principles of aerial and satellite photography and infrared, multispectral, and microwave sensing. Interpretation of remotely sensed data, including application to problems in a variety of environmental sciences. Every fourth semester. Lecture 2 hours, laboratory 2 hours. Prerequisites: Geography 221, completion of general education natural science and statistics requirements. Computer Science 150, junior standing. Maybe registered as Environmental Science 465. Credit not allowed in both Geography 465 and Environmental Science 465. Laboratory/studio course fee will be assessed.

466 Geographic Information Systems (3)
Introduction to fundamental principles of geographic information systems (GIS). Applications, data structures and basic functions of GIS. GIS computer programs
are used to demonstrate basic GIS functions. Lecture 2 hours, laboratory 2 hours. 
Prerequisite: Environmental Science/Geography 465. May be registered as Environmental Science 466. Credit not allowed in both Geography 466 and Environmental Science 466. Laboratory/studio course fee will be assessed.

480 Geography Seminar (1) 
Seminar and discussion of topics of current interest in the geography. Student presentations required. On demand.

496r Geography Field Camp (1-6) 
A field methods experience (the application of theory and techniques to field problems). On demand. Prerequisites: at least 12 hours of geography courses.

497r Research (1-4) 
Every semester. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4) 
Every semester. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4) 
On demand.

SOCIOLOGY COURSES (SOC)

125 Sociology of Social Problems (3) 
Sociological perspectives on selected contemporary social problems such as crime, poverty, hunger, racial and sexual discrimination, alcohol and drug abuse, the threat of war; examination of theories and research on social problems; analysis of possible solutions. Every second semester.

151 Introduction to Sociology (3) 
Scientific study of human society, of how individuals and groups adjust to each other and to their social environment; examination of varying research approaches; consideration of basic concepts, theories, and principles of explanation used by sociologists. Every semester.

199r Special Projects (1-4) 
Individual or group projects. On demand.

215 The Sociology of the Family (3) 
The study of modern marriage and family institutions from sociological and social psychological perspectives; the social factors of mate selection, kinship relationships and sexual behavior; evaluations of research findings and emerging trends. Every semester.

219 Deviance and Conformity (3) 
A social and psychological introduction to the nature and consequences of "normal" and "deviant" behavior. Theories of deviance with particular attention to role theory and labeling theory in the areas of crime and mental illness. Every third semester.

250 Social Statistics (3) 
Basic statistical techniques such as frequency distributions and graphs, the normal curve, tests of significance, correlation, simple analysis of variance, and applications to sociocultural data and their interpretation. Spring semester. Prerequisite: Two years of high school algebra and UTC Math Placement Level 20 or Math 106 with minimum grade of C. Credit not allowed in Sociology 250 after earned hours in any other statistics course.

300 Urban Sociology (3) 
Analysis of how urban areas grow and are spatially organized. Examination of the cultures, social stratification systems, and modes of governance in contemporary American cities. Emphasis on urban problems. Every third semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

305 Minorities in American Life (3) 
Character and role of racial, religious, and ethnic minorities in the U.S.; the interplay of historical and current sociocultural processes on attitudes and behavior for both dominant and minority groups; minority-related social problems and their possibilities of solution. Spring semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

307 Gender and Society (3) 
Analysis of how ideas about gender are socially constructed and the importance of women-centered theories on this approach; the interplay of gender and various social structures including education, religion, politics, family, health, work and sexuality. Prerequisite: 3 hours Sociology or approval of instructor. May be registered as Women's Studies 307. Credit not allowed in both Sociology 307 and Women's Studies 307.

310 Sociology of Religion (3) 
Social and cultural interpretations of religious institutions and the relation of religion to the social order; major emphasis upon theory and research in the context of Western Christian civilization. Every fourth semester. Prerequisite: any general education Behavioral and Social Science course, philosophy or religion, or approval of instructor.

312 Classical Social Theory (3) 
A systematic examination of the important classical social theorists. Those theorists who have had enduring historical and/or theoretical importance will be emphasized. Topics include: Auguste Comte, Herbert Spencer, Karl Marx, Max Weber, Emile Durkheim, George Simmel, George Herbert Mead, Alfred Schutz and Karl Mannheim. Every fall semester. Prerequisite: Sociology 151.

313 Modern Social Theory (3) 
A systematic examination of the important theoretical schools of thought. Ideas that have important implications for the modern world will be emphasized. Topics include: structural functionalism, conflict theory, symbolic interactionism, the critical school, neo-Marxian theory, feminist theory, identity theory, queer theory, postmodern theory, and metatheory. Every spring semester. Prerequisite: Sociology 312.

314 Research Methods (3) 
The nature of the scientific method and research as applied to the collection, analysis, and interpretation of social and cultural data. An introduction to selected basic techniques in research and the preparation of research proposals. Fall semester. Prerequisite: A statistics course (Sociology 250 recommended); Sociology 151, or Anthropology 152 or 208, or approval of instructor. May be registered as Anthropology 314. Credit not allowed in both Sociology 314 and Anthropology 314.

317 Organizational Behavior (3) 
Structure of social relationships in organizational life: common patterns in development and operation of bureaucratic systems and their effect upon personal values and individual behavior applications in modern education, industry, government, and institutional life. Every third semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

319 Work and Society 
In this course, students will gain a critical understanding of one of the most dominant spheres in society by examining the world of work. Prerequisite: Any general education Behavioral or Social Science course, or approval of instructor.

321 Criminology (3) 
The nature of crime, criminal statistics, causal factors, theories and procedures in prevention and treatment. Every third semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

322 Juvenile Delinquency (3) 
The nature of juvenile delinquency; factors contributing to delinquency; methods of diagnosis and treatment of delinquent behavior; prevention of delinquency. Spring semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

323 Sociology of Corrections (3) 
Historical and cross-cultural study of adult detention, punishment, and rehabilitation systems. Examination of political and social values as they relate to corrections. Every fourth semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

331 Social Psychology (3) 
Survey of the general concepts and research areas in social psychology. Emphasis upon the interactions between the individual and society with consideration of
such topics as attitudes, prejudices, conformity, deviance, socialization, and interpersonal attraction. Every semester. Prerequisite: 6 hours of psychology or sociology. May be registered as Psychology 331. Credit not allowed in both Psychology 331 and Sociology 331.

339 Sociology of Education (3)
This course focuses on the structure of the education system and culture of schools in the United States. Specifically, students examine the functions and purpose of schooling, stratification in education, schools as organizations, teachers and teaching, students, education policy and reform, and the application of sociological concepts in the local context. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

345 Social Inequality (3)
Examination of the causes and consequences of inequality including the distribution of resources and opportunities, both comparatively and historically; the systematic disadvantages associated with race, gender, wealth and income; and the major theoretical perspectives addressing inequality in society. Every other semester. Prerequisite: any general education Behavioral and Social Science course or approval of instructor.

350 Social Change and Globalization (3)
Examination of social change and globalization utilizing sociological insights to understand the impact of rapid changes on human cultures and social institutions throughout the world. Prerequisites: two Behavioral and Social Sciences courses or approval of instructor.

355 Sociology of Globalization (3)
Examination of the increasing globalization of political, social, economic, and individual processes. Topics include the effects of globalization on the changing nature of work, the homogenization of cultures, religious fundamentalism as response, the decline of the nation-state, and the impact on the self. Every third semester. Prerequisite: Sociology 151 or approval of instructor.

357 Social and Cultural Studies of Aging (3)
A basic course in social and cultural studies of aging using multidisciplinary and comparative approaches to provide a comprehensive introduction to the human experience of aging. Prerequisite: Anthropology 152 or 208 or Sociology 151 or 215 or approval of instructor. May be registered as Anthropology 357. Credit not allowed in both Sociology 357 and Anthropology 357.

365 Medicine and Disease: A Cross-Cultural Perspective (3)
Cross-cultural study of medicine and disease; the relationship between the development of medical practice and medical belief systems, including non-Western medical systems, and cultural beliefs, social systems, ecological adaptations, and cultural changes of human groups. May be registered as Anthropology 365 or Psychology 365. Credit allowed in only one of the three courses.

414 Research Seminar (3)
The use of social research techniques to report on social and cultural phenomena; data collection and analysis, writing of a research report. Research project required of all students. Spring semester. Prerequisites: Sociology 314 or Anthropology 314. May be registered as Anthropology 414. Credit not allowed in both Sociology 414 and Anthropology 414.

415 Urban Geography (3)
Every third semester. See Geography 415

424 Applied Social Research (3)
Examination of the various issues faced by applied social researchers when developing a framework for conducting the research and when determining which data collection and analysis methods are most suitable given the research objectives and needs of the client. Focus on both quantitative and qualitative methods, but with special emphasis on the latter. Every second semester. Prerequisite: Sociology 314 or Psychology 202 or Political Science 207 or other approved course in social research. May be registered as Psychology 424. Credit not allowed in both Sociology 424 and Psychology 424.

425 Advanced Sociology of the Family (3)
Examination of selected topics in the sociology of the family. Emphasis on the interaction between the family and the society. Special attention given to power relationships and gender roles in marriage and the family. Every fourth semester. Prerequisite: 215, or Early Childhood 340, or Social Work 210 or approval of instructor.

431 Advanced Social Psychology (3)
Intensive treatment of selected research areas in social psychology. Emphasis upon the interrelationship between current theoretical perspectives and appropriate methodological procedures. On demand. Prerequisite: 331 or equivalent. May be registered as Psychology 431. Credit not allowed in both Psychology 431 and Sociology 431.

470r Special Studies and Problems (1-3)
Investigation and reporting on specialized topics in research or theory under faculty direction. Primarily for seniors. On demand. Prerequisite: approval of instructor. Maximum credit 6 hours.

494r Sociology Internship (3-6)
Intended to provide majors an opportunity to experience “hands on” activities in a human services setting, learn the operation and policies of an agency, integrate classroom theory with practice, and develop the requisite competencies necessary for a sociological/anthropological practitioner. Prerequisites: Sociology 151 and 312 or Anthropology 152 and 302, junior standing, completed at least one semester at UTC, minimum cumulative GPA of 2.75, completion of additional Sociology/Anthropology courses relevant to the internship and approval of the internship coordinator.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
Every semester.

Spanish
See Foreign Languages and Literatures.

Theatre and Speech

Professor Mac Smotherman, Acting Head

The Department of Theatre and Speech offers a curriculum that leads to a Bachelor of Arts degree with a major in Theatre and a Bachelor of Science degree with a major in Theatre Education. It seeks to promote an understanding of cultural history, an appreciation of meaning and form, a respect for and a facility with language, a sense of responsibility for the larger human community, and a firm grounding in the discipline and the creative processes involved in the making of theatre.

Through its curriculum and public season of performance the department is committed to exposure to and enhanced appreciation of the art of the theatre and the related arts of film and dance. The department provides the means for involvement in the art of theatre for interested members of the University community.
Courses designed to develop basic competency in oral communication are regularly offered by the department.

Students may elect to take specified courses leading to state licensure to teach theatre at the primary and secondary level.

5600 - Theatre (B.A.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either Theatre and Speech. (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses in two different disciplines (6 hours)

Foreign Language: Through second college year in one foreign language

Completion of a minor with a minimum 2.0 grade point average

Major and Related Courses

2-3 hours from Theatre and Speech 125 or 225, or 2 HHP activity courses
6 hours design and technical theatre: 141, 143
3 hours acting: 221
6 hours directing: 331, 431
9 hours dramatic literature and theatre history: 151, 255, 257
9 hours of approved theatre and speech electives selected from THSP 343, 423, 450, 459, 461r, 463r, and English 307, 420, 421; 3 hours of 200r.
6 hours (6 semesters) of performance and production: 2 hours each of 200r, 300r, 400r;
3 hours approved theatre and speech electives selected from 125, 225, 343, 423, 450, 459, 461r, 463r
25 hours from the College of Health, Education and Professional Studies including Education 201, 321 or 323, 400, 433, 444
University Studies 330

For graduation: 2.0 average in all Theatre and Speech courses and 2.0 average in College of Education and Applied Professional Studies.

For licensure 2.5 average cumulative, 2.5 at UTC, 2.5 average in education courses with no grade lower than C, 2.5 in content area courses with no grade lower than C.

Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.

See page 67 for additional requirements.

K-12 - Theatre Education

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Art 301*, Music 111* (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social sciences courses in two different disciplines (6 hours)

Major and Related Courses

Art 301# and Music 111#
Psychology 221 or 222 or Early Childhood 242
6 hours design and technical theatre: 141, 143;
3 hours acting: 221;
6 hours directing: 331, 431;
6 hours of theatre education from: 465r, 412;
12 hours dramatic literature and theatre history: 151, 255, 257, 457;
36 hours (6 semesters) of performance and production: 2 hours each of 200r, 300r, 400r;
3 hours approved theatre and speech electives selected from 125, 225, 343, 423, 450, 459, 461r, 463r
25 hours from the College of Health, Education and Professional Studies including Education 201, 321 or 323, 400, 433, 444
University Studies 330

For graduation: 2.0 average in all Theatre and Speech courses and 2.0 average in College of Education and Applied Professional Studies.

For licensure 2.5 average cumulative, 2.5 at UTC, 2.5 average in education courses with no grade lower than C, 2.5 in content area courses with no grade lower than C.

Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.

See page 67 for additional requirements.

4670 - Theatre

18 hours including Theatre and Speech 151 and 3 hours from 121, 141, 143, 221, 255 or 257; 9 hours from Theatre and Speech 343, 423, 450, 457, Classics 395, 397; English 307, 420, 421; 3 hours of 200r.
Minimum 8 hours at the 300-400 level.
Minimum 2.0 average in the minor.

4545 - Drama

18 hours including Theatre and Speech 151, 255, 257, and 457; 6 hours from Theatre and Speech 450, 485; Classics 395, 397; English 307, 420, 421, or 435.
Minimum 8 hours at the 300-400 level.
Minimum 2.0 average in the minor.

4665 - Speech

9 hours from Theatre and Speech 107, 108, 109, 110, 209, 210, Communication 101; 9 hours from Theatre and Speech 307, 308, 309, 463, Communication 320
Minimum 8 hours at the 300-400 level.
Minimum 2.0 average in the minor.

THEATRE AND SPEECH COURSES (THSP)

10Cr Performance and Production (1)
Introductory laboratory course in performance and production. Prerequisite: Approval of department head. Graded by faculty jury. May be repeated for credit.

107 Voice and Diction (3)
Systematic training of the speaking voice for controlled articulation, volume, and tone in interpersonal communication. Every semester.

108 Oral Interpretation (3)
Systematic teaching of the principles and skills of effective oral reading with a continuing study of voice and diction. On demand.

109 Public Speaking (3)
Practical application of the principles of public speaking and group discussion. Every semester.

110 Speaking Through Performance (3)
Instruction and practice in the application of imaginative processes and performance skills with observation and research in the creation of effective and expressive oral presentation.

111 Introduction to the Theatre (3)
A study of the theatre and its drama; examination of selected plays as representative types of drama, as products of a cultural milieu, and as works intended for performance. Designed to heighten the student's perception, appreciation, and enjoyment of a variety of forms of theatre in performance. Every semester.

113 Introduction to Dance (3)
An introductory study of dance forms and function and of specific practices in a range of different cultures. Designed to heighten the student's understanding and
appreciation of how dance expresses aesthetic values and how it embodies social, religious and political values.

115 Theatre: Introduction to Performance (3)
Introduction to acting and use of total instrument of the theatre. Emphasis upon dramatic theory and literature and their relationship to performance. Every semester.

121 Beginning Acting (3)
The basic principles of acting. On demand.

125 Dance Technique I (3)
A studio introduction to dance including physical and musical disciplines, form, style, and standard professional practice. On demand.

141 Stagecrafts (3)
Introduction to production organization. Survey and application of technologies, materials, and techniques of theatrical production. Fall semester.

143 Basic Design in Theatre (3)
Introduction to the principles and practices of designing theatrical environments and costumes for plays. Study and practice in analysis of various styles and types of plays; basic visual and spatial principles; developing theatrical imagery; and communicating design ideas. Spring semester.

151 Play Analysis (3)
Nature of drama and theatre in its historical context with emphasis upon analysis of play scripts as the basis for creation of theatrical images. Fall semester.

199r Special Projects (1-4)
Individual or group projects. Every semester. Maximum credit 4 hours.

200r Performance and Production (1)
Lower division laboratory course in all aspects of theatre performance and production. Project assignments in departmental productions and workshops. Every semester. Prerequisite: approval of department head. Graded by faculty jury. May be repeated for credit.

209 Business and Professional Speech Communication (3)
Study of the modes and processes of speech communication in organizations. Development of individual skills in group interaction and decision-making as well as informative and persuasive speech. On demand.

210 Interpersonal Communication (3)
Examination of the basic theories and practices of face-to-face communication: how communication messages are designed, produced, exchanged, and interpreted in a variety of interpersonal contexts. Practical exercises in speech communication will be required. On demand.

221 Acting I (3)
Fundamentals of acting and of speech for the theatre. Fall semester. Prerequisite: Theatre and Speech 151 and/or approval of instructor. Corequisite: Theatre and Speech 200r.

225 Dance Technique II (3)
A studio course for students with previous training in dance. Attention to choreography. On demand. Prerequisite: Theatre and Speech 125 or approval of instructor.

230 Contemporary Francophone African Cinema (3)
An overview of recent African films from former French colonies with attention to issues of identity, heritage, and former colonial status. Prerequisite: English 121 or 122. May be registered as Humanities 230 or Modern Languages 230. No foreign language credit. Credit allowed in only one of the three courses.

255 The Theatre to the Renaissance (3)
History of the theatre as an art and as an institution from its beginnings to the 17th century. Fall semester. Prerequisite: Theatre and Speech 151 or approval of instructor.

257 The Theatre from the Renaissance to the 20th Century (3)
History of the theatre as an art and as an institution from the Renaissance to the 20th century. Spring semester. Prerequisite: Theatre and Speech 151 or approval of instructor.

259r Playwrights’ Seminar (2)
Development of the playwright’s craft through exercises in dramatic writing, critique, and examination of dramaturgical principles. On demand. Prerequisites: Theatre and Speech 151, 255 or 257, or approval of the instructor. May be repeated for up to 6 hours credit.

280 Introduction to Film (3)
The history and language of motion pictures studied by viewing and analyzing selected film masterpieces and the ideas they explore. Every semester.

300r Performance and Production (1)
Upper division laboratory course in all aspects of theatre performance and production. Project assignments in departmental productions and workshops. Every semester. Prerequisite: 2 semesters of Theatre and Speech 200r and approval of department head. Graded by faculty jury. May be repeated only once for credit.

307 Advocacy and Debate (3)
A study of contemporary procedures in deliberation, persuasion, and debate utilizing current topics of public interest. Emphasis on the development of individual skills in rational decision-making and advocacy through actual experiences in intercollegiate and parliamentary forms of debate. On demand.

308 Readers’ Theatre (3)
The study of literature through group performance and the development of skilled verbal and nonverbal expression based on the critical examination of written texts. On demand.

309 Contemporary Public Speech Communication: Concepts and Cases (3)
Study of rhetorical principles employed in addresses by contemporary leaders concerning significant current questions: practice in the application of rhetorical principles in speeches and oral reports. On demand.

331 Directing I (3)
Basic elements of play directing: play analysis, director-actor communication, and the uses of improvisation. Each student will direct a short scene and participate in group and individual directed productions. Fall semester. Prerequisites: Theatre and Speech 143, 255, 257, and approval of instructor. Corequisite: Theatre and Speech 311r or 312r.

340 Theatre Arts for Children (1)
Implementation of discipline-based theatre arts concepts and creative drama techniques for the child. Laboratory in addition to regularly scheduled classes will be included. Fall and Spring semester. Prerequisites: Theatre and Speech 115, Psychology 221 OR Human Ecology 240, Music 111, Art 301. Corequisites Music 340, Art 340.

343 History of Costume (3)
Study of wearing apparel, principally in the western world from ancient Egypt to the present with a particular emphasis on clothing as a reflection of the cultural milieu. Formerly 313. Spring semester alternate years.

400r Performance and Production (1)
Upper division laboratory course in all aspects of theatre performance and production. Projects assigned in departmental productions and workshops. Every semester. Prerequisite: 2 semesters of 300r or approval of department head. Graded by faculty jury. May be repeated only once for credit.

412 Theatre for Youth (3)
All phases of producing plays for or by junior audiences examined, including the techniques of creative dramatics. On demand.

423 Advanced Problems in Acting (3)
Further development of the actor’s instrument with emphasis upon performance style in the theatre. Spring semester alternate years. Prerequisites: Theatre and Speech 151, 221, 2 semesters of 200r and/or approval of instructor. Pre- or Corequisite: Theatre and Speech 300r.
431 Directing II (3)
Directing of short scenes for laboratory presentation and participation in diagnostic criticism. Spring semester. Prerequisite: Theatre and Speech 331 and approval of instructor. Corequisite: Theatre and Speech 300r or 400r.

450r Topics in Drama and Theatre (3)
Study of dramatic genres, dramaturgy, playwrights, theatre and performance theory, applications and/or interpretations by theatre artists. A specified topic will be listed in course schedule. On demand. May be repeated for up to 6 hours credit when specified topics differ.

457 Conceptual Foundations of the Modern Theatre (3)
Studies in the concepts of selected playwrights, directors, and designers who helped to shape the directions of the twentieth-century theatre and its drama. Spring semester alternate years. Prerequisite: approval of instructor.

459 Playwrights' Workshop (2)
Use of rehearsal, performance, and production process for the development of student writing for the stage. On demand. Prerequisites: Theatre and Speech 259r, 331, 300r and/or approval of instructor.

461r Directed Studies in Advanced Production (1-4)
Advanced problems in design and technical theatre. On demand. Prerequisite: approval of department head. May be repeated for credit.

463r Directed Studies in Advanced Performance (1-4)
Advanced problems in acting, directing, and musical theatre. On demand. Prerequisite: approval of department head. May be repeated for credit.

465r Directed Studies in Theatre Education (1-4)
Problems in teaching theatre, creative drama, arts integration, etc., to K-12 students. On demand. Prerequisite: Approval of Department Head. May be repeated for up to six hours credit.

480 Theatre and Feminism (3)
Readings, discussion and writing about a wide variety of plays by modern feminist playwrights. On demand. Prerequisite: Approval of Department Head. May be repeated for credit.

485 Film Topics (3)
Directors, genres, styles, or theories of film studied by viewing and analyzing representative films. On demand.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

499r Group Studies (1-4)
On demand.

University Studies
See Interdisciplinary Studies.

University Honors Program
Professor Gregory O'Dea, Director

Enrollment in courses taught in the curriculum of the University Honors Program is restricted to members of the University Honors Program. The following courses make up the required curriculum for all members.

Freshman
University Honors 100r (0)
University Honors 101 (6)
University Honors 102 (6)
University Honors 120 (3)

Sophomore
University Honors 200r (0)
University Honors 214 (3)
At least 4 hours from University Honors 103, 104, 105, 106 or 199
3 hours from University Honors 216, 217, 218, 219

Junior
University Honors 300r (0)
University Honors 315 (3)
University Honors 317r (3)

Senior
University Honors 400r (0)
Departmental Thesis 495r (4)

NOTE: Requirements for the selected degree(s) and major program(s) must be met. With approval, students in certain degree programs may alter the UHON curriculum schedule and/or extend their study beyond the fourth year in order to complete both UHON and degree program requirements. UHON students must complete the appropriate Honors Studies course (100, 200, 300, 400) each semester in residence.

For further information, contact the University Honors Program Office, 202 Guerry.

UNIVERSITY HONORS COURSES (UHON)

100r Freshman Honors Studies (0)
An introduction to the nature of University Honors education and a general orientation to the functions and resources of the University and the honors program. Designed to help University Honors freshmen better understand the Honors program curriculum, requirements, expectations, and procedures, to be familiar with University resources, and to prepare them to enter effectively into the intellectual life of the University. Fall and Spring semesters. Course graded on a Satisfactory/No credit basis. Limited to University Honors Program students. Required in the first and second semester of the freshman year.

101, 102 Humanities I and II (6,6)
Selected authors from the traditional corpus of Western literature with emphasis on historical and intellectual contexts; analysis of specific texts through seminar discussion and written work. 101 fall/102 spring semester. Limited to University Honors Program students; others with approval of the Honors Program Director.
103 Fine Arts: Music History and Aesthetics (3)
A general review of the aesthetic and history of Western concert music. Limited to University Honors Program students; others with approval of the Honors Program Director.

104 Introduction to Art (3)
Consideration of the formal elements, design principles, and technical factors in the production of works of visual art. Examination of selected works representative of a broad range of functions, forms, styles, and artistic intentions. Comparisons between works of different periods. Designed to heighten perception, appreciation, and enjoyment of the visual arts. Limited to University Honors Program students; others with approval of the Honors Program Director.

105 Introduction to the Theatre (3)
A study of the theatre and its drama; examination of selected plays as representative types of drama, as products of a cultural milieu, and as works intended for performance. Special emphasis on acting and direction. Designed to heighten perception, appreciation, and enjoyment of a variety of forms of theatre. Limited to University Honors Program students; others with approval of the Honors Program Director.

106 Film Studies (3)
A consideration of the formal elements, terminology, and development of film, through an overview of the history and aesthetics of Western cinema. Limited to University Honors Program students; others with approval of the Honors Program Director.

120 Development of Scientific Thought (3)
Selected topics in history of science designed to illustrate the methods by which science progresses. Scientists and their struggle with society will form the background for study for this course. Limited to University Honors Program students; others with approval of the Honors Program Director.

199r Special Projects (1-4)
Individual or group project. On demand. Maximum credit 4 hours.

200r Sophomore Honors Studies (0)
Introduction in University Honors Program mentoring, involvement in the life and leadership of the university, and study abroad opportunities. Designed to help University Honors sophomores better understand their chosen academic disciplines, their roles as mentors to beginning students, the benefits and responsibilities of involvement in the University’s student governance, committee work, campus organizations, the value of community service, and opportunities for undergraduate education abroad. Fall and Spring semesters. Course graded on a Satisfactory/No credit basis. Limited to University Honors Program students. Required in the first and second semester of the sophomore year.

214 Classical and Medieval Historical and Political Thought (3)
Critical analysis of the origin and development of Western historical, political, and social theory from antiquity to the early Renaissance. Readings from the works of the central figures of the Greek city-state, Roman Empire, Medieval Church, and Renaissance Europe, including Herodotus, Thucydides, Plato, Aristotle, Livy, Tacitus, Plutarch, Augustine, Aquinas, and Machiavelli. Consideration of Gibbon as representative of historical interpretation. Limited to University Honors Program students; others with approval of the Honors Program Director.

216 Traditions of Latin America (3)
A study of the major historical and cultural traditions of Latin America, from the Aztec/Mexico and Inca Empires through the colonial and independence periods. Emphasis on the key factors that contributed to the development of Latin American nations. Readings include scholarly books and articles, literary analysis, and primary text material, supplemented with films, art, and music. Limited to University Honors Program students; others with approval of the Honors Program Director. Prerequisite: University Honors 101 or Western Humanities I.

217 The Chinese and Japanese Traditions (3)
Readings of central texts in East Asian civilization, including Confucianism, Legalism, Taoism, Buddhism, and Zen, as well as great works of literature. Discussion of texts and written analysis to facilitate comparisons with western thought. An appreciation of different intellectual traditions is a major goal. Limited to University Honors Program students; others with approval of the Honors Program Director.

218 The Tradition of India (3)
A study of Indian culture through a reading of texts selected from classical and modern Indian literature, supplemented by lecture, audiovisual materials, and library materials. Limited to University Honors Program students; others with approval of the Honors Program Director.

219 Africa Through Its Literature (3)
A study of the sociocultural, historical, and political dynamics of the continent and its peoples through reading, discussion, and analysis of African literary works by and about Africans. Limited to University Honors Program students; others with approval of the Honors Program Director.

300r Junior Honors Studies (0)
Introduction in planning for the Departmental Honors (DHON) project. Designed to prepare students for intensive, extended research projects in their disciplines by workshops and discussions on discipline-specific library research, topic focus and development, advisor and committee selections, proposal development and writing, and project scheduling. Fall and Spring semesters. Course graded on Satisfactory/No credit basis. Limited to University Honors Program students. Required in the first and second semester of the junior year.

315 Origins of the Social Sciences (3)
Analysis of the origins, development and nature of the social sciences using contemporary theories and methodologies. Core texts from seminal thinkers such as Lister, Locke, Rousseau, Marx, and Durkheim will be used as case studies of the developing modern social and human sciences. Every semester. Limited to University Honors Program students; others with approval of the Honors Program Director.

317r Contemporary Issues in Social Science (3)
Intensive study seminar on a single theme or topic in contemporary social science. Specific subject to be announced in the schedule of classes. Limited to University Honors Program students; others with approval of the Honors Program Director. Prerequisite: University Honors 315. Maximum credit: 6 hours.

400r Senior Honors Studies (0)
Introduction in the timely execution of the Departmental Honors (DHON) project and planning for the post-baccalaureate world. Designed to address such matters as scheduling, deadlines and formation of the DHON project, planning for graduate and professional school, and career placement skills. Fall and Spring semesters. Course graded on Satisfactory/No Credit basis. Limited to University Honors Program students. Required in the first and second semester of the senior year and all additional semesters in residence.

497r Research (1-4)
On demand. Prerequisite: approval of the Honors Program Director. Students must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of the Honors Program Director. Students must submit an Individual Studies/Research Contract to the Records Office at the time of Registration.

499r Group Studies (1-4)
On demand.
College of Business

Professor Richard Casavant, Dean

The College of Business of The University of Tennessee at Chattanooga is committed to providing quality educational programs that prepare students for managerial, professional, or entrepreneurial opportunities. The College offers undergraduate degree programs in accounting, finance, entrepreneurship, management and marketing. At the graduate level, the Master of Business Administration, Executive MBA and Master of Accountancy programs prepare students for management and accounting positions of increasing responsibility.

As a College within a state-supported metropolitan University with financial support from the business community, we recognize our responsibility to:

• Provide students with the knowledge, business skills and professional training necessary for success.
• Engage in business research that serves the needs and interests of business and management, and support pedagogical research to enhance the education process.
• Provide service to the University, academic profession and Chattanooga community.

The College is committed to the principles of diversity so that varied and diverse viewpoints are appreciated and valued.

To fulfill its mission the College seeks the support and participation of students, faculty, and community leaders in educational programs, research activities, and community and professional service that provide mutual benefit to all stakeholders through the sharing of knowledge, experience, and insight. In all its initiatives the College strives to foster progressive innovation and an entrepreneurial spirit.

The curricula also provide essential skills for employment opportunities in related career fields. Career preparation is offered in the following areas:

- Accounting
- Entrepreneurship
- Finance
- General Management
- Industrial Management
- Human Resource Management
- Marketing

The College also offers minors in business administration, entrepreneurship and promotion. A student who is not seeking a major in business administration may only earn a maximum of 30 hours in the College of Business.

The College is organized into three departments: Accounting and Finance, Management, and Marketing and Entrepreneurship. It offers three degree programs: Bachelor of Science with a major in business administration and concentrations in accounting, finance, general management, industrial management, human resource management, marketing, and entrepreneurship; Master of Business Administration; and Master of Accountancy.

These degree programs are accredited by AACSB International - The Association to Advance Collegiate Schools of Business.

The letter B used before a course name is an abbreviation for “Business.” Example: B(usiness) Accounting.

Accounting

Associate Professor Stan Davis, Head

The Department of Accounting offers a concentration designed to prepare students for positions in the profit and nonprofit sectors. The Bachelor of Science degree in Business Administration may be obtained with a concentration in Accounting.

The mission of the Department of Accounting at the undergraduate level is to:

1. Advance the mission of the College of Business;
2. Provide students majoring in accounting an opportunity to acquire the knowledge and skills necessary for success in an accounting career or graduate program;
3. Provide students majoring in other business disciplines an opportunity to acquire basic accounting knowledge and skills;
4. Provide fundamental accounting knowledge to nonbusiness students seeking to enhance personal skills or achieve individual career objectives.
The Department of Accounting is committed to providing high-quality educational programs supported by ongoing faculty research and active participation in community and professional organizations.

## 2006 - Business Administration: Accounting (B.S.)

### General Education (see pages 69-72 for list of approved courses)

**Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)

**Mathematics:** Mathematics 131* (3 hours)

**Statistics:** Management 211* (3 hours)

**Natural Sciences:** Two approved natural science courses, at least one including a laboratory component (7-8 hours)

**Humanities and Fine Arts:** Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

**Cultures and Civilizations:** Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)

### Behavioral and Social Sciences:

One course from Economics 101* or 102* and one course from Anthropology 152*, Political Science 101*, Psychology 101*, or Sociology 151* (6 hours)

### Major and Related Courses

**Economics 101#, 102# and one course from Anthropology 152#, Political Science 101#, Psychology 101#, or Sociology 151#.

**Management 100; Mathematics 131# and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;**

31 hours from the College of Business including Accounting 201, 202; Finance 302; Management 211#, 212, 311, 315, 440, 441; Marketing 313; Business Administration 335

### Accounting Concentration

21 hours from the College of Business including: Accounting 300, 301, 302, 305, 307, 405, 408

12 hours: 6 hours chosen from Accounting 306, 401, 406, 407, 411, or Business Administration 412;

6 hours chosen from any 300 or 402 level Finance course; Economics 324 or 325; Management 356; Business Administration 336, 390#, 453.

- Credit not allowed

2.0 average in all Accounting courses.

E Electives to complete 120 hours.

A minimum of 54 hours of the 120 total must be taken at the 300-400 level.

Maximum of 69 hours total accepted in College of Business courses; i.e., at least 51 hours other than College of Business courses must be completed.

At least 50 percent of the business credit hours required for the B.S. degree in Business Administration must be earned at UTC.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

### ACCOUNTING COURSES (BACC)

#### 200 Accounting and Financial Reporting: A User’s Perspective (3)

This course provides an introduction to financial accounting within the context of the decision-making process used by internal and external users, their information processing styles, and the role of ethics and values in decision-making. The student will study accounting as the language of business, the four major financial statements, and the accounting cycle and its role in the development of accounting information. The course is appropriate for non-business majors seeking knowledge of today’s complex financial world. Fall and spring semesters. Credit will not apply toward the Accounting major. Prerequisite: Finance 302.

#### 201 Principles of Accounting I (3)

Basic financial and managerial accounting principles as applied to manufacturing, service and retail enterprises. Includes the study of generally accepted accounting. Every semester. Prerequisite: Math Placement level 20 or Mathematics 126 with a grade of C or better or Math ACT 24 or above.

#### 202 Principles of Accounting II (3)

Basic financial and managerial accounting principles as applied to manufacturing, service and retail enterprises. Includes the study of generally accepted accounting. Every semester. Prerequisite: Accounting 201 with a grade of C or better.

#### 300 Intermediate Accounting I (3)

The theoretical foundations and structure of accounting as they relate to the presentation of financial statements. Emphasis will be on the framework underlying financial accounting and analysis of current assets. Every semester. Prerequisite: Accounting 202 with a grade of C or better, junior standing.

#### 301 Intermediate Accounting II (3)

Theoretical foundations and structure of accounting as they relate to the presentation of financial statements. Emphasis will be placed on analysis of fixed assets, liabilities and equity. Every semester. Prerequisites: Accounting 300 with a grade of C or better.

#### 302 Intermediate Accounting III (3)

The theoretical foundations and structure of accounting as they relate to the presentation of financial statements. Emphasis will be placed on analysis of cash flows, deferred taxes, leases, pensions, earnings per share, and other financial reporting considerations. Every semester. Prerequisites: Accounting 301.

#### 305 Managerial Cost Accounting (3)

Introduction to the managerial-cost accounting models available for planning, controlling, and evaluating operations. Including: the development and utilization of unit standard costs, job order and process costing, variance analysis, direct and absorption costing models, and their data requirements. Every semester. Prerequisite: Accounting 202 with a grade of C or better, junior standing.

#### 306 Budgeting (3)

Cost accounting by standard costs. Cost analysis and cost distribution reports emphasized. Methods and procedures in the preparation and execution of master and special budgets for industrial and commercial enterprises. Summer semester. Prerequisite: Accounting 305, or Accounting 202 and approval of instructor.

#### 307 Federal Tax Accounting (3)

Fundamentals of federal income tax with major emphasis upon tax law and regulations applicable to individuals. Every semester. Prerequisite: Accounting 300 and 335, or approval of instructor.

#### 312 Issues in Financial Accounting and Reporting (3)

An application of accounting principles and an examination of how those principles influence the financial reporting process. Every semester. Credit not allowed toward the Accounting major. Prerequisite: Finance 302.

#### 401 Advanced Accounting (3)

Theory of business combinations and preparation of consolidated financial statements; accounting for foreign currency translations, and partnerships. Spring semester. Prerequisite: Accounting 301; Management 215.

#### 405 Auditing (3)

Kinds of audits, systems of accounts, and methods of conducting audits. Preparation of working papers and reports. Fall and spring semesters. Prerequisites: Accounting 301, Management 212, Prerequisite or Corequisite: Accounting 408.

#### 406 Advanced Managerial Accounting (3)


#### 407 Governmental Accounting (3)

Accounting systems of institutions and various governmental units. Fund transactions, revenues and expenditures, appropriations, and form and content reports. Fall and spring semesters. Prerequisite: Accounting 300.
Accounting Information Systems (3)
This course provides an introduction to accounting information systems concepts. Emphasis is on the definition of accounting information, current accounting technology, the systems development life cycle, systems controls, accounting transaction cycles and related documents and files. Every semester. Prerequisites: Management 100; Accounting 300 and 305, or Accounting 312.

Taxation of Corporations and Partnerships (3)
Fundamentals of federal income tax laws covering the formation, liquidation and reorganization of corporations and partnerships. Emphasis is placed on the federal income tax laws as they relate to both the entity and the owner. Fall and spring semesters. Prerequisite: Accounting 301 and 307.

Departmental Thesis (1-3 hours per term, 4 hours for the two terms) Every semester. See Departmental Honors. Student must submit an Individual Studies/ Research Contract to the Records Office at the time of registration.

Research (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/ Research Contract to the Records Office at the time of registration.

Individual Studies (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/ Research Contract to the Records Office at the time of registration.

Group Studies (1-3)
Every semester.

Finance
Associate Professor Stan Davis, Head

The Department of Finance offers a concentration designed to prepare students for positions in the profit and nonprofit sectors. The Bachelor of Science degree in Business Administration may be obtained with a concentrations in Finance.

The mission of the Department of Finance at the undergraduate level is to:

1. Advance the mission of the College of Business;
2. Provide students majoring in finance an opportunity to acquire the knowledge and skills necessary for success in a finance career or graduate program;
3. Provide students majoring in other business disciplines an opportunity to acquire basic finance knowledge and skills;
4. Provide fundamental financial knowledge to nonbusiness students seeking to enhance personal skills or achieve individual career objectives.

The Department of Finance is committed to providing high-quality educational programs supported by ongoing faculty research and active participation in community and professional organizations.

Business Administration:
Finance (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 131* (3 hours)
Statistics: Management 211* (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)
Behavioral and Social Sciences: One course from Economics 101* or 102* and one course from Anthropology 152*, Political Science 101*, Psychology 101*, or Sociology 151* (6 hours)

Major and Related Courses
Economics 101#, 102# and one course from Anthropology 152#, Political Science 101#, Political Science 101#, or Sociology 151#
Management 100; Mathematics 131# and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;
31 hours from the College of Business including: Accounting 201, 202; Finance 302; Management 211#, 212, 311, 315, 440, 441; Marketing 313; Business Administration 335
Accounting 312, 408

Completion of one of the following tracks:

Business Finance Track
14 hours including Finance 318, 320, 321, 412, 421, 423
Students who are pursuing a double concentration in both accounting and finance may substitute one of the required accounting courses for either Finance 318, 412, 421 or 423. The required Accounting courses are 300, 301, 302, 305, 307 and 405.
3 hours chosen from any 300 or 400 level Accounting or Finance course
6 hours chosen from any 300 or 400 level course in Accounting, Economics, Entrepreneurship, Finance, Management, Marketing, or Business Administration 300r

Investments Track
This track is designed to prepare students to take the CFA® Level I exam.
15 hours including Finance 318, 320, 321, 412, 421
3 hours from Finance 423 or Business Administration 300r
9 hours including Finance 403, 431 and 488

2.0 average in all Finance courses.
Electives to complete 120 hours.
A minimum of 54 hours of the 120 total must be taken at the 300-400 level.
Maximum of 69 hours accepted in the College of Business courses; i.e., at least 51 hours other than College of Business courses must be completed.
At least 50 percent of the business credit hours required for the B.S. degree in Business Administration must be earned at UTC.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

FINANCE COURSES (BFIN)
300 Small Business Finance (3)
The role and nature of finance in the small business. The essential tenants and concepts of small business finance are distinguished from corporate finance. Fall and spring semesters. Prerequisite: Accounting 200. Credit will not apply toward Business Administration: Finance major. Students pursuing a business minor with credit in Accounting 201 with a grade of C or better have met this prerequisite.
301 Personal Finance (3)
Designed to help the individual and family make intelligent, informed decisions on personal financial management. On demand.

302 Essentials of Managerial Finance (3)
Management of funds in business, including procurement, utilization, and disposition of money. Financial aids such as budgeting and break even analysis, financial statement analysis, and capital management. Every semester. Prerequisites: Accounting 202, Economics 101 and 102, Management 211, Mathematics 131, junior standing.

318 Financial Institutions (3)
Capital markets and institutions; sources and uses of capital funds; impact of changes in flow of funds on the economy. Fall semester. Prerequisite: Finance 302 with a grade of C or better, junior standing.

320 Intermediate Financial Management (3)
A course designed to provide students with a detailed development of key finance concepts introduced in earlier course work. Topics covered include risk analysis, security valuation, capital budgeting, cost of capital, capital structure, the dividend decision, leasing and mergers. Every semester. Prerequisites: Finance 302 with a grade of C or better, Management 212, junior standing.

321 Investments (3)
Theory of investment; classification of media; security analysis; investment market mechanisms; securities legislation; institutional aids to the investor, investment timing; formulation of investment programs. Fall and summer semesters. Prerequisites: Finance 302 with a grade of C or better, Management 212, junior standing.

337 Principles of Insurance (3)
Types of insurance, insurance coverage, policy protection, and company organization and regulation. On demand. Prerequisites: Economics 101 and 102.

371 Real Estate Fundamentals (3)
A survey course on real estate principles. Topics include property rights, ownership, economic and social issues, and brokerage. Fall semester. Prerequisite: Finance 302 with a grade of C or better, junior standing.

403 Financial Statement Analysis (3)
Techniques of financial statement analysis with special attention paid to the balance sheet and the income statement. Emphasis on current position, profitability, and financial structure of the firm. Spring semester. Prerequisites: Accounting 301 or 312, Finance 302, senior standing, and approval of instructor.

412 International Finance (3)
Designed to offer students an understanding of the global financial environment. Topics covered include foreign exchange markets, the evolving international financial architecture, currency crises, foreign exchange risk management, political risk and multinational capital budgeting. Spring semester. Prerequisite: Finance 302 with a grade of C or better and three hours from the following: finance 318, 320, 321.

418 Commercial Banking (3)
An in-depth study of commercial banks and their role in the economy. The course provides a comprehensive examination of the issues facing today’s commercial bank managers and regulators. Topics covered include: banking history and regulation, credit analysis, asset and liability management, risk management, loan policy, and money management services. Trends such as consolidation, internationalization, and product diversification, are also addressed. On demand. Prerequisites: Finance 302.

421 Security Analysis and Portfolio Management (3)
A course designed to introduce the undergraduate to advanced investment analysis and theory. Included in the course will be computer applications and analysis of investment vehicles and strategies. Fall and spring semesters. Prerequisites: Accounting 301 or 312, Finance 321 or 546, Management 100.

423 Financial Management (3)
A case course which affords the undergraduate an opportunity to apply financial principles to actual situations. The course is a continuation of the topics in 320 using the case discussion approach. Fall and spring semesters. Prerequisite: Accounting 301 or 312, Finance 320.

431 Derivative Securities (3)
Theory and practical applications of futures, options, and other derivative securities. Concepts, model derivations, thought processes, tools used and numerical examples are included. Fall semester. Prerequisites: Any of the following: Finance 318, 320, 321, 518, 546, or approval of instructor.

471 Real Estate Appraisal (3)
Theory and practical applications of real estate appraisal. Qualitative and quantitative analyses are incorporated into the various approaches of real estate valuation. Topics include cash flow estimation, lease valuation, site valuation and market analyses. On demand. Prerequisite: Finance 302 and 371 or approval of instructor.

488 Seminar in Portfolio Management (3)
A seminar in security analysis and portfolio management. Students will experience the actual investment decision process by analyzing and investing designated funds into a variety of securities. Spring semester. Prerequisite: Finance 321 or 546 and approval of instructor. Pre- or Corequisite: Accounting 301 or 312.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-3)
Every semester. Prerequisite: approval of department head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
Every semester.

Management

Professor Lawrence Ettrick, Head

The Management curriculum is designed to prepare students for careers in both the public and private sectors as well as graduate studies. Students may choose to concentrate in General Management, Human Resource Management or Industrial Management.

2005-Business Administration:

General Management (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 131* (3 hours)
Statistics: Management 211* (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)
Behavioral and Social Sciences: One course from Economics 101* or 102* and one from Anthropology 152*, Psychology 101* or Sociology 151* (6 hours)
**2010-Business Administration:**

**Human Resource Management (B.S.)**

**General Education** (see pages 69-72 for list of approved courses)

**Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)

**Mathematics:** Mathematics 131* (3 hours)

**Statistics:** Management 211* (3 hours)

**Natural Sciences:** Two approved natural science courses, at least one including a laboratory component (7-8 hours)

**Humanities and Fine Arts:** Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

**Cultures and Civilizations:** Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)

**Behavioral and Social Sciences:** One course from Economics 101* or 102* and one from Anthropology 152*, Psychology 101* or Sociology 151* (6 hours)

**Major and Related Courses**

Economics 101#, 102# and one course from Anthropology 152#, Psychology 101#, or Sociology 151#

Management 100; Mathematics 131# and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;

15 hours from the College of Business including Accounting 201, 202; Finance 302; Management 211#, 212, 311, 315, 440, 441; Marketing 313; Business Administration 335

**Human Resource Management Concentration**

15 hours including Management 330, 332, 360, 410, 411, 434, 435, 436, 451, 452; Business Administration 390, 459; Entrepreneurship 340, 435

2.0 average in all Management courses.

Electives to complete 120 hours.

A minimum of 54 hours of the 120 total must be taken at the 300-400 level.

Maximum of 69 hours total accepted in College of Business courses; i.e., at least 51 hours other than College of Business courses must be completed.

At least 50 percent of the business credit hours required for the B.S. degree in Business Administration must be completed.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

2008-Business Administration:

**Industrial Management (B.S.)**

**General Education** (see pages 69-72 for list of approved courses)

**Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)

**Mathematics:** Mathematics 131* (3 hours)

**Statistics:** Management 211* (3 hours)

**Natural Sciences:** Two approved natural science courses, at least one including a laboratory component (7-8 hours)

**Humanities and Fine Arts:** Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

**Cultures and Civilizations:** Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)

**Behavioral and Social Sciences:** One course from Economics 101* or 102* and one from Anthropology 152*, Psychology 101* or Sociology 151* (6 hours)

**Major and Related Courses**

Economics 101#, 102# and one course from Anthropology 152#, Psychology 101#, or Sociology 151#;

Management 100; Mathematics 131# and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;

31 hours from the College of Business including Accounting 201, 202; Finance 302; Management 211#, 212, 311, 315, 440, 441; Marketing 313; Business Administration 335

**Industrial Management Concentration**

21 hours including Accounting 305; Management 356, 360, 451, 452; Industrial Engineering 457

12 hours chosen from Business Administration 390; Industrial Engineering 354, 458; Management 330, 331, 332, 410, 411, 435, 438; Marketing 415; Economics 429

2.0 average in all Management courses.

A minimum of 54 hours of the 120 total must be taken at the 300-400 level.

Electives to complete 120 hours.

Maximum of 69 hours total accepted in College of Business courses; i.e., at least 51 hours other than College of Business courses must be completed.

At least 50 percent of the business credit hours required for the B.S. degree in Business Administration must be completed at UTC.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

**MANAGEMENT COURSES (BMGT)**

**100 Computers In Business (3)**

Introduction to the use of computers in business. Emphasizes spreadsheet and database applications, using microcomputer hardware and software. Also includes word processing and presentation software, Internet use, the basic structure and organization of a computer, ethical issues in computing, and the impact of computers on society. Every semester. Prerequisites: UTC Math Placement Level 20 or Math ACT score of 24 or above or Mathematics 106 with a grade of C or better. This course is designed for Business Administration majors.

**103 Introduction to Business and Entrepreneurship (3)**

The general characteristics of a business, its role in society, and the objectives of business enterprise. All functional areas of a business are covered, in the context of both established businesses and entrepreneurial ventures. Fall and spring semesters. Juniors and seniors majoring in Business Administration will not receive credit for this course.

**199r Special Projects (1-4)**

Individual or group projects. Every semester. Maximum credit 4 hours.
211 Statistical Methods for Business I (3)
Basic concepts of descriptive and inferential statistics including frequency, probability, sampling distributions, estimation theory, and introduction to hypothesis testing. Emphasis on business applications. Every semester. Prerequisite: Management 100; UTC Math Placement Level 30 or Math ACT score of 26 or above or Mathematics 131 with a grade of C or better.

212 Statistical Methods for Business II (3)
Advanced concepts of statistical inference including hypothesis testing for two populations, contingency, tables, goodness of fit, analysis of variance, and simple and multiple regression analysis. Emphasis is on computer solutions of business statistical applications. Every semester. Prerequisites: Management 100; Management 211 or Mathematics 210 with a grade of C or better; and Math Placement Level 30 or Math ACT score of 26 or above or Mathematics 131 with a grade of C or better.

310 Business Communication (3)
Principles of writing, grammar, rhetoric, and oral presentations are applied to business communication. Mechanics that include organization, methods of development, paragraph length, sentence style, and vocabulary of professional and business letters, memoranda, and reports. Every semester. Prerequisites: English 122 with a grade of C or better, Management 100, Theatre and Speech 109, and a minimum of 50 earned hours.

311 Operations Management (3)
An introduction to the management of operations systems in both service and manufacturing environments. The focus of the course is on strategic issues in operations as well as on design and control of operating systems. Topics include both concepts and decision support models from such specialized areas as inventory management, quality management, production and capacity planning, forecasting, project management, and production control. Every semester. Prerequisites: Management 100, 212; Math Placement Level 30 or Math ACT of 26 or above or Math 131 with a grade of C or better; Economics 102; junior standing.

315 Management Concepts, Theory, and Practice (3)
Principles of management focusing on the processes of strategic and intermediate term planning, organizing, human resource management, leadership, motivation, groups, communication and controlling. Topics also include the history of management as well as current trends in the discipline. Every semester. Prerequisite: junior standing.

330 Concepts in Organizational Behavior (3)
An advanced survey of theory and research concerning the behavior of people in organizations. Topics include personality, communication, perception, group dynamics, stress, change and organizational culture. Class is taught extensively using experimental exercises and cases. Every semester. Prerequisites: Management 315 or approval of instructor; junior standing.

331 Organizational Motivation and Leadership (3)
A comprehensive examination of leading theories of organizational motivation and leadership. An understanding of the processes affecting the behavior of employees is stressed. Emphasis will be placed on directed exercises demonstrating the implementation of concepts learned from the class material. Fall and spring semesters. Prerequisites: Management 315 or approval of instructor; junior standing.

332 Human Resource Management (3)
Introduction to human resource management principles and practices, including equal employment opportunity, job analysis, staffing, performance appraisal, compensation programs, and employee relations. Every semester. Prerequisite: junior standing. Pre- or Corequisite: Management 315.

340 Innovation and Creativity in Business (3)
The development of creative thinking skills and creative approaches to decision making as they relate to innovation and the recognition of opportunity. Issues relevant to the operations of entrepreneurial ventures and established businesses will be covered. Fall and spring semesters. Prerequisite: junior standing. May also be registered as Entrepreneurship 340. No credit in both Management 340 and Entrepreneurship 340.

356 Management Science (3)
Concepts and applications of quantitative (mathematical) techniques, and computer analysis for business decision making under deterministic and stochastic conditions. Topics include mathematical model formulation, linear programming, integer programming, goal programming, transportation problems, assignment problems, network models, project scheduling, decision analysis, queuing, dynamic programming, and Markov processes. Fall semester. Prerequisites: Management 100, 212; Math Placement Level 30 or Mathematics 131 with a grade of C or better or Math ACT score of 26 or better, junior standing.

360 Management Information Systems (3)
Systems and information concepts; systems in organizations; systems tools; decision making; database concepts; information systems analysis and design; integrative business project that includes problem identification, definition, requirements analyses, system design, and implementation. Every semester. Prerequisites: Management 100, 315; junior standing.

366 Business Forecasting (3)
A study of forecasting processes including data collection, analysis, model selection, and forecasting accuracy. Moving averages, smoothing models, time-series decomposition, simple regression, autorecorrelation models, and Box-Jenkins (ARIMA) methodologies will be studies. Computer applications such as spreadsheets and statistical packages will be extensively used. Spring semester. Prerequisites: Management 100, 212; junior standing.

410 Industrial Relations (3)
Union-management relations. Topics include labor law, collective bargaining, grievance administration, arbitration, and dispute resolution techniques. On demand. Prerequisites: Management 332 with a grade of C or better, junior standing.

411 Government Regulation of Human Resource Management (3)
An examination of laws and government guidelines regulating the employer-employee relationship with regard to hiring, discharge, and conditions of employment. Topics include sexual harassment, discrimination, and employee privacy. Fall and spring semesters. Prerequisites: Business Administration 335; Management 352 with a grade of C or better, junior standing.

434 Human Resource Management Staffing (3)
This course will examine the procedures used by employers to hire and train employees. Students will learn how organizations seek to improve their effectiveness by attracting, selecting, promoting, and developing their employees to ensure that each job is staffed by a fully capable individual. Fall and spring semesters. Prerequisites: Management 352 with a grade of C or better, junior standing.

435 Compensation Management (3)
A survey of pay and benefits practices used by organizations to control labor costs and motivate employees to achieve strategic organizational goals. Traditional compensation techniques based on job evaluations, as well as more contemporary techniques such as group-based reward practices, will be explored. Fall and spring semesters. Prerequisites: Management 212, 332 with a grade of C or better, junior standing.

436 Managing Diversity in Organizations (3)
This course provides an overview of diversity issues in the workplace. In response to changing workforce demographics, the global marketplace, and increased competition, organizational awareness of the need to effectively manage an increasingly more diverse workforce has intensified. This course helps students understand these issues and develop skills to function better in a multicultural business environment. Spring semester. Prerequisites: Management 315, junior standing.

437 Training and Development (3)
This course is designed to provide an introduction to the Training and Development field. From a foundation of various learning theories, students will build their understanding of processes of design, development and delivery of company training programs, and examine the role of training and development in the overall performance management system. Topics include training design, training technologies, employee development, adult education theory, managing the training function, instructional methods and training assessment. Spring semester. Prerequisites: Management 315, junior standing.

438 International Management (3)
A study of issues, concepts, and skills necessary for managerial success in international companies. Particular attention is given to exploring how culture influences management practices in overseas operations. Every semester. Prerequisites: Management 315, junior standing.
440 Strategic Management (3)
This capstone course integrates all functional business courses. Using cases, students will analyze management decisions and formulate future strategies for business. A mix of small and large businesses as well as private and publicly-traded businesses will be emphasized using cases. Strategic management theory will emphasize planning from mission setting and goal development through implementation, evaluation and control. Small group activities, experimental activities, and student team presentations on future strategies for selected companies and industries. Every semester. Prerequisites: Finance 302; Management 311, 315; Marketing 313; senior standing. May not be used for graduate credit.

441 Senior Seminar (1)
The practices, policies, and administration of business examined by top level executives of a variety of businesses. The course considers a wide variety of topics from the top management viewpoint with a view towards broadening the interest and horizon of the student. Every semester. Course graded on satisfactory/unsatisfactory credit basis. Prerequisite: senior standing. Open to Business Administration majors only

444 Strategic Issues in Human Resource Management (3)
The capstone course in human resources. Involves extensive readings and discussion of current Human Resource issues and their implications for the strategic and effective operation of the organization. Course is to be taken during student’s final semester before graduation. Fall and spring semesters. Prerequisite: Senior standing. Open to Business Administration majors only.

451 Production Planning and Control (3)
Explores concepts and techniques utilized in solving problems associated with production planning and control. Master production scheduling, material requirements planning, production activity and control, capacity requirements planning, constraint theory, and current topics will be addressed to broaden the student’s working knowledge of production planning and control management. Fall semester. Prerequisites: Management 311, junior standing.

452 Supply Chain Management (3)
A study of the problems and practices of operations and materials management. Topics will include: materials acquisition, classical inventory systems, demand management, aggregate planning, material logistics systems, and current topics in materials management including just-in-time, zero inventories, and group technology. Spring semester. Prerequisites: Management 311, junior standing.

495r Department Thesis
(1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497 Research (1-3)
Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-3)
Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
Every semester. Prerequisite: junior standing.

Marketing and Entrepreneurship
Professor Lawrence Ettkin, Head
The Marketing curriculum is designed to prepare students for careers in both the public and private sectors as well as for graduate studies.

2009 - Business Administration:
Marketing (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 131* (3 hours)
Statistics: Management 211* (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)
Behavioral and Social Sciences: One course from Economics 101* or 102* and one course from Psychology 101* or Sociology 151* (6 hours)

Major and Related Courses
Economics 101#, 102# and one course from Psychology 101# or Sociology 151# Management 100; Mathematics 131* and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;

2012-Business Administration:
Entrepreneurship (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 131* (3 hours)
Statistics: Management 211* (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: One approved Western Humanities course and one approved Non-Western Cultures and Civilizations course OR Option B: two approved World Civilization courses (6 hours)
Behavioral and Social Sciences: One course from Economics 101* or 102* and one course from Psychology 101* or Sociology 151* (6 hours)

Major and Related Courses
Economics 101, 102 and one course from Psychology 101# or Sociology 151# Management 100; Mathematics 131# and 136 (if exempted from Mathematics 131, student must take Mathematics 136); Theatre and Speech 109; Management 310;
Entrepreneurship Concentration
15 hours including Entrepreneurship 340, 430, 435, 440 and Management 360
15 hours chosen from the following with no more than 6 hours in Marketing:
Accounting 312; Finance 371; Management 332, 438; Marketing 318, 361, 362, 431, 442; Business Administration 336, 390, 459.

2.0 average in all business courses. Electives to complete 120 hours. A minimum of 54 hours of the 120 total hours must be taken at the 300-400 level. Maximum of 69 hours total accepted in College of Business courses; i.e., at least 51 hours other than College of Business courses must be completed. At least 50 percent of the business credit hours required for the B.S. degree in Business Administration must be earned at UTC.

See page 67 for additional requirements.

*Also satisfies requirement in the major.
 Also satisfies general education requirement.

MARKETING COURSES (BMKT)

313 Principles of Marketing (3)
This course examines the principles and methods involved in the movement of goods and services from producers to consumers or end-users. In particular, the course focuses on strategies the firm may use to take advantage of market opportunities. Every semester. Prerequisites: Economics 102; junior standing.

318 International Marketing (3)
Examination of the problems and opportunities in marketing across national borders. Major topics covered in this course are: description of major world markets, including cultural and political implications of target market selection; market entry alternatives; marketing strategy and implementation issues in a global environment. On demand. Prerequisites: Marketing 313, junior standing.

361 Selling and Sales Management (3)
Basic principles of selling and the practical application and management in sales situations. Persuasion and communication techniques related to the selling of industrial and consumer goods and services are covered. Selling techniques and communication skills are analyzed and practiced during class. The course also covers sales management topics such as sales department organization, the role of the sales manager, sales planning and forecasting, managing and motivating the sales force and sales policies. Fall and spring semesters. Prerequisites: Marketing 313 with a grade of C or better, junior standing.

362 Integrated Marketing Communications (3)
This course considers the many ways marketers communicate with target customers to inform and influence decision-making. Also considers the nature and role of integrated marketing communications in an organization's overall marketing plan. Foundation concepts include target marketing, positioning, and consumer behavior as they relate to persuasive marketing communications. Specialized topics include objective and budget setting, planning the promotion mix, media planning, sponsorship marketing, sales promotion techniques, public relations, and other elements of promotion strategy. Fall and spring semesters. Prerequisites: Marketing 313 with a grade of C or better, junior standing.

364 Retailing (3)
Focuses on strategy development and execution in marketing consumer goods and services through retail organizations. In addition to such topics as target market selection, location decisions, and merchandising issues, vendor relations, trade management, and emerging retail trends will be covered. Spring semester. Prerequisites: Marketing 313, junior standing.

365 Consumer Behavior (3)
Consumer behavior is an analysis of internal and external influences on consumer buying behavior. Internal influences include perception, motivation, personality, and attitudes, while external influences include culture, families, social class, and situations. The consumer decision making process is also evaluated with reference to these influences. Every semester. Prerequisites: Marketing 313 with a grade of C or better, junior standing.

415 Business to Business Marketing (3)
Principles and strategies used in the marketing of products and services to businesses and industrial customers. Covers the differences between organizational buyers and ultimate consumers and the resulting effects on marketing strategy. The course also covers the “buying” side of business to business marketing by examining the purchasing function within organizations. This includes the planning, implementation, and control of purchasing operations, inventory management, and buying for institutions and government agencies. On demand. Prerequisites: Marketing 313, junior standing.

417 Strategic Distribution Management (3)
Principles and strategies used to design and manage the distribution channels used in the movement of goods and services from producers to users. Includes channel management issues such as determining channel type, coverage and service levels, costs, and conflict management within the channel. The logistics of physical distribution are also addressed. This includes the integration of transportation, warehousing, order processing, inventory control, and location decisions in the effective movement of products and services. On demand. Prerequisites: Marketing 313, junior standing.

430 New Venture Creation (3)
An in-depth study of the lifestyle of the entrepreneur. Actual business opportunities identified and evaluated with group feasibility projects. The relationship of the entrepreneur to the formation and growth of the enterprise. Fall and spring semesters. Prerequisites: Marketing 313 with a grade of C or better, junior standing. May be registered as Entrepreneurship 430. No credit in both Marketing 430 and Entrepreneurship 430.

431 E-Marketing (3)
This course introduces students to the concepts and tools on Internet marketing. In addition to examining different e-business models, new and recent developments in e-business are a focus of the class. The strategic implications of the Internet on research, promotion, transactions, and distribution will be examined in both for profit and not-for-profit organizations. Fall semester. Prerequisites: Marketing 313, Management 100, junior standing.

442 Services Marketing (3)
An examination of the unique aspects of marketing of services. Appropriate for students seeking careers in health and human services, banking and finance, education and training, small business, sports management, information technology, or other service industries. The course investigates the characteristics of services and service customers, strategic differences in the marketing of goods versus services, service standards, and service quality measurement and management. In addition, the importance of service in providing customer satisfaction. Fall semester. Prerequisites: 6 hours in marketing courses including Marketing 313, junior standing.

450 Marketing Research (3)
Course emphasizes marketing research as a decision making tool in opportunity identification and problem analysis. In addition to secondary data analysis, research methodologies and procedures for additional data capture will be covered. An application-oriented approach will address all research phases from problem identification to presentation. Every semester. Prerequisites: Marketing 313 with a grade of C or better, 6 additional hours in marketing courses, Management 212, junior standing.

461 Marketing Problems (3)
The major marketing problems of representative firms, including manufacturers, wholesalers, and retailers. A case course dealing with actual business problems in all phases of marketing activity. Every semester. Prerequisites: Finance 302, Marketing 313 with a grade of C or better, 6 additional hours in Marketing courses, junior standing.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms) Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497 Research (1-3) Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.
498r Individual Studies (1-3)
Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
Every semester. Prerequisite: junior standing.

ENTREPRENEURSHIP COURSES (BETR)

340 Innovation and Creativity in Business (3)
The development of creative thinking skills and creative approaches to decision making as they relate to innovation and the recognition of opportunity. Issues relevant to both entrepreneurial ventures and established businesses will be covered. Fall and spring semesters. Prerequisite: Business Administration 335. Credit/no credit option. Credit may be earned in Entrepreneurship 430 and Management 340.

430 New Venture Creation (3)
An in-depth study of the lifestyle of the entrepreneur. Actual business opportunities identified and evaluated with group feasibility projects. The relationship of the entrepreneur to the formation and growth of the enterprise. Fall and spring semesters. Prerequisite: 313 with a grade of C or better, junior standing. May be registered as Marketing 430. No credit for both Entrepreneurship and Management 430.

435 Managing Venture Growth (3)
Focus is on managing the growth of a young business from the time it has completed the initial start-up phase through harvest. Topics covered include growth strategies, cash flow management, financing for growth, moving from entrepreneurial to professional management, legal issues, marketing on a tight budget, family business issues, management succession planning, and exit strategies. Spring semester. Prerequisite: Entrepreneurship or Marketing 430, junior standing.

440 Essentials of Entrepreneurial Finance (3)
This course provides an overall understanding of the segments of the capital markets specializing in start-up and growth financing, and focuses on the various financial concepts, issues, methods and industry practices relevant to entrepreneurial decision-makers. The course addresses a variety of topics including financial analysis, financial planning, business valuation, sources of funds, bankruptcy, expansion, IPOs, and cashing out. Fall semester. Prerequisite: Finance 302, junior standing.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
Every semester. See Departmental Honors. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497 Research (1-3)
Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-3)
Every semester. Prerequisite: junior standing. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-3)
Every semester. Prerequisite: junior standing.

General Business Administration

Professor Richard Casavant, Dean

General Business Administration consists of courses and programs which are offered to all students regardless of major or department. These courses are intended to enhance students’ opportunities to understand business and its environment and provide opportunities to participate in a business practicum. General Business Administration is not a degree program. Courses in this category are designated as BUSA for “Business Administration.” A concentration in Entrepreneurship is available to Business Administration majors and a minor in Entrepreneurship is available to non-business majors.

BUSINESS ADMINISTRATION COURSES (BUSA)

001r Cooperative Work Experience (0)
Cooperative work terms as a part of the cooperative education program in business. Student participation in off-campus work terms in business as a parallel work/learn semester or alternating semester (as either first semester, second semester, or a three-month summer term).

335 Legal Environment of Business (3)
American legal institutions and sources of law; ethical considerations of business; an introduction to social and political influences as reflected in government regulation. Every semester.

336 Business Law (3)
Fundamental principles concerning contracts, personal property, and bailments, sales, commercial paper, secured transactions, agency and employment, partnerships and corporations, real property. Fall and spring semesters. Prerequisite: Business Administration 335.

390r Internship (1-3)
A supervised work experience designed to strengthen the student’s technical competencies and fundamental knowledge in accounting, finance, management, marketing or entrepreneurship. Written report required. Every semester. Graded on a satisfactory/no credit basis. Prerequisite: junior standing and approval of internship coordinator. Open to business majors only.

412 Taxation of Estates, Gifts and Trusts (3)
A study of the federal taxation of wealth transfers, including federal estate and gift taxes, and the income taxation of estates and trusts. Summer semester. Prerequisite: Business Administration 335.

453 The Business of Health Care (3)
This course provides a basic understanding of the U.S. health care industry. Emphasis is on health care delivery issues, health care organization issues, and current topics of concern related to health care management and business issues. Summer semester. Prerequisites: Finance 302; Marketing 313; Management 311 and 315.

459 Small Business Practicum (3)
A project-based course where students, under the direction of the instructor, serve as business consultants. Students work directly with entrepreneurial companies to help solve practical business problems such as situation analysis, market evaluation, strategy development and implementation/control capabilities. The course uses a combination of independent study, in-class lecture and discussion, written reports and working presentations to assist students in sharpening analytical and communication skills as they apply to understanding small business management. On demand. Prerequisites: Finance 302; Management 311, 315; Marketing 313; Marketing or Entrepreneurship 430. Corequisite: Management or Entrepreneurship 340, or approval of instructor.
BUSINESS ADMINISTRATION MINORS

4644 - Business Administration Minor
(Available only to non-business majors.)
18 hours including Accounting 200 or 201; Economics 102; Management 315;
Finance 300 or 302*; Marketing 313; one additional course from the College
of Business at the 200-level or higher, excluding BMGT 211.
Minimum of 8 hours at the 300-400 level.
Minimum of 2.0 average in minor.
*Students may substitute any General Education approved statistics course in lieu
of BMGT 211 as a prerequisite to Finance 302. Students wishing to take any
course must meet all stated prerequisites.
Students not seeking a major in business administration may only complete a
maximum of 30 hours in the College of Business.

4555 - Entrepreneurship Minor
(Available only to non-business majors)
18 hours including Entrepreneurship 340 and 430, Accounting 200, Finance 300,
Management 103, Marketing 313
Minimum of 8 hours at the 300-400 level.
Minimum of 2.0 average in minor.
A student who is not seeking a major in business administration may only com-
plete a maximum of 30 hours in the College of Business.

4643 - Promotion Minor
(Available only to non-business majors)
18 hours including Marketing 313, 361, 362, 365, 442, 450.
A minimum of 8 hours at the 300-400 level required.
Minimum of 2.0 average in minor.
A student who is not seeking a major in business administration may only com-
plete a maximum of 30 hours in the College of Business.
College of Engineering and Computer Science

Professor William Sutton, Dean

College Mission: The College of Engineering and Computer Science (CECS) at The University of Tennessee at Chattanooga strives to serve the people, businesses, and industries of our region and support their technical needs. The College exists as the region’s principal resource for educational, applied research, and service programs.

College Objectives: Grounded in the application of scientific and mathematical principles and based on a commitment to interdisciplinary study, our programs and activities:
• Prepare undergraduate students for rewarding professional careers or graduate study and for a lifetime of creative thinking and adaptive learning as productive citizens;
• Prepare post-baccalaureate and graduate students for continuing professional development and career advancement;
• Promote excellence in teaching and learning through scholarship in our disciplines;
• Perform and disseminate applied research that solves problems of transforming information, matter, and energy into structures, machines, products, technologies, systems, organizations, and processes; and
• Serve the University and our professional communities with leadership and distinction.

The CECS supports programs in engineering, computer science, and technology management that lead to:
• Bachelor of Science in Engineering (with specializations)
• Bachelor of Science in Electrical Engineering
• Bachelor of Science in Mechanical Engineering
• Bachelor of Science with a major in Computer Science
• Bachelor of Science with a major in Engineering Technology Management

In addition, the CECS supports the following graduate programs:
• Master of Science with a major in Engineering (with concentrations)
• Master of Science with a major in Computer Science
• the Master of Science with a major in Engineering Management.
• Doctor of Philosophy (Ph.D.) with a major in Computational Engineering

These graduate programs are discussed in a separate Graduate Program publication

The undergraduate engineering program is accredited by ABET, Inc. (www.abet.org/), the national accrediting agency for engineering and computer science programs. Four of the programs—Chemical, Civil, Electrical, and Mechanical Engineering—are accredited in the ABET classification ‘Traditional Engineering Programs.’ Two of the programs—Environmental and Industrial engineering—are accredited in the ABET classification ‘Nontraditional Engineering programs.’

The undergraduate Computer Science program concentrations in Software Systems and Scientific Applications are also accredited by ABET, Inc.

The CECS full-time faculty has extensive experience in engineering or computer science, professional practice, research, and higher education. In addition, the college draws on the talent of adjunct faculty who are employed in professional capacities in a variety of industrial and governmental settings.
Cooperative Program (Co-op)
Hubert Prevost, Director
Professor Gary McDonald, Advisor-Engineering

In addition to the basic four-year engineering and computer science programs a five-year optional cooperative program is available. In this program students alternate between a term in school and a term in industry or divide their time between school and industry concurrently. Typical students receive their baccalaureate degrees after five years and obtain approximately 20 months of industrial work experience.

Program Objectives: The Co-op program is designed to: (1) provide practical experience which relates academic studies to industry requirements, (2) give the student a better understanding of human relations in industry, and (3) assist the student financially.

The financial benefits to the student are usually adequate to cover most of the student’s college expenses while obtaining the engineering or computer science degree.

Overall Program Structure and Requirements: The Co-op program is open to any UTC engineering or computer science student who has at least a 2.5 cumulative grade point average, whose class work and school activities indicate that he or she is dependable and capable, and who is acceptable to a cooperative company. In general, a student is admitted to this program at the end of the freshman year. The specific requirements of the program are described below.

Scholastic requirements: A student must have at least a 2.5 cumulative grade point average (out of 4.0) to enroll in the program. Further, the student must maintain a 2.25 cumulative grade point average to remain in the program. If the student fails to attain at least a 2.0 average in any semester while participating in the program, the student will be required to meet for advising to determine further enrollment in the program.

Registration: Co-op students are required to register each term (including each term in industry) as a co-op student. A $25 fee is assessed the student for registration during the work term.

Cooperative Seminar: All alternating engineering and computer science co-op students are expected to register and participate in Engineering 390r (Cooperative Seminar) during the term in school immediately following a work assignment. This seminar is designed to discuss and report on projects conducted as a part of the cooperative work assignment and to discuss topics relevant to the engineering profession.

Reports: Student participants are required to file a 1-3 page work report with the UTC Co-Op Office concerning the student’s work at the end of each work term.

Work Schedule: Co-op students are expected to attend school full-time during their first year and last year in the program. They will alternate each term (between school and work) or simultaneously attend school and work in industry during the three years between their first and last year in the program. (A term is considered to be either first semester, second semester, or a full summer term.)

Co-op Graduate: A co-op student is certified as a co-op graduate upon graduation if he or she has completed at least 3 alternating co-op work terms or 6 concurrent work terms and meets the degree requirement.

Additional Degree Requirements for Co-op Graduates: A cooperative program student graduate completes all requirements of their degree (engineering or computer science) plus 10 additional hours in Engineering 390r, Cooperative Seminar.

Engineering
Professor Cecelia Wigal, Assistant Dean, Undergraduate Programs

Program Mission: The engineering program at UTC provides accessible education in the theory and application of engineering in a supportive, interdisciplinary environment that prepares students for successful careers in industry, government, and academia; emphasizes project-based design; promotes lifelong learning; and serves the engineering profession.

Program Objectives: In support of this mission, the engineering program aims to produce graduates who:

• function as successful professionals in a variety of engineering disciplines
• function effectively in multidisciplinary environments
• adapt to various environments and participate in further knowledge building opportunities
• are progressing toward Professional Registration

Program Structure: The strength of UTC’s four-year Engineering program is its emphasis on breadth, interdisciplinary interaction, design, and depth. The program builds on the general education and graduation requirements of the University. Every student completes a structured set of courses that form a foundation in written and oral communication, mathematics, chemistry, physics, and engineering fundamentals. Special emphasis is placed on learning the basic tools and techniques of engineering. Interdisciplinary interaction is introduced and emphasized through interdisciplinary design projects, team experience, and laboratory exercises. Depth is provided during the last two years of the curriculum when the students focus on an area of engineering (Chemical, Civil, Electrical, Environmental, Industrial, or Mechanical).

The engineering faculty is dedicated to fostering lifelong learning among the engineering graduates. The majority of the full-time engineering faculty are registered professional engineers and possess substantial industrial experience.

Transfer Credit: Credits received by transfer for required engineering courses in either engineering or engineering technology management programs require a grade of C or better. Although equivalents will be awarded for D grades, students must retake the courses.
Career Preparation for Other Fields: Engineering study is considered an excellent preparation for advanced medical, law, and business degrees. Such plans usually require additional coursework beyond that required for the engineering degree. The student should contact one of the program directors or the dean of the CECS for advisement on course of study.

Engineering Curricula

Engineering Fundamentals: The engineering fundamental courses equip the student with an understanding of engineering economic analysis, statistical analysis tools, and strong decision making skills as well as basic engineering science knowledge. Laboratories develop an understanding of engineering instrumentation, experimental techniques, and fundamental principles. Written and oral communication is emphasized throughout the curriculum. The engineering design experiences begin with freshmen team design projects, are continued throughout the curriculum, and culminate in a two-semester interdisciplinary design project. The study of the computer and its applications is integrated throughout the curricula.

Programs:
The Bachelor of Science in Engineering (B.S.E.) has four program specialties:

- Engineering: Chemical
- Engineering: Environmental
- Engineering: Civil
- Engineering: Industrial

In addition, two discipline specific degree programs are offered:

- B.S.E.E. - Bachelor of Science in Electrical Engineering
- B.S.M.E. - Bachelor of Science in Mechanical Engineering

Each program offers specific upper-level undergraduate and graduate level courses that provide learning opportunities to support the skill and knowledge needs of a graduate of that program. Each program is governed by its own mission and set of program objectives. Students in each engineering program take a selection of additional engineering fundamentals courses (at least 7 hours) and at least 30 specialty course hours to complete their program. The descriptions and requirements of each program follow the description of the engineering curricula and fundamental courses.

Curricula Structure: The engineering curricula is highly structured. The typical engineering course has one or more prerequisites, which must be completed before enrollment in that engineering course. Additionally, some engineering courses have corequisites, which must be taken simultaneously with the engineering courses. It is expected that laboratory courses will be taken simultaneously with the related lecture courses. The structured nature of the engineering curriculum makes it advisable that students see a faculty advisor in their selected program prior to each registration. Typical courses of study have been prepared for each program, and may be obtained from the faculty advisor. The faculty who support the various engineering programs also teach the engineering fundamentals courses.

To obtain one of the offered undergraduate engineering degrees, a student must complete the following curriculum.

General Education (see pages 69-72 for list of approved courses)
Each engineering student must complete the following general education sequences:

- Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
- Mathematics: Mathematics 151/152 (4 hours)
- Statistics: Engineering 222 (3 hours)
- Humanities Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
- Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)
- Cultural and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses

Major and related courses vary depending upon the engineering program (see above); however, all B.S. Engineering programs require at least:

- Chemistry 121/123
- Mathematics 151/152, 161, 212, 245, 255
- Physics 231/281
- Engineering Fundamentals: Engineering 103, 104, 113, 185, 222, 246, 247, 270, 385, 485, and at least 7 additional Engineering hours as prescribed by the specialty program selected.

Note: For qualified students, Engineering 495r, Departmental Honors (4 hours), may substitute for Engineering 485 (3 hours).

Program and Related Courses

Engineering Program Courses: At least 30 hours, as prescribed by the specialty program.

Technical Electives: As prescribed by the program.

Minimum Degree Requirements

- 128 hours (138 for co-op graduates)
- Minimum 39 hours at the 300-400 level
- 2.0 GPA in all engineering courses

See page 67 for additional requirements.

ENGINEERING COURSES (ENGR)

001-007 Cooperative Work Experience (0)
Consecutive cooperative engineering work terms as a part of the cooperative engineering program. Student participation in off-campus work terms in industry (work term defined as either first semester, second semester, or a three month summer term in industry). Fall, spring and summer semesters.

103 Basic Engineering Science (3)

104 Vector Statics (3)
Vector statics operations and applications; particle equilibrium, force system resultants, equilibrium of a rigid body. Structural analysis; trusses, solution techniques. Center of gravity and centroid. Internal forces. Friction. Moments of inertia. Elasticity. Fall and spring semesters. Lecture 3 hours. Pre- or Corequisites: Mathematics 161 and 162. Prerequisite: Engineering 103 with a grade of C or better.

113 Freshman Engineering Laboratory (1)
Laboratory experiments to support and enhance the topics listed from Engineering 103. Introduction to professional aspects of engineering, including ethics and observation of engineering practice. Written and oral presentations included. Fall and spring semesters. Laboratory 3 hours. Corequisite: Engineering 103. Laboratory/Studio course fee will be assessed.
170 Introduction to Engineering (3)
An introductory class designed to meet the needs of entering freshmen, especially those whose math placement scores prevent them from taking the usual first semester engineering classes. Topics include basic math, use of EXCEL and MS Word, simple machines, and some very basic concepts relating to statics, digital logic, electricity, construction, and other engineering topics of interest to the students.

180 Introduction Three-Dimensional (3-D) Modeling (1)
Introduction to computer aided design (CAD) using three dimensional modeling software for both technical and non-technical individuals. Emphasis on sketching, dimensioning, geometric relations, assembly modeling, drawing construction and solid prototype production. On demand. Laboratory 3 hours.

185 Introduction to Engineering Design (3)
Introduction to the design process in engineering including: historical perspective, problem definition, idea generation, project planning and management, and simple decision-making. Design exercises culminate in a group designed prototype. Three dimensional thinking and the importance of modeling and visualization to the engineering design process discussed. Geometric modeling, solid modeling, and basic ideas of visualization practiced. Use of 3D modeling and prototyping. Written and oral reports included. Fall and spring semesters. Lecture 1 hour, laboratory 3 hours. Pre- or Corequisite: Mathematics 145. Laboratory/Studio course fee will be assessed.

199r Special Introductory Topics in Engineering (1-4)
Introductory treatment of a fundamental area in engineering, varying from term to term. On demand. Prerequisite: Approval of Instructor and Dean. Laboratory/Studio course fee will be assessed.

200 Structures in Architecture (3)
The history, esthetics, functional beauty, and behavior of architectural structures will be presented along with the economic, environmental, social, political, and scientific factors which were affected by them. On demand. Lecture 3 hours. Prerequisite: high school algebra and geometry.

211 Pollution Controls (3)
The emergence and solution of pollution problems. Discussion of fundamental ideas and policies contributing to pollution problems. Pollution is examined from industrial, political, and social perspectives. Included are role-playing experiences designed to illustrate the effects of various policies on the quality of life in a simulated community. Fall semester. Lecture 3 hours. Prerequisite: sophomore standing.

222 Probability and Statistics for Engineering (3)
Introduction to probability and statistical methods with direct application to engineering problem solving. Discrete and continuous distributions, numerical measures, elementary sampling, point estimation, interval estimation, design of experiments, and hypothesis testing. Fall, spring and summer semesters. Lecture 3 hours. Prerequisites: Mathematics 161/162.

224 Introduction to Engineering Computations (3)

225 Engineering Programming (3)
Introduction to programming with a high-level language. Flowcharting, algorithm design, input/output, data types, files, decisions, loops, arrays. Application to engineering problems including matrix equations. Fall and spring semesters. Lecture 3 hours. Prerequisite: Engineering 104 with a grade of C or better; Pre- or Corequisite: Mathematics 245.

246 Mechanics of Materials (3)
Stress-strain concepts and relations. Bending, shear, torsion, and deflections. Euler columns, repeated loading and connections. Fall and spring semesters. Lecture 3 hours. Prerequisites: Engineering 104, 185 with grades of C or better. Corequisites: Engineering 247, Mathematics 245.

247 Mechanics of Materials Laboratory (1)
Principles applied in various lab activities include the stress and deformation of solid bodies subjected to uniaxial, bending and torsional loads. Individual and team projects include designing, building, testing, and evaluating structures. Written engineering communications, engineering ethics and professional responsibility. Fall and spring semesters. Laboratory 3 hours. Prerequisite: English 122 with a grade C or better. Corequisite: Engineering 246. Laboratory/Studio course fee will be assessed.

248 Dynamics (3)
Rectilinear, curvilinear, and rotary motion. D'Alembert's principles of work and energy. Impulse and momentum, impact. Three-dimensional kinematics and dynamics. Fall and spring semesters. Lecture 3 hours. Prerequisites: Engineering 104 with grades of C or better. Corequisite: Mathematics 245.

270 Electrical Circuits I (3)

271 Electrical Circuits I Laboratory (1)
Introduction to laboratory instrumentation, measurement techniques, and electrical circuit elements. Laboratory experiments to support the introduction to DC circuit analysis. Kirchhoff's laws, network theorems, transient analysis, phasor and AC circuits analysis. Digital computer analysis of electrical circuits using such tools as PSPICE. Fall and summer semesters. Laboratory 3 hours. Corequisite: Engineering 270. Laboratory/Studio course fee will be assessed.

303 Thermodynamics (3)
Classical thermodynamics with emphasis on first and second laws of thermodynamics. Property relationships, chemical equilibrium, and cycle analysis. Fall semester and summer. Lecture 3 hours. Prerequisites: Engineering 104 with a grade of C or better, Mathematics 245.

305 Thermo-Fluids (3)
Integrated introduction to classical thermodynamics and basic fluid mechanics. Coverage of thermodynamic properties; the first and second laws of thermodynamics; pressure and flow measurement; fluid statics and kinematics; Bernoulli's equation; laminar and turbulent flow; and flow in pipes. Fall semester. Lecture 3 hours. Prerequisites: Engineering 104 with a grade of C or better, Mathematics 255.

307 Fluid Mechanics (3)
Fluid statics and kinematics; fluid dynamics including Bernoulli, continuity and momentum equations; fluid measurements; viscosity; compressible and incompressible flow; laminar and turbulent flow; flow in pipes and open channels; model studies; lift and drag. Fall and spring semester. Lecture 3 hours. Prerequisites: Engineering 104 with a grade of C or better; Mathematics 255; Corequisite: Engineering 308.

308 Fluid Mechanics Laboratory (1)
Laboratories that include pressure, quantity and property measurements; impulse, momentum and energy concepts; hydrostatic and buoyancy forces; pump and turbine applications; open channel flow; wind tunnel studies. Design experience. Application of statistics. Fall and spring semesters. Prerequisite: Engineering 222. Corequisite: Engineering 307. Laboratory/Studio course fee will be assessed.

328 Control Systems (3)
Classical feedback control systems for continuous time systems. Block diagrams and performance criteria. Root locus, frequency methods and state space approach. Fall and spring semesters. Lecture 3 hours. Prerequisites: Engineering 224 or 225 and 270, 271 with grades of C or better. Corequisite: Engineering 329.

329 Control Systems Laboratory (1)
Experimental and simulation studies of dynamic engineering systems. System identification and feedback controller design. Application of statistics. Fall and spring semesters. Laboratory 3 hours. Prerequisite: Engineering 222 with a grade of C or better, and Engineering 247 with a grade of C or better for Engineering majors, or English 122 for non-engineering majors. Corequisite: Engineering 328. Laboratory/Studio course fee will be assessed.
340 Engineering Materials Science (3)
Study of the science of solid materials, including metals, ceramics, plastics, and semiconductors. Nature and fundamental characteristics stressed. Atomic and macroscopic perspectives. Fall and summer semesters. Lecture 3 hours. Prerequisite: Chemistry 121 and 123, Physics 231.

352 Engineering Economy (3)
Economic decision making for engineering systems. Choice of alternatives by equivalent annual cost, rate-of-return, present worth, and benefit-cost methods. Tax influences, statistical decision making, replacement policy. Fall, spring, and summer semesters. Lecture 3 hours. Prerequisite: Engineering 222 or Management 211 with a grade of C or better.

370 Energy Conversion and Electronics (3)

385 Interdisciplinary Design Project I (3)
First semester of interdisciplinary group design project. Guided design experience that includes design methodology, concept generation, decision making, technical project management, quality and reliability engineering, concurrent engineering, teamwork, written and oral communication, engineering ethics and professional responsibility and the global and societal impact of engineering decisions. Includes team design project through the preliminary design phase. Fall and spring semesters. Lecture 2 hours, project 2 hours. Prerequisite: Engineering 247 with a grade of C or better. Registrant must be within three semesters of graduation. Engineering 485 must be taken in the immediately following semester.

499r Individual Studies/Research Contract (1-4)
On demand. See Departmental Honors. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

Engineering: Chemical (B.S.E.)
Associate Professor Joseph Owino, Head

Program Mission: The mission of the chemical specialty is three-fold: (1) to provide students with the knowledge and skills required for a range of careers and graduate study; (2) to provide service to the profession in our region and beyond; and (3) to maintain a supportive environment that encourages students and faculty to achieve.

Specialty Objectives: In support of this mission, the chemical program aims to produce graduates who
- have the ability to function as chemical engineers;
- agree that the environment at UTC was conducive to their achieving;
- work in multidisciplinary teams;
- are progressing toward professional registration;
- participate in professional societies;
- pursue graduate studies.

The chemical engineering program faculty is committed to delivering a chemical engineering curriculum that has a strong emphasis on fundamental engineering tools, the use of modern electronic instrumentation, and the design of chemical unit operations. The curriculum culminates with a process design project.

Chemical engineering program faculty interests include process design and control, chemical process miniaturization, and environmental issues and impacts.

2310 - Engineering: Chemical (ENCH)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 151/152 (4 hours)
Statistics: Engineering 222 (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-9 hours)

Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)

Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)

Behavioral and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses
Chemistry 121/123
Mathematics 151/152, 161/162, 212, 245, 255
Physics 231/281
Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385, 485

Note: For qualified students, Engineering 499r, Departmental Honors (4 hours), may substitute for Engineering 485 (3 hours).

Program and Related Courses
Chemistry 122/124, 351/353, 352/354, 371
Chemical Engineering: ENCH 331, 332, 430, 432, 433, 434, 435

128 hours (138 for co-op graduates).
Minimum 39 hours at the 300-400 level.
2.0 GPA in all engineering courses.
See page 67 for additional requirements.
CHEMICAL ENGINEERING COURSES (ENCH)
331 Chemical Process Principles (3)
Quantitative relations of chemical reactions and physico-chemical processes.
Calculations based on gases, vapors, humidity, and process material balances.
Study of industrial processes involving thermophysics, thermochemistry, and heat
balances. Fall semester. Lecture 3 hours. Prerequisites: Chemistry 121/123,
Mathematics 245. May be registered as ENEV 331. Credit not allowed in both ENCH
331 and ENVE 331.

332 Heat Transfer Processes (3)
Principles of heat transfer process in engineering and industrial applications.
Practical heat transfer equipment. Spring semester. Lecture 3 hours. Prerequisite:
ENCH 331 with grade of C or better.

430 Chemical System Design (3)
Application of systems design techniques to the design of chemical processes.
Discussion of case studies including separation processes, heat exchanger
networks, and process utilities. Individual or group design problems. Spring semester.
Lecture 3 hours. Prerequisites: ENGR 385, ENCH 432, 433, 435 with grades of C or
better. Corequisite: 434. May be registered as ENEV 430. Credit not allowed in both
ENCH 430 and ENEV 430.

332 Fractional Distillation Separation Processes (3)
Fundamental variables of fractional distillation. Ideal and non-ideal binary vapor-
liquid phase equilibria. Application of fundamental principles for systems with
simultaneous heat, and mass transfer. Design of flash, batch and continuous distil-
lation processes. Computational and design projects. Fall semester. Lecture 3 hours.
Prerequisites: ENGR 307, 308, ENCH 332 with grades of C or better.

433 Chemical Process Operations (3)
Fundamental variables of chemical operations; generalized treatment of mass-
transfer processes. Application to continuous and stage-wise separation processes.
Computational and design projects. Fall semester. Lecture 3 hours. Prerequisites:
ENGR 307, 308, ENCH 331 with grades of C or better. May be registered as ENEV
433. Credit not allowed in both ENCH 433 and ENEV 433.

334 Chemical Kinetics and Reactor Design (3)
Concepts of chemical kinetics applied to reactor design. Effects of temperature,
pressure, concentration, and catalysis on rates of chemical reactions. Design of
batch, backmix, and tubular reactors. Computational and design projects. Spring semester.
Lecture 3 hours. Prerequisites: ENGR 307, 308, ENCH 333 with grades of C or better.

435 Chemical Processes Laboratory (1)
Laboratory exercises in chemical operations such as binary distillation, batch dis-
tillation, stripping, rectification, flooding and gas absorption. Design projects.
Application of statistics. Fall semester. Laboratory 3 hours. Prerequisites: ENGR
222, ENCH 332 with grades of C or better. Corequisites: ENCH 432, 433. May be
registered as ENEV 435. Credit not allowed in both ENCH 435 and ENEV 435.
Laboratory/Studio course fee will be assessed.

497r Research (1-4)
on demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

499r Group Studies (1-4)
On demand.

Engineering: Civil (B.S.E.)
Associate Professor Joseph Owino, Head

Program Mission: It is the mission of the civil program to pro-
vide a high-quality education to students of all backgrounds to
become civil engineering professionals who plan, design, build
and manage infrastructure needed for the challenging environ-
ment of the 21st century. The specialty also aims to provide serv-
ice to the civil engineering profession locally and regionally.

Program Objectives: In support of this mission, the civil program
aims to produce graduates who

• participate in professional societies;
• agree that the environment at UTC was conducive to
  their achieving;
• work in multidisciplinary teams;
• are progressing toward professional registration;
• have the ability to function as civil engineers;
• pursue graduate studies.

The civil program curriculum provides an opportunity to obtain
a firm foundation in engineering science and develops the tech-
niques of analysis and design which are basic for the successful
practitioner. Emphasis is placed on developing problem-solving
skills. The students’ experiences culminate in a year-long civil
engineering team project supported by industry. The civil spe-
cialty also offers an option in structural engineering.

The civil program faculty have degrees in civil engineering and
is committed to delivering a civil engineering curriculum that has
strong emphasis on engineering analysis and utilization of mod-
ern engineering tools.

2312 - Engineering: Civil (ENCE)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composi-
tion (6 hours)
Mathematics: Mathematics 151/152 (4 hours)
Statistics: Engineering 222 (3 hours)
Natural Sciences: Two approved natural science courses, at least one includ-
ing a laboratory component (7-8 hours)
Humanities and Fine Arts: One approved fine arts course and one approved
humanities course (6 hours)
Cultures and Civilizations: One approved Non-Western Cultures and
Civilizations course (3 hours)
Behavioral and Social Sciences: Economics 101 and 102 or two approved
behavioral science courses (6 hours)

Major and Related Courses
Chemistry 121/123
Mathematics 151/152, 161/162, 212, 245, 255
Physics 231/281
Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385

Program and Related Courses
Geology 445
Engineering Fundamentals: ENGR 224, 248, 271, 307, 308, 352
Environmental engineering: ENEV 331, 438
Civil Engineering: ENCE 340, 361, 362, 363, 368, 450, 461, 462, 463, 468
Technical Elective: Two 3-hour 300-level or 400-level courses in an Engineering
program
CIVIL ENGINEERING COURSES (ENCE)

340 Civil Engineering Materials (3)
Physical and mechanical properties of materials used in construction. Behavior of materials and structures under load. Testing standards, aggregates, cements, concretes, ferrous and non-ferrous metals, wood and wood laminates, and plastics. Lecture 2 hours, laboratory 3 hours. Spring Semester. Prerequisite: Engineering 246/247 with grades of C or better.

361 Soil Mechanics (3)
Geological overview, soil composition, soil type and structure, index properties, classification, site investigation, subsurface flow, flow nets, drainage, subsurface stresses, settlement, shear strength, and slope stability. Spring semester. Lecture 2 hours laboratory 1 hour. Prerequisites: ENGR 246, 247, 307 with grades of C or better. Laboratory/Studio course fee will be assessed.

362 Transportation Engineering I (3)
Introduction to transportation engineering and surveying with specific emphasis on the design, operation, and construction of highway facilities. Topics in GIS and GPS will also be introduced. Fall semester. Lecture 3 hours. Prerequisites: ENGR 222 with a grade of C or better. Corequisite: ENCE 361.

363 Structural Analysis I (3)
Principles of structural analysis and design. Analysis and design of trusses, beams, and frames using equilibrium and energy methods. Use of influence lines. Elastic deflections of trusses, beams, and frames. Computer analysis of structures utilizing these methods. Spring semester. Lecture 3 hours. Prerequisites: ENGR 246, 247 with grades of C or better.

368 Design of Concrete Structures (3)
Design of concrete beams in flexure and shear, one-way slabs, T-beams, doubly reinforced beams, columns, development lengths, and serviceability based on the ACI Codes of Practice. Computer applications used as applicable. Spring semester. Lecture 2 hours, design laboratory 2 hours. Prerequisite: ENGR 385 (must have been taken in the immediately preceding semester. Pre- or Corequisite: ENGR 468.

450 Civil Engineering Design Project (3)
Capstone civil engineering design experience; design of a civil engineering structure, component or system. Consideration of engineering standards and realistic constraints that include most of the following considerations: economic, environmental, sustainability, constructability, ethical, health and safety, social, and political. Oral presentations and written design report required. Spring semester. Lecture 2 hours, design laboratory 2 hours. Prerequisite: ENGR 385 must have been taken in the immediately preceding semester. Pre- or Corequisite: ENGR 468.

460 Design of Steel Structures (3)
Design of structural systems: steel beams, columns, bolted and welded connections based on the AISC specifications. Computer applications used as applicable. Fall semester. Lecture 3 hours. Prerequisite: ENGR 363 with a grade of C or better.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Electrical Engineering (B.S.E.E.)

Professor Ahmed Eltom, Head

Program Mission: The electrical program educates students for professional practice or further study in electrical engineering, contributes to the body of knowledge in electrical engineering education, and creates a supportive environment that enables students and faculty to achieve their best.

Program Objectives: In support of this mission, the electrical program prepares students to take their places as responsible practitioners of EE in a multidisciplinary environment.

The electrical program faculty holds degrees in various emphasis areas of electrical engineering and is committed to a curriculum that is broad-based in the engineering fundamentals of analysis and design, and has a strong emphasis in electrical engineering. The electrical program curriculum provides breadth in the areas of electrical engineering plus emphases on electronics, instrumentation and control systems, and power systems. The curriculum is highly structured and is laboratory intensive.

2324 - Electrical Engineering (ENEE)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 151/152 (4 hours)
Statistics: Engineering 222 (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)
Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)
Behavioral and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses
Chemistry 121/123
Mathematics 151/152, 161, 212, 245, 255
Physics 231/281

Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385, 485

Note: For qualified students, ENGR 495r, Departmental Honors (4 hours) may substitute for ENGR 485 (3 hours).
Program and Related Courses

170 :: Engineering

Program and Related Courses

Physics 232
Engineering Fundamentals: ENGR 225, 271, 305
Technical Elective: One 3-hour 300-level or 400-level electrical engineering course OR One 3-hour 300-level or 400-level engineering or advisor-approved course.

128 hours (138 for co-op graduates).
Minimum 39 hours at the 300-400 level.
2.0 GPA in all engineering courses.
See page 67 for additional requirements.

ELECTRICAL ENGINEERING COURSES (ENEE)

272 Electrical Circuits II (3)

273 Electrical Circuits II Laboratory (1)
Measurement and analysis of transformers, AC circuits, power, three-phase systems, and power transient. Response transient. Spring semester. Laboratory 3 hours. Corequisite: ENEE 272. Laboratory/Studio course fee will be assessed.

274 Digital Electronics (3)

276 Digital Electronics Laboratory (1)
Fundamental digital behavior of semiconductor devices and amplifiers for the Electrical Engineering student. Realization of digital devices with standard integrated circuit logic families. Laboratory experiences and design projects. Spring semester. Laboratory 3 hours. Prerequisites: English 122, ENGR 270 and 271 with grades of C or better. Corequisite: ENEE 274. Laboratory/Studio course fee will be assessed.

325 Signals and Systems (3)
Time, sequence and frequency domain analysis of linear continuous-time and discrete-time systems. Direct solution methods for differential and difference equations, impulse response, convolution. Laplace, Fourier and Z transform methods. State variables for discrete and continuous systems. Fall semester. Lecture 3 hours. Prerequisites: ENEE 272, 273 with grades of C or better; Mathematics 245, 255.

371 Analog Electronics Laboratory (1)
Fundamental analog behavior of semiconductor devices and amplifiers for the electrical engineering student. Laboratory experiences and design projects. Fall semester. Laboratory 3 hours. Prerequisites: ENEE 272, 273 with grades of C or better. Corequisite: ENEE 371. Laboratory/Studio course fee will be assessed.

372 Analog Electronics (3)

373 Automatic Control Systems Analysis and Design (3)
Analysis and synthesis of feedback control systems for continuous and discrete time systems. Performance criteria. Routh-Hurwitz, root locus, Nyquist, Bode, and state space methods for stability determination. Analytic and computer-aided techniques for design of systems to meet performance standards. Spring semester. Lecture 3 hours. Prerequisites: ENEE 325 with grade of C or better; Mathematics 245, 255.

375 Electromagnetic Fields and Waves (3)
Elementary fields and waves, static electric and magnetic fields; potential and vector fields; Gauss’s Law; Ampere’s Law; line integrals; vector calculus methods; Biopt-Savart law; time varying electric and magnetic fields; Maxwell’s equations.

377 Advanced Electronics (3)

378 Advanced Electronics Laboratory (1)
A series of projects in advanced electronics culminating in a major design project, all totally designed by the student. Spring semester. Prerequisite: ENEE 276 with grade of C or better. Corequisite: ENEE 377. Laboratory/Studio course fee will be assessed.

380 Electrical Machinery (3)
Magnetic circuits and transformers. Rotating electrical machinery; DC machines, synchronous machines, induction motors. Spring semester. Lecture 3 hours. Prerequisites: ENEE 272/273, 375, with grades of C or better. Corequisite: ENEE 381.

381 Electrical Machinery Laboratory (1)
Experimental study of transformer and machine behavior. Design project included. Spring semester. Laboratory 3 hours. Corequisite: ENEE 380. Laboratory/Studio course fee will be assessed.

461 Power Electronics and Motor Drives (3)
Power semiconductors, converters, controlled rectifiers systems, choppers, and inverters, commutator motor drives, induction motor drives, synchronous generators, motors, and drives. Senior elective, offered on demand. Lecture 3 hours. Prerequisites: ENEE 371, 372, 380, 381 with grades of C or better.

462 Protective Relaying (3)
Protection fundamentals. Generator protection, transformer, reactor and shunt capacitor protection bus, motor, line protection and pilot protection. Senior elective, offered on demand. Lecture 3 hours. Prerequisite: ENEE 375 with grade of C or better.

464 Control of Robotic Systems (3)
Information, decision and control problems associated with robotics. Analysis, modeling, and control of automated robotic systems. Sensors and robot vision. Non-linearity issues. Senior elective, offered on demand. Lecture 3 hours. Prerequisite: ENEE 375 with grade of C or better.

466 Data Communications Systems (3)
The study and design of digital communication systems. Synchronization of digital systems. Multiple access techniques and protocols for networks and satellite systems. Interference rejection, source encoding, error correction, data security. Senior elective, offered on demand. Lecture 3 hours. Prerequisite: ENEE 475 with grade of C or better.

468 Advanced Electronic Instrumentation Systems (3)
Physical operation and design of modern discrete and integrated electronic structures and their application in signal processing. Response time, resolution, sensitivity, and noise considerations in instrumentation systems. Senior elective, offered on demand. Lecture 3 hours. Prerequisites: ENEE 377, 378, 477 with grades of C or better.

470 Microprocessors Applications (3)
Practical microprocessor principles, programming, and interfacing. Design of programs for basic data acquisition and control using the microprocessor as a system component. Review of number systems and digital logic. Fall semester. Lecture 2 hours, projects 3 hours. Prerequisites: ENGR 225, ENEE 371, 372, 377, 378 with grades of C or better. Laboratory/Studio course fee will be assessed.

472 Power System Analysis and Design (3)
Power systems component modeling, transmission lines, machines, transformers. Load flow analysis, symmetrical components, symmetrical and un symmetrical fault analysis. Fall semester. Lecture 3 hours. Prerequisite: ENEE 380 with grade of C or better.
473 Communication Systems (4)
Definitions and basic concepts of analog and digital modulation techniques. Fourier series and transform techniques used to study transmission of signals through linear filters, time-bandwidth relationships. Amplitude, frequency, and pulse modulation techniques described and analyzed. Periodic sampling and the Nyquist sampling criterion. Fall semester. Lecture 4 hours. Prerequisites: ENGR 222 and ENEE 373 with grades of C or better. Laboratory/Studio course fee will be assessed.

474 Optical Fiber Communication (3)
Optical fiber as a transmission medium using ray theory and wave theory approaches. Characteristics and practical aspects of optical fiber communications. Measurements undertaken in the laboratory and field. Light sources and detectors with particular emphasis on System design, application, and performance. Basic principles used for optical sensors. Electro-optic devices. On demand. Lecture 3 hours. Prerequisites: Engineering 222 and ENEE 325 with grades of C or better.

475 Analog and Digital Communications (3)
Definitions and basic concepts of analog and digital modulation techniques. Ethical considerations; global and societal effects of communications technology. Transmission of signals through linear filters, time-bandwidth relationships. Amplitude, frequency, and pulse modulation techniques described and analyzed. Periodic sampling and the Nyquist sampling criterion. Applications of probability to error rates and noise probabilities. Fall semester. Lecture 3 hours. Prerequisites: Engineering 222 and ENEE 377, 378, 340 with grades of C or better. Laboratory/Studio course fee will be assessed.

477 Electronic Instrumentation (3)
Basic principles of operation of commonly used sensors. Signal conditioning and grounding considerations. Introduction to programming of virtual instruments using software such as LabVIEW. Specification and design of systems to acquire, condition, display, and control using data from multiple sensors and programmable controllers. Semester group design project included. Spring semester. Lecture 3 hours. Prerequisites: Senior standing within 24 semester hours of graduation, or approval of the instructor; ENGR 225, ENEE 377, 378, 340 with grades of C or better. Laboratory/Studio course fee will be assessed.

478 Sampled Data and Nonlinear Control Systems (3)
Analysis and design of automatic control systems operating on discontinuous data and depending on either incremental or sampled continuous processes. Consideration of non-linear systems analysis and design. Fall semester. Lecture 3 hours. Prerequisite: ENEE 373 with grade of C or better.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Engineering: Environmental (B.S.E.)
Associate Professor Joseph Owino, Head

Program Mission: The mission of the environmental program is threefold: (1) to provide students with the knowledge and skills required for a wide range of careers and graduate study in environmental engineering; (2) to provide service to the environmental engineering profession in our region and beyond; and (3) to maintain a supportive environment that encourages students and faculty to achieve.

Program Objectives: In support of this mission, the environmental program aims to produce graduates who
- participate in professional societies;
- agree that the environment at UTC was conducive to their achieving;
- work in multidisciplinary teams;
- are progressing toward professional registration;
- have the ability to function as environmental engineers;
- pursue graduate studies.

The environmental engineering program deals with the design of processes to reduce the impact of man’s activities on the environment. The curriculum focuses on the reduction of pollution in air, water and solid waste from sources such as industry and utilities.

2316 - Engineering: Environmental (ENEV)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 151/152 (4 hours)
Statistics: Engineering 222 (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-9 hours)
Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)
 Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)
Behavioral and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses
Chemistry 121/123
Mathematics 151/152, 161, 212, 245, 255
Physics 231/281
Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385, 485
Note: For qualified students, ENGR 495r, Departmental Honors (4 hours) may substitute for ENGR 485 (3 hours).

Program and Related Courses
Biology 210
Chemistry 122/124, 351/353
Environmental Science 410
Geology 445
Engineering Fundamentals: ENGR 224, 303, 307, 308, 328, 329, 340, 352
Environmental Engineering: ENEV 331, 430, 433, 435, 437, 438, 439

128 hours (138 for co-op graduates).
Minimum 39 hours at the 300-400 level.
2.0 GPA in all engineering courses.
See page 67 for additional requirements.
ENVIRONMENTAL ENGINEERING (ENEV)

331 Environmental Process Principles (3)
Quantitative relations of chemical reactions and physico-chemical processes with environmental applications. Calculations based on gases, vapors, humidity, and process material balances. Study of industrial processes involving thermophysics, thermochemistry, and heat balances. Fall semester. Lecture 3 hours. Prerequisites: Chemistry 121/123, Mathematics 245. May be registered as ENCH 331. Credit not allowed in both ENCH 331 and ENEV 331.

430 Environmental System Design (3)
Application of systems design techniques to the design of environmental processes. Discussion of case studies including separation processes, waste minimization, resource recovery and recycle, and process utilities. Individual or group design problems. Spring semester. Lecture 3 hours. Prerequisites: ENGR 385, ENEV 433, 435 with grades of C or better. Corequisites: ENEV 438, 439, Environmental Science 410. May be registered as ENCH 430. Credit not allowed in both ENCH 430 and ENEV 430.

431 Survey of Environmental Engineering (3)
A survey of environmental engineering practice and principles. Fundamental principles including material balances; energy balances; fluid mechanics, reaction kinetics. Applications to water, air and solid systems. Selected municipal and industrial case studies. On demand. Lecture 3 hours. Prerequisites: ENGR 308, ENEV 331 with grades of C or better. May be registered as ENCH 431. Note: For qualified students, ENEV 431r, Departmental Honors (4 hours) may be registered as ENCH 431r. Credit not allowed in both ENCH 431 and ENEV 431.

433 Environmental Process Operations (3)
Fundamental variables of environmental process operations; generalized treatment of mass-transfer operations including separation processes. Application of fundamental principles of continuous and stage-wise separation processes applicable to resource recovery, recycle and reuse. Design project. Fall semester. Lecture 3 hours. Prerequisites: ENGR 308, ENEV 331 with grades of C or better. May be registered as ENCH 433. Credit not allowed in both ENCH 433 and ENEV 433.

435 Environmental Processes Laboratory (1)
Laboratory exercises in environmental operations such as stripping, flooding and gas absorption, drying of solids, flow in porous media, and filtration. Design projects. Application of statistics. Full semester. Laboratory 3 hours. Prerequisites: ENGR 222, ENEV 331 with grades of C or better. Corequisites: ENEV 433, 437. May be registered as ENCH 435. Credit not allowed in both ENCH 435 and ENEV 435. Laboratory/Studio course fee will be assessed.

437 Municipal and Industrial Waste Management (3)
Survey of the regulations pertaining to industrial and municipal wastes. Including but not limited to toxic and hazardous wastes. Survey of approved collection, transportation and disposal techniques. Design considerations. Case studies. Individual or group design project. Fall semester. Lecture 3 hours. Prerequisites: ENEV 331 with grade of C or better. Chemistry 351/353, Geology 445.

438 Water Supply and Waste Water Treatment (3)

439 Air Pollution Control (3)
Principles of control and remediation of contaminated air. Emphasis on design of air pollution control strategies for particulates, VOC’s, SOx and NOx. Scrubbers, combustion and catalytic oxidation. Design project. Spring semester. Lecture 3 hours. Prerequisites: ENGR 222, ENEV 433 with grades of C or better.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Engineering: Industrial (B.S.E.)
Professor Cecelia Wigal, Head

Program Mission: The industrial program promotes life-long learning by providing accessible undergraduate, graduate, and continuing education in the theory and practical application of industrial engineering while creating a supportive environment that enables students and faculty to excel.

Program Objectives: In support of this mission, the industrial program prepares industrial engineers who

- effectively evaluate, design, and implement integrated systems of people, materials, information, machines, and energy as required by business and industries;
- adapt to changing technologies and participate in further knowledge building opportunities such as professional and graduate education;
- think creatively, communicate effectively and function professionally and effectively in independent team environments.

The industrial program provides a program of study that embodies the realm of industrial engineering applications. The application of software tools and current industry practices are emphasized. The students’ experiences culminate in a one-semester industrial engineering team project supported by industry.

The industrial program faculty have degrees in industrial engineering as well as other engineering degrees that study and apply IE principles. The Faculty has experience in a variety of manufacturing and service industries. Research interests encompass a large range of applications from traditional industrial problems (production quality, manufacturing and work flow) to nontraditional service industry problems (patient safety, operation room turnover). The faculty works closely with the students in and out of the classroom.

2318 - Engineering: Industrial (ENIE)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152 (4 hours)

Statistics: Engineering 222 (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)

Cultures and Civilizations: One approved non-Western Cultures and Civilizations course (3 hours)

Behavioral and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses

Chemistry 121/123
Mathematics 151/152, 161/162, 212, 245, 255
Physics 231/281

Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385, 485

Note: For qualified students, ENGR 495r, Departmental Honors (4 hours) may substitute for ENGR 485 (3 hours).
Program and Related Courses
Engineering Fundamentals: ENGR 225, 248, 271, 305, 328, 329, 352, 370
Chemical Engineering: ENCH 331
Industrial Engineering: ENIE 350, 351, 354, 358, 441, 443, 450, 457, 458, 461
Technical Elective: One 3-hour 300-level or 400-level course in an engineering
discipline or an advisor-approved 300-level or 400-level course from another
program.

128 hours (138 for co-op graduates).
Minimum 39 hours at the 300-400 level.
2.0 GPA in all engineering courses.
See page 67 for additional requirements.

INDUSTRIAL ENGINEERING COURSES (ENIE)

350 Introduction to Project Management (3)
Examination of the identification, selection, and planning of projects. Specific
topics include: organization structure, project selection and scope definition, proj-
ect team selection and development, work breakdown structures and statements
of work, project scheduling (PERT/DPM) and budgeting, resource allocation, risk
management planning, and project controlling. Project management software is
applied. Fall semester. Lecture 3 hours. Prerequisite or Corequisite: ENGR 352. May
be registered as ETEM 350. Credit not allowed in both ENIE 350 and ETEM 350.

351 Operations Research I (3)
Introduction to operations research, the methodology of mathematical modeling,
the decision analysis, and its relation to problems in industrial, commercial,
and public systems. The emphasis is on the use of linear mathematical programming
including the simplex method, sensitivity analysis, transportation problems, inte-
gner programming, and goal programming. Fall semester. Lecture 3 hours.
Prerequisites: ENGR 222 with grade of C or better; Mathematics 212, 245.

354 Work Measurement and Design (3)
Techniques for analysis and improvement of work methods; principles of motion
economy, process charts, work sampling, standard data development, perform-
ance rating, predetermined time systems, and wage incentive systems. Emphasis
on man-machine interfaces (ergonomics) and productivity improvements.
Computer applications and design project included. Spring semester. Lecture 2
hours, laboratory 3 hours. Prerequisites: ENGR 222 or Management 211 with a grade
of C or better. May be registered as ETEM 354. Credit not allowed in both ENIE 354
and ETEM 354.

358 Manufacturing Processes (3)
Introduction to the analytical tools of machine science such as heat treatment,
metalworking, welding, vibrations, control theory, thermal processing, machine
operations, and their applications to the solution of manufacturing problems.
Emphasis is on the processes and applications of engineering theory to manufac-
turing problems. Spring semester. Lecture 3 hours. Prerequisites: ENGR 222, 246,
247 with grades of C or better; Physics 231; Chemistry 121/123.

441 Production and Operations Management (3)
The detailed study of designing a product or service through the processes and
systems of making and delivering the product, and controlling the operations.
Fundamental coverage of the concepts of competitiveness, productivity, forecast-
ing, supply chain management, inventory management, JIT, MRP, ERP, and queue-
ing theory basic quantitative techniques are explored. Spring semester. Lecture 3
hours. Prerequisites: ENIE 351 or BMGT 356, and ENIE 354 with grades of C or bet-
ter.

443 Simulation and Modeling (3)
Simulation of complex discrete-event systems with applications in industrial and
service organizations. Introduction to modeling, random number generation, sim-
ulation design, and current simulation software package. Applications include a
variety of industrial situations, including manufacturing and logistics simulation.
Spring semester. Lecture 3 hours. Prerequisites: ENGR 225 and ENIE 458 with
grades of C or better. Corequisite: ENIE 441.

450 Industrial Engineering Design (3)
Culminating design experience in industrial engineering. Discussion of case stud-
ies including operations systems, manufacturing, quality, ergonomics, layout and
scheduling. Includes team project with an application in manufacturing or serv-
ice industry. Oral and written communication of progress and results is empha-
ized. Spring semester. Lecture 1 hour, project 4 hours. Prerequisites: ENGR 385
and ENIE 350, 358, 457, 458 with grades of C or better. Corequisite: ENIE 441.

451 Operations Research II (3)
Introduction to non-linear programming, dynamic programming, network mod-
els, and queueing theory. Emphasizes the use of game theory, inventory theory,
queueing theory, Markov chains, forecasting, and network techniques with the
engineering applications. Lecture 3 hours. Prerequisite: ENIE 351 with grade of C
or better.

453 Value Engineering (3)
Introduction to concepts of Value Engineering and demonstration of the applica-
tion of techniques to maximize the value in a product, process, or service while
minimizing cost. Topics include functional analysis, functional costing, generation
of alternative designs, evaluation of alternative designs, proposal preparation and
presentation. Project required. Prerequisite: ENGR 352 with grade of C or better.
May be registered as ETM 453. Credit not allowed in both ENIE 453 and ETM 453.

455 Industrial Safety Engineering (3)
The basic information about accident prevention methods and techniques, plant
inspection, health hazards and their control, accident records and reports,
employee selection, placement and counseling based on legal, management, and
technical aspects of the application of system safety engineering. Lecture 3 hours.
Prerequisites: ENIE 354 with grade of C or better, Senior standing, or approval of
instructor.

457 Quality Control (3)
The design and analysis of quality systems. Fundamental coverage of statistical
process control, quality control concepts, control charts, product specifications,
process control, acceptance sampling systems, and other means of assurance
widely used in many industries to improve product and service quality and to
reduce costs. Fall semester. Lecture 3 hours; laboratory work included. Prerequisite:
ENGR 222 or Management 211 with grade of C or better. May be registered as ETM 457.
Credit not allowed in both ENIE 457 and ETM 457. Laboratory/Studio course
fee will be assessed.

458 Facilities Planning (3)
Methods, techniques, and computer algorithms for planning facility layout, facil-
ity location, and activities and equipment planning are presented. Scheduling
strategies that affect facility layout including push vs. pull operation, batch sizes,
and dispatching rules are also discussed. Cellular technology, material handling,
facility planning data collection methods, process flow-charting; and simulation of
manufacturing facility layout are demonstrated. Fall semester. Lecture 3 hours;
laboratory work included. Prerequisite: ENIE 354 with grade of C or better. May be reg-
istered as ETM 458. Credit not allowed in both ENIE 458 and ETM 458. Laboratory/Studio course
fee will be assessed.

461 Engineering Information Systems (3)
Introduction to and application of the basic concepts, design, development, and
uses of engineering information systems. Topics include architecture and compo-
nents of engineering information systems, problem analysis, modeling, design,
development, and system maintenance. Theoretical and practical issues related to
the manipulation of engineering information and design of queries are discussed.
Examples of engineering information systems are provided. Course culminates
with a project. Fall semester. Lecture: 3 hours; laboratory work included. Prerequisite:
ENGR 225 with grade of C or better. Laboratory/Studio course fee will be assessed.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

499r Group Studies (1-4)
On demand.
Mechanical Engineering (B.S.M.E.)
Associate Professor Gary McDonald, Head

Program Mission: The mechanical program prepares mechanical engineering students for successful careers in industry and academia, and provides service to the mechanical engineering profession and to the State of Tennessee.

Program Objectives: In support of this mission, the mechanical program aims to

- prepare mechanical engineering graduates who are technically competent;
- prepare students thoroughly in methods of analysis appropriate to solving mechanical engineering problems;
- develop skills pertinent to the design process, including economic considerations;
- teach students to use modern computer-based data acquisition and analysis for design and control of engineering systems;
- instill in our graduates an understanding of professional, societal, and ethical responsibilities and need for lifelong learning;
- produce graduates who are progressing towards professional licensure and continued professional development;
- produce graduates who are able to work effectively in teams and who demonstrate good communication skills.

The mechanical program curriculum offers two options: Energy Systems and Mechanical Systems. The Energy Systems option emphasizes applications of thermodynamics, fluid mechanics and heat transfer. The Mechanical Systems option emphasizes applications in the analysis and design of machine elements and mechanisms. Two courses differentiate the two options.

The mechanical program faculty have degrees in various emphasis areas of mechanical engineering and are committed to delivering a mechanical engineering curriculum that has strong emphasis on engineering analysis tools, utilization of modern, electronic instrumentation culminating with a mechanical engineering and interdisciplinary design experience.

2322 - Mechanical Engineering (ENME)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 151/152 (4 hours)
Statistics: Engineering 222 (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)
Cultures and Civilizations: One approved non-western cultures and civilizations course (3 hours)
Behavioral and Social Sciences: Economics 101 and 102 or two approved behavioral science courses (6 hours)

Major and Related Courses
Chemistry 121/123
Mathematics 151/152, 161, 212, 245, 255
Physics 231/281

Engineering Fundamentals: 103, 104, 113, 185, 222, 246, 247, 270, 385, 485
Note: For qualified students, ENGR 495r, Departmental Honors (4 hours) may substitute for ENGR 485 (3 hours).

Program and Related Courses
Industrial Engineering: ENIE 358
Mechanical Engineering: ENME 304, 309, 347, 348, 442, 443, 447, 450
ENME Option: Select one option:
- Energy Systems: ENME 440, 441
- Mechanical Systems: Two courses from ENME 445, 446, 448

128 hours (138 for co-op graduates).
Minimum 39 hours at the 300-400 level.
2.0 GPA in all engineering courses.
See page 67 for additional requirements.

MECHANICAL ENGINEERING COURSES (ENME)

304 Mechanical Engineering Thermodynamics (3)
A continuation of ENGR 303 (Thermodynamics) with an emphasis on mechanical engineering applications that involve energy (availability), power and refrigeration cycles, gas-vapor mixtures (psychrometrics), and chemically reacting gases (combustion). Spring semester. Lecture 3 hours. Prerequisite: ENGR 303 with grade of C or better.

309 Heat and Mass Transfer (3)
Fundamental principles of heat, mass, and momentum transfer; application to macroscopic systems. Special emphasis on heat transfer by conduction and convection; analogy between heat and mass transfer. Fall semester. Lecture 3 hours. Pre- or Corequisites: ENGR 303 with grades of C or better.

347 Mechanical Engineering Experimentation (2)
A course in the study of general characteristics of mechanical measurement systems; the study of electrical signals, computerized data acquisition systems, discrete sampling and time-varying signal analysis, statistical and uncertainty analysis of data; and the study of various sensing devices for solid-mechanical quantities, pressure, temperature, humidity, and flow. Fall semester. Lecture 2 hours. Prerequisite: ENGR 222 with a grade of C or better. Pre- or Corequisites: ENGR 303, 307, 308.

348 Kinematics and Dynamics of Machinery I (3)
Mobility analysis of planar mechanisms, the study of displacement, velocity and acceleration of planar mechanisms; the analysis and synthesis of various followers and plate cams; the analysis of spur, helical, bevel and worm gear systems with an introduction to simple and compound gear trains. Fall semester. Lecture 3 hours. Prerequisite: ENGR 248 with grade of C or better.

440 Advanced Fluid Dynamics (3)
Principles of continuity, momentum, and energy applied to flow measurements, turbomachinery, open channel flow, compressible flow, and computational fluid mechanics using text and/or supplemental software. Fall semester. Lecture 3 hours. Prerequisites: ENGR 303, 307 with grades of C or better.

441 Energy Conversion (3)
Broad based energy conversion with emphasis on global and societal impacts of engineering decisions as applied to steam power, gas turbines, internal combustion engines, and nuclear power systems. Combustion analysis using appropriate computer software for analyzing equilibrium combustion products. Spring semester. Lecture 3 hours. Prerequisites: ENGR 307, ENME 304, ENME 309 or ENCH 332 with grades of C or better.

442 Machine Design (3)
The analysis of design of machine elements including fatigue-failure analysis of shafts, springs, screws, brakes, clutches, chains, belts, welds, and rivets, lubrication of journals, ball and roller bearings, and spur, helical, bevel, and worm gears. Design experience included. Fall semester. Lecture 3 hours. Prerequisites: ENGR 246, 248 with grades of C or better.
443 Thermal Component Design (3)
Design of individual components of thermal systems. Design and analysis of components such as pumps, fans, compressors, turbines, heat exchangers, piping and duct design networks. Modern innovative thermal and refrigeration concepts involving economic tradeoffs in sizing and/or choice of materials. Global and societal impacts of engineering decisions. Design experience included. Fall semester. Lecture 3 hours. Prerequisites: ENGR 307, ENME 304, ENME 309 or ENCH 332 with grades of C or better, or approval of instructor for graduate students without undergraduate prerequisites.

445 Mechanical Vibrations (3)
Free and forced vibrations of damped and undamped systems; single and multiple degrees of freedom using lumped parameter analysis. Matrix methods. Spring semester. Lecture 3 hours. Prerequisites: ENGR 248 with a grade of C or better. Mathematics 245.

446 Advanced Mechanics of Materials (3)
Statically indeterminate structures; introduction to theory of elasticity; topics in mechanics of composite materials. Fall semester. Lecture 3 hours. Prerequisites: ENGR 246 with a grade of C or better; Mathematics 245.

447 Mechanical Engineering Experimentation Laboratory (2)
The laboratory will provide experiences with instrumentation and data acquisition required for measuring temperature, pressure, liquid and gas flow rates, rotational speed, strain, displacement, velocity, acceleration, and combustion products. Design project is included. Application of statistics. Fall and spring semesters. Laboratory 2 hours. Prerequisites: ENGR 307, 308, ENME 304, ENME 309 or ENCH 332, ENME 347 with grades of C or better. Laboratory/Studio course fee will be assessed.

448 Kinematics and Dynamics of Machinery II (3)
The study of compound and planetary gear trains and transmissions; static force analysis of mechanisms, dynamic force analysis of mechanisms, balancing of rotating systems; dynamics of reciprocating engines, cam dynamics and vibrations; analytic synthesis of linkage and introduction to robotics. Spring semester. Lecture 3 hours. Prerequisites: ENME 348 with grade of C or better.

450 Mechanical Engineering Design Project (3)
Capstone mechanical engineering design experience; design of a thermal and/or mechanical system; consideration of engineering standards and realistic constraints that include most of the following considerations: economic, environmental, sustainability, manufacturability, ethical, health and safety, social, and political; application of the design process; oral presentations and written design report required. Spring semester. Lecture 2 hours, design lab 2 hours. Prerequisites: ENGR 385, ENME 442, 443; Pre- or Corequisite: ENME 447.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

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Engineering Technology Management Program

Professor Neslihan Alp, Head

The engineering technology management program is an interdisciplinary program leading to a Bachelor of Science (B.S.) degree. The purpose of the program is to provide quantitative and qualitative engineering, technology, and management skills for problem solving. The program is intended to serve as advanced preparation to serve a leadership role in a technical or service organization. There are two concentrations in the program: Engineering Management and Construction Management.

2664 - Engineering Technology Management: Engineering Management (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Engineering 222* or Management 211* (3 hours)

Natural Sciences: Chemistry 121/123* and Physics 103/183* (8 hours)

Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)

Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)

Behavioral and Social Sciences: Economics 101* and 102* (6 hours)

Major and Related Courses

Accounting 201, 202, 305, and 335

Chemistry 121/123#

Economics 101# and 102#

English 276 or 277 or 278

Engineering 222# or Management 211#

Management 315 and 330

Mathematics 151/152#

Physics 103/183#

Engineering Fundamentals: Engineering 352

Management Fundamentals: ETEM 350, 354, 453 and 458

Specialty and Related Courses

Management Fundamentals: Management 332

Marketing Fundamentals: Marketing 313

Psychology Fundamentals: Psychology 406

Engineering Management Fundamentals: ETEM 450, 457 and 496

Technical Electives (36 hours): May come from engineering, science, or business courses. They may also come from an engineering technology curriculum. Advisement should be sought from program director as early as possible.

127 total hours required.

Minimum 39 hours at the 300-400 level.

2.0 average in all engineering, accounting, and management courses.

See page 67 for additional requirements.

Note: A maximum of 30 hours may be earned in the College of Business and credited toward the degree.
2665 - Engineering Technology Management: Construction Management (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Engineering 222* or Management 211* (3 hours)

Natural Sciences: Chemistry 121/123* and Physics 103/183* (8 hours)

Humanities and Fine Arts: One approved fine arts course and one approved humanities course (6 hours)

Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)

Behavioral and Social Sciences: Economics 101* and 102* (6 hours)

Major and Related Courses

Accounting 201, 202, 305, and 335

Chemistry 121/123#

English 276 or 277 or 278

Engineering 222# or Management 211#

Management 315 and 330

Mathematics 151/152#

Physics 103/183#

Engineering Fundamentals: Engineering 352


Specialty and Related Courses

Construction Management Fundamentals: ETCM 301, 401, 402, 403, 450 and 496

Technical Electives (36 hours): May come from engineering, science, or business courses. They may also come from an engineering technology curriculum.

Advisement should be sought from program director as early as possible.

127 total hours required.

Minimum 39 hours at the 300-400 level.

2.0 average in all engineering, accounting, and management courses.

See page 67 for additional requirements.

Note: A maximum of 30 hours may be earned in the College of Business and credited toward the degree.

CONSTRUCTION MANAGEMENT COURSES (ETCM)

301 Construction Safety and Risk Management (3)

Introduction of occupational safety hazards associated with the construction industry. Emphasis placed on recognition, evaluation and control of safety hazards, particularly as they relate to the Occupational Safety and Health Administration (OSHA) guidelines. Introduction to risk management strategies by identifying potential risks and assigning mitigation control measures. Lecture 3 hours.

401 Construction Scheduling (3)

Development of the project schedule and its relationship to the estimate and contractual scheduling requirements examined. The application of the Critical Path Method (CPM) and Program Evaluation Review Technique (PERT) to construction planning, scheduled vs. actual job expenditures, cost forecasting, should be reinforced. Lecture 3 hours. Prerequisite: ETEM or ENIE 350.

402 Construction Cost Estimating (3)

Principles and practices of estimating providing application and drill in surveying quantities of labor and materials for general construction projects: excavation, concrete and formwork, carpentry, masonry, structural steel, lath and plaster, interior finishes. Topics include proposal solicitation and preparation, bidding strategy, estimate types and content, quantity survey, ethics, and an introduction to computer use in estimating. Lecture 3 hours. Prerequisite: ENGR 352.
Computer Science and Engineering

Professor Joseph Kizza, Head

The Computer Science program provides the B.S. degree in computer science. Computer science majors take at least a 46-hour sequence of computer science courses and take additional courses in an area of concentration. The concentration of study augments the computer science courses and is a specialization in which the student can apply his or her knowledge of computers. Four concentrations are available: Software Systems, Scientific Applications, Computer Engineering, and Information Security and Assurance.

Program Mission: The Department of Computer Science and Engineering at the University of Tennessee at Chattanooga prepares students for productive and challenging careers in computer and information technology, and to function as leaders in a technological society. The department exists as the region’s principal resource for educational, applied research, continuing professional education, and service programs in computer and information technology. In these programs, emphasis is on communication and problem solving competencies, and on the applications of basic theory and design.

403 Construction Cost Accounting (3)
This course reviews the fundamentals of accounting and examines construction cost accounting principles as they apply to construction management, reading financial statements, cash management, cash flow analysis, depreciation and taxes, and impact on profitability. Examines the principles of activity based costing and net present value analysis, and introduces the framework for construction performance measurement, cost performance indices, and earned value analysis. Lecture 3 hours. Prerequisite: ENGR 352; junior standing; and approval of the instructor.

450 Construction Management Design (3)
Propose, design and implement a construction project that will analyze, integrate and synthesize concepts and knowledge from previous Construction Management course work. Independent research will be performed to develop projects in preparation for a formal final report and presentation. Lecture 1 hour, project 2 hours. Prerequisite: ETCM 301; Corequisite: ETCM 401 and 402.

496r Construction Management Internship (2-4)
Supervised work experience in construction management. Evaluation and reports required. Internships should be coordinated with the prior consent of an advisor by aligning with a local business. Lecture 1 hour, laboratory 3 hours. Prerequisite or Corequisite: ETCM 450.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

Program Objective: Within three years after graduation, our students will be on successful career paths in computer science or closely related fields as evidenced by such items as employment and promotions in a computer science or related position, entry into graduate school, and continuing education in the field.

Admission to the Computer Science Program
Students entering UTC who intend to major in Computer Science should be enrolled as pre-majors (0921). For admission to the Computer Science program, pre-majors must have completed Mathematics 145 and Computer Science 150 with grades of C or better. Only after meeting the course completion requirements or obtaining a written waiver from the Computer Science and Engineering department head will students be allowed to change their major to any of the Computer Science concentrations.

2154 - Computer Science: Software Systems (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Mathematics 307 or Engineering 222 (3 hours)

Natural Sciences: One 2-semester laboratory science sequence chosen from: Biology 121, 122; Chemistry 121/123 or 125, 122/124; Geology 111/181, 112/182 (8 hours)

Humanities and Fine Arts: Computer Science 385* and one approved fine arts course (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Economics 101* and 102* (6 hours)

Major and Related Courses
Accounting: 201, 202; Economics 101* and 102*; Management 311; one course from English 276, 277 or 278

Computer Science core courses: Computer Science 150, 160, 251, 261, 305, 306, 312, 335, 351, 385#, 450, 460, 490 or 495# 9 hours of upper division (300 or 400-level) Computer Science electives

Mathematics 151/152*, 161/162, 212, 303, 307 or Engineering 222

1 additional 1-semester laboratory science course chosen from: Biology 121, 122; Chemistry 121/123 or 125, 122/124; Geology 111/181, 112/182; Physics 230/280, 231/281, 232/282 (4 hours)

All majors must attain a minimum grade of C in all computer science core courses as a condition for graduation.

2.0 average required in all computer science courses excluding 110 and 111.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

*Also satisfies requirements in the major.

#Also satisfies general education requirements.

2155 - Computer Science: Scientific Applications (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Mathematics 307 or 408 or Engineering 222 (3 hours)
Natural Sciences: One 2-semester laboratory science sequence chosen from:
- Biology 121, 122; Chemistry 121/123 or 125, 122/124; Geology 111/181, 112/182; Physics 103/183, 104/184; or Physics 230/280, 231/281 (8 hours)

Humanities and Fine Arts: Computer Science 385* and one approved fine arts course (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Two approved behavioral or social science courses (6 hours)

Major and Related Courses

Computer Science core courses: Computer Science 150, 160, 251, 261, 305, 306, 312, 351, 385*, 450, 460, 490* or 495*

9 hours of upper division (300 or 400-level) Computer Science electives

Mathematics 151/152#, 161/162, 212, 245, 255, 303, 465

Mathematics 307, or 407 and 408, or Engineering 222

One additional 2-semester laboratory sequence chosen from Biology 121, 122; Chemistry 121/123 or 125, 122/124; Geology 111/181, 112/182; Physics 103/183, 104/184; or Physics 230/280, 231/281 (8 hours). If Biology or Geology is used to fulfill the General Education natural science requirement, the additional laboratory sequence must be chosen from Chemistry or Physics.

One course from English 276, 277, or 278

All majors must attain a minimum grade of C in all computer science core courses as a condition for graduation.

2.0 average required in all computer science courses excluding 110 and 111.

Minimum of 39 hours of 300 and 400 level courses.

2.0 average required in all computer science electives.

Students will be required to meet any prerequisite requirements of the courses. To satisfy prerequisite requirements, additional course work may be required.

2313 - Computer Science: Computer Engineering (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Engineering 222* (3 hours)

Natural Sciences: Chemistry 121/123 or 125 and Physics 231/281 (8 hours)

Humanities and Fine Arts: Computer Science 385* and one approved fine arts course (6 hours)

Cultures and Civilizations: One approved Non-Western Cultures and Civilizations course (3 hours)

Behavioral and Social Sciences: Two approved behavioral or social science courses (6 hours)

Major and Related Courses

Computer Science core courses: Computer Science 150, 160, 251, 261, 305, 306, 312, 351, 385*, 450, 460, 490* or 495*

Chemistry 121/123# or 125 and Physics 231/281 (8 hours)

Engineering core courses: ENGR 103, 104, 113, 222#; 270/271, and 305

Electrical Engineering core courses: ENEE 272/273, 325, 371/372, 377/378

Chemistry 121/123# or 125

Mathematics 151/152#, 161/162, 212, 245, 255, 303

Physics 231/281#

All majors must attain a minimum grade of C in all engineering, electrical engineering, computer science, and computer engineering core courses as a condition for graduation.

2.0 average required in all major and related mathematics, engineering, electrical engineering, computer science and computer engineering courses.

Minimum of 39 hours of 300 and 400 level courses.

128 total hours required.

See page 67 for additional requirements.

2156 - Computer Science: Information Security and Assurance (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 151/152* (4 hours)

Statistics: Mathematics 307 or Engineering 222 (3 hours)

Natural Sciences: One 2-semester laboratory science sequence chosen from:
- Biology 121, 122; Chemistry 121/123 or 125, 122/124; Physics 103/183, 104/184 (8 hours)

Humanities and Fine Arts: Computer Science 385* and one approved fine arts course (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and Non-Western Cultures and Civilizations OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Criminal Justice 110* and one additional approved behavioral or social science course (6 hours)

Major and Related Courses

Computer Science core courses: Computer Science 150, 160, 251, 261, 305, 306, 312, 335, 351, 385*, 450, 460, 490* or 495*

Information Security core courses: Computer Science 375, 415, 426, 444, 462

6 hours of upper level (300-400 level) Computer Science electives

2.0 average required in all computer science courses excluding 110 and 111.

Minimum of 39 hours of 300 and 400 level courses.

2.0 average required in all computer science electives.

Students will be required to meet any prerequisite requirements of the courses. To satisfy prerequisite requirements, additional course work may be required.

0600 - Certificate in Information Systems Security

Admission Requirements

Knowledge of mathematics and programming is required as demonstrated by the satisfactory completion of MATH 151/152 and CPSC 150 with minimum grades of C. Individuals will be admitted to the Certificate in Information Systems Security if they meet the admission requirements of the University as stated in the Undergraduate Catalog. Students will be required to meet any prerequisite requirements of the courses. To satisfy prerequisite requirements, additional course work may be required.
Course Requirements

CRMJ 110 Introduction to the Criminal Justice System 3
CPSC 160 Data Structures and Program Design 3
CPSC 375 Principles of Information Security and Assurance 3
CPSC 426 Computer Networks 3
CPSC 415 Biometrics and Cryptography 3
CPSC 444 Computer Network Security 3

Total Hours 18

0602 - Certificate in Advanced Information Systems Security

Admission Requirements

Individuals will be admitted to the Certificate in Advanced Information Systems Security if they meet the admission requirements of the University as stated in the Undergraduate Catalog and have a Certificate in Information Systems Security. Students will be required to meet any prerequisite requirements of the courses. To satisfy prerequisite requirements, additional course work may be required.

Course Requirements

CPSC 461 System Vulnerability Analysis and Auditing 3
CPSC 462 Database Security and Auditing 3
CPSC 484 Computer Crime Investigation 3

Total Hours 9

4538 - COMPUTER SCIENCE MINOR

23 hours in computer science including 150, 160, 251, 261, 312; one 400-level computer science course; one additional 300-400 level computer science course. At least two 300-400 level courses must be taken at this institution. Minimum 2.0 grade point average in the minor.

COMPUTER SCIENCE COURSES (CPSC)

110 Introduction to Computing (3)
Overview of the development of the electronic computer, its technology, capabilities, and limitations. Ethical and social issues are considered, as well as the role of computers in society. Introduction to the use of a range of useful microcomputer hardware and software. Extensive laboratory experience. Credit not allowed in both Computer Science 102 and 110. Prerequisites: UTC Placement Level 20 or Mathematics 106 with a grade of C or better.

111 Computer Information Systems II (3)
A study of the analysis, design, and implementation of business computer systems; system life cycle models; methods and techniques for systems development; advanced concepts in microcomputer application packages; introduction to a programming language such as BASIC. Prerequisite: CPSC 110.

118 Computer Programming with FORTRAN (3)
An introduction to the concepts and techniques of computer science. Emphasis is placed on the design of efficient algorithms using the FORTRAN language. Prerequisite: Mathematics 131 or 145.

150 Fundamentals of Computer Science (4)
An introduction to computer science concepts and computer software development using a higher level language. Algorithms, flowcharting, programming, and documentation of numerical and non-numerical problems. Introduction to computer science terminology and concepts such as computer hardware and computer application areas. Lecture 2 hours, laboratory 3 hours. Prerequisites: 4 years of college preparatory mathematics; UTC Math Placement Level 30 or Mathematics 151 or 144. Laboratory/Studio fee will be assessed.

160 Data Structures and Program Design (4)
Continued development of programming style using abstract data structures and top-down design. Debugging and testing of large programs. Emphasis on algorithm development. List processing, recursion. (Stacks, trees, searching and sorting) Lecture 3 hours, laboratory 2 hours. Prerequisites: CPSC 150 with a grade of C or better and either Mathematics 145 with a grade of C or better or UTC Math Placement Level 40. Laboratory/Studio fee will be assessed.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

251 Introduction to Operating Systems (3)
Basic operating system principles, job control languages and operating system internals. The hardware/software interface; file systems; resource management; command languages; segmentation, paging and virtual memory; other virtual resources. Detailed examination of two or more current operating systems, such as Windows, UNIX or Novell NOS. Prerequisite: CPSC 160 with a grade of C or better. May be registered as CPEN 251. Credit not allowed in both CPSC 251 and CPEN 251.

261 Software Design and Development (3)
A study of the analysis, design and implementation phases of software systems development using a phased life cycle approach. Process, data and object-oriented development models. Introduction to modeling tools and CASE software. Team approaches to software development. Project management concepts. Prerequisite: CPSC 160 with a grade of C or better. May be registered as CPEN 261. Credit not allowed in both CPSC 261 and CPEN 261.

305 Digital Logic and Introduction to Computer Hardware (4)
Number representation and arithmetic; basic digital devices and their Boolean representations; introduction to logic circuit design and simplification using Boolean algebra and Karnaugh maps; combinational logic building blocks such as multiplexers, demultiplexers, encoders, decoders, comparators, adders, ALUs; analysis and design of sequential logic circuits; sequential logic building blocks such as storage registers, shift registers and counters. Lecture 3 hours, laboratory 2 hours. Prerequisite: CPSC 150 with a grade of C or better and either Mathematics 145 with a grade of C or better or UTC Math Placement Level 40. May be registered as CPEN 305. Credit not allowed in both CPSC 305 and CPEN 305. Laboratory/Studio course fee will be assessed.

306 Computer System Organization and Assembly Language Programming (4)
Structure of digital computers; introduction to machine language, symbolic coding, and assembly language; register sets, instruction types, and addressing modes; assembler directives and macros; low-level input/output techniques; interrupts, procedure calls, returns, and stack operations; linking to high-level languages. Lecture 3 hours, laboratory 2 hours. Prerequisites: CPSC 160 and CPSC 305 or CPEN 305 with grades of C or better. May be registered as CPEN 306. Credit not allowed in both CPSC 306 and CPEN 306. Laboratory/Studio course fee will be assessed.

312 Algorithm Analysis and Advanced Data Structures (3)
A study of data structures and the algorithms used to process them. Algorithms for handling strings, stacks, lists, trees and graphs. Sorting and searching techniques. Recursive and non-recursive algorithms. Efficiency considerations. Spring and Summer semesters. Prerequisites: CPSC 261 or CPEN 261 and Mathematics 303 with grades of C or better.

335 File and Database Processing (3)
A study of sequential, direct, and indexed sequential files. File sorting and searching techniques. Data compression and data encryption. Database concepts. Introduction to the relational model. Prerequisite: CPSC 261 or CPEN 261 with grade of C or better.

351 Systems Programming (3)
Structure and design of programs whose inputs are programs. Assemblers, interpreters, compilers, loaders and supervisors. Introduction to formal programming languages, syntactic descriptions, symbolic functions and manipulations. Prerequisites: CPSC 261 or CPEN 261, CPSC 306 or CPEN 306, and Mathematics 303 with grades of C or better.

375 Principles of Information Security and Assurance (3)
This course focuses on information security, integrity and privacy techniques. Topics include the nature and challenges of computer security, the relationship between policy and security, the role and application of cryptography, the mechanisms used to implement policies, the methodologies and technologies for assurance and vulnerability analysis and intrusion detection. Prerequisite: CPSC 160 with a grade of C or better.
180 :: Computer Science

385 Ethical and Social Issues in Computing (3)
This course examines the ethical and social issues arising from advances in com-
puter technology and the responsibility that computer professionals and users
have with regard to computer use by focusing on the intrinsic link between ethics
and the law, how both try to define the validity of human actions, and on the
moral and ethical dilemmas created by computer technology that challenge the
traditional ethical and moral concepts. Prerequisites: English 122 and CPSC 110 or
150 with grades of C or better and junior standing.

410 Programming Languages (3)
The study of the structure, design, and implementation of computer programming
languages, including procedural, object-oriented, logic programming, and func-
tional languages. Topics include language syntax and semantics, procedure and
data abstraction, binding times, exception processing, support for concurrency,
and language programming paradigms. Prerequisites: CPSC or CPEN 251, and
CPSC 312 with grades of C or better.

415 Biometrics and Cryptography (3)
This course covers the basic concepts of pattern recognition and biometrics, cur-
rent major biometric technologies, and analyzes specific case studies from techni-
cal, privacy, and social impact viewpoints along with a critical study of the cryp-
tographic protocols used in many security applications. Prerequisites: CPSC 160,
375 and Mathematics 303 with grades of C or better.

420 Computer Graphics Applications and Algorithms (3)
Computer graphics systems, system software, data structures for graphics devices
and display processors, representational algorithms and packaged graphics soft-
ware. Prerequisite: CPSC 312 with grade of C or better.

426 Computer Networks (3)
The theory, design, engineering, and installation of networks to connect digital
computers. The course will prepare students to plan and implement a network.
Also includes peer-to-peer networks, the client-server model, network operating
systems, and an introduction to wide-area networks. The network and imple-
mentation tools may vary to meet current development trends. Prerequisites:
CPSC or CPEN 251, 305 with grades of C or better, or approval of instructor.

430 Topics in Simulation (3)
Digital simulation. A study of simulation languages and simulation techniques for
solving many types of research problems from management, engineering, and sci-
ence; simulation of large systems, design of simulation experiments for optimization;
aplications using simulation languages. Prerequisites: CPSC 312 with a grade of
C or better and an approved course in statistics.

431 Information Security Management (3)
The study of management in information security, including planning, policy and
protections is covered. Topics include planning for security, information security
policy, developing security programs, access control, cryptography, risk manage-
ment, information security administration and incident handling and response.
Both commercial practices and federal government policies for classified informa-
tion will be explored. Prerequisites: CPSC 160, 375 and 385 with grades of C or bet-
ter.

432 Advanced Operating Systems (3)
Concepts and issues of operating system principles; procedure activation, storage
allocation, system structure, performance evaluation, memory management,
process management, security, and recovery procedures. An introduction to dis-
tributed operating systems; communication, synchronized and system structure in
distributed systems. Prerequisites: CPSC or CPEN 251, 305, 306, and Mathematics
303 with grades of C or better.

435 Database Management Systems (3)
Concepts and methods in the definition and management of databases; physical
and logical database design; data modeling techniques; programming in a data-
base environment; topics in database security, integrity, recovery and concurrence.
Prerequisites: CPSC 335 with grade of C or better or Senior standing in Computer
Science and approval of instructor.

440 Wide Area Networks (3)
The design, preparation, and delivery of information, applications, and services
using client/server computing over a wide-area network. The network and imple-
mentation tools may vary to meet current development trends. Prerequisite: CPSC
312 with a grade of C or better.

444 Computer Network Security (3)
This course will focus on the security issues and procedures in computer and
mobile communication networks. Topics include risk assessment and security
policies, network intrusion detection, forensics technologies, and current trends
and research in security policies and technologies. Prerequisites: CPSC 426 with
grade of C or better and an approved course in statistics.

445 Automata, Complexity, and Computability (3)
An introduction to the classical and contemporary theory of computation includ-
ing automata, formal languages, Turing machines, recursive functions, comput-
putability and incomputability, complexity, and the classes of P and NP.
Prerequisites: CPSC 160 and Mathematics 303 with grades of C or better.

450 Software Engineering (3)
Study of techniques used in the definition, specification, design, implementation
and testing of large software systems. The course will include team efforts to iden-
tify and define the requirements of a large software product. The development of
this product will continue in CPSC 490. Prerequisites: CPSC 261 or CPSC 261,
Mathematics 303, and English 122 with grades of C or better.

454 Wireless Network Security (3)
This course covers the basic concepts of wireless technologies, current major
wireless technologies, and analyzes specific case studies from technical, privacy,
and social impact viewpoints. Also covered is a critical study of the IEEE 802.11
cryptographic protocols used in many wireless security applications. Prerequisites:
CPSC 160, 375 and 426 or 444 with grades of C or better.

460 Computer Architecture (3)
An advanced course in computer architecture. Topics include classical uniprocessor
architecture, computer arithmetic, instruction sets, control unit design including the
basics of microprogramming, I/O operations, memory hierarchies, cache and virtual
memory mechanisms, instruction and arithmetic pipelines, CISC, RISC, superscalar
and superpipelined architectures, parallel architectures. Prerequisites: CPSC or CPEN
251 and 306 with grades of C or better. May be registered as CPEN 460. Credit not allowed in
both CPSC 460 and CPEN 460.

461 System Vulnerability Analysis and Auditing (3)
The course covers the assessment of systems to discover resources that are sus-
ceptible to damage if intrusions and unauthorized access occur. The analysis of
system vulnerability, identification of security deficiencies, security measure-
ments, effectiveness and adequacy, and estimation of the vulnerability of system
resources to potential disaster hazards of unknown origin are also covered.
Prerequisites: CPSC 160, 375, and 426 or 444 with grades of C or better.

462 Database Security and Auditing (3)
This course provides an overview of database security concepts and techniques,
application security models, data mining, database and data auditing, XML access
control, trust management and privacy protection. New directions in database
security will also be discussed. Prerequisites: CPSC 335 and 375 with grades of C or better.

472 Internet Security Protocols (3)
This course focuses on Internet security vulnerabilities, firewalls and their limita-
tions. Topics include cryptographic technology and services, PPP and data layer
security, IPSEC and key management for network layer security. TLS, SSH and
transport layer security, secure e-mail, secure infrastructure protocols and all
authentication and virtual private networks protocols will be explored.
Prerequisites: CPSC 375, 426 and 444 with grades of C or better.

475 Advanced Computer Systems (3)
A study of representative computer systems including architectural features,
hardware implementation, machine level programming, memory systems, I/O
device interfacing, and system design. Prerequisites: CPSC or CPEN 305, 306, and
460 with grades of C or better. May be registered as CPEN 475. Credit not allowed in
both CPSC 475 and CPEN 475.

476 Embedded Microcontroller Systems (3)
Microcontroller systems architecture, advanced real-time signal interfacing tech-
niques, I/O programming concepts, real-time realization of digital signal process-
ing and filtering techniques. Projects included. Prerequisites: CPSC or CPEN
305, 306 and ENEE 371, 372 with grades of C or better. May be registered as CPEN 476.
Credit not allowed in both CPSC 476 and CPEN 476.
480 Introduction to Artificial Intelligence (3)
Artificial intelligence; simulation of cognitive behavior and self-organizing sys-
tems; heuristic programming including the use of list processing languages; data
representation; pattern matching structures; applications in symbolic mathemat-
ics; survey of examples from representative application areas. Prerequisite: CPSC 312 with a grade of C or better.

484 Computer Crime Investigation (3)
A study on procedures for identification, preservation, and extraction of elec-
tronic evidence. Auditing and investigation of network and host system intru-
sions, analysis and documentation of information gathered, and preparation of
expert testimonial evidence will be covered. Forensic tools and resources for sys-
tem administrators and information system security officers will also be explored. Prerequisite: CPSC 160, 251, 375 and 385 with grades of C or better.

485 Information Security Laboratory (3)
The course will involve laboratory exercises that cover advanced technical con-
ccepts in network surveillance, protection, auditing and detection techniques. Prerequisites: CPSC 375 and 426 with grades of C or better or Corequisite: CPSC 444 or 461.

490r Senior Capstone Project (3)
Continuation of the group design effort started in CPSC 450. Implementation of
a computer science project. Oral and written presentation of progress and final
results required. Prerequisites: CPSC 251, 312, 351, 385 and 450 with grades of C or better and senior standing in computer science or approval of instructor.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms) On demand. See
Departmental Honors. Students must submit an Individual Studies/Research
Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an
Individual Studies/Research Contract to the Records Office at the time of registra-
tion.

499r Group Studies (1-4)
On demand.

COMPUTER ENGINEERING COURSES (CPEN)
251 Introduction to Operating Systems (3)
Basic operating system principles, job control languages and operating system inter-
als. The hardware/software interface; file systems; resource management; command
languages; segmentation, paging and virtual memory; other virtual resources.
Detailed examination of two or more current operating systems, such as Windows,
UNIX or Novell NOS. Prerequisite: CPSC 160 with a grade of C or better. May be reg-
istered as CPSC 251. Credit not allowed in both CPEN 251 and CPSC 251.

261 Software Design and Development (3)
A study of the analysis, design and implementation phases of software systems
development using a phased life cycle approach. Process, data and object orient-
ed development models. Introduction to modeling tools and CASE software.
Team approaches to software development. Project management concepts. Prerequisite: CPSC 160 with a grade of C or better. May be registered as CPSC 261. Credit not allowed in both CPEN 261 and CPSC 261.

305 Digital Logic and Introduction to Computer Hardware (4)
Number representation and arithmetic; basic digital devices and their Boolean
representations; introduction to logic circuit design and simplification using
Boolean algebra and Karnaugh maps; combinational logic building blocks such as
multiplexers, demultiplexers, encoders, decoders, comparators, adders, ALUs;
analysis and design of sequential logic circuits; sequential logic building blocks
such as storage registers, shift registers and counters. Lecture 3 hours and labora-
tory 2 hours. Prerequisite: CPSC 150 with a grade of C or better and either
Mathematics 145 with a grade of C or better or UTC Math Placement Level 40. May
be registered as CPSC 305. Credit not allowed in both CPEN 305 and CPSC 305. Laboratory/Studio course fee will be assessed.

306 Computer System Organization and Assembly Language Programming (4)
Structure of digital computers; introduction to machine language, symbolic cod-
ing, and assembly language; register sets, instruction types, and addressing modes;
assembler directives and macros; low-level input/output techniques; interrupts;
procedure calls, returns, and stack operations; linking to high-level languages.
Lecture 3 hours and laboratory 2 hours. Prerequisites: CPSC 160 and CPSC or
CPEN 305 with grades of C or better. May be registered as CPSC 306. Credit not
allowed in both CPEN 306 and CPSC 306. Laboratory/Studio course fee will be assessed.

451 Computer Engineering Senior Project: Planning and Design
Phase (1)
A team project course that serves as the first part of the culminating experience
for students in the Computer Engineering concentration. Students will work in
small groups to develop specifications for hardware and software components and
a proposed design for a system to solve a problem typical of real-world engineer-
ing practice using realistic engineering standards and constraints. Prerequisites:
ENGR 222, CPSC or CPEN 306, CPSC 312 and ENEE 377/378 with grades of C or better.

460 Computer Architecture (3)
An advanced course in computer architecture. Topics include classical
uniprocessor architecture, computer arithmetic, instruction sets, control unit
design including the basics of microprogramming, I/O operations, memory hierar-
chies, cache and virtual memory mechanisms, instruction and arithmetic
pipelines, CISC, RISC, superscalar and superpipelined architectures, parallel
architectures. Prerequisites: CPSC or CPEN 251 and 306 with grades of C or better.
May be registered as CPSC 460. Credit not allowed in both CPEN 460 and CPSC 460.

475 Advanced Computer Systems (3)
A study of representative computer systems including architectural features,
hardware implementation, machine level programming, memory systems, I/O
device interfacing, and system design. Prerequisites: CPSC or CPEN 305, 306, and
460 with grades of C or better. May be registered as CPSC 475. Credit not allowed in both
CPEN 475 and CPSC 475.

476 Embedded Microcontroller Systems (3)
Microcontroller systems architecture, advanced real-time signal interfacing tech-
niques, I/O programming concepts, real-time realization of digital signal process-
ing and filtering techniques. Projects included. Prerequisites: CPSC or CPEN 305,
306 and ENEE 371, 372 with grades of C or better. May be registered as CPSC 476.
Credit not allowed in both CPEN 476 and CPSC 476.

490 Computer Engineering Senior Project: Implementation Phase
(3)
A team project course that serves as the second part of the culminating experi-
ence for students in the Computer Engineering concentration. Students will work in
interdisciplinary teams made up of computer engineers, computer scientists,
and electrical engineers to move a project forward from an initial design through
development and implementation, resulting in a complete system that solves a
problem typical of real-world engineering practice, using realistic engineering
standards and constraints. Written and oral presentations included. Prerequisites:
CPEN 451 with a grade of C or better.
The mission of the faculty and staff in the College of Health, Education and Professional Studies is to collaboratively engage students in diverse, high quality learning with opportunities for research and service within the metropolitan community. In fulfilling this mission, the College is committed to:

- Enhancing the bodies of knowledge in each of its disciplines.
- Promoting the values and ethics of a truth-seeking, caring college.
- Serving diverse populations by preparing family and social service experts; health and lifestyle professionals; and leaders and teachers for the 21st century.
- Promoting critical partnerships with communities for the development of socially responsible leaders.

Departments within the College include the Graduate Studies Division, Health and Human Performance, Interior Design, the School of Nursing, Physical Therapy, Social Work, and the Teacher Preparation Academy. Through a partnership with the University of Tennessee Health Science Center (UTHSC) in Memphis, the College offers the B.S. degree in Rehabilitation Science with a concentration in Occupational Therapy. Programs in the College have earned accreditation from the following organizations:

- National Council for Accreditation of Teacher Education (NCATE)
- Tennessee State Department of Education
- National Association for the Education of Young Children (NAEYC)
- Council for Interior Design Accreditation (CIDA) (formerly FIDER)
- National Association of Schools of Art and Design (NASAD)
- American Dietetics Association (ADA)
- Council on Social Work Education (CSWE) (in candidacy)
- Council for Accreditation of Counseling and Related Education Programs (CACREP)

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National Association of School Psychologists (NASP) (conditional accreditation)
Commission on Collegiate Nursing Education (CCNE)
Council of Accreditation (COA) for Nurse Anesthesia
Commission on Accreditation of Athletic Training Education (CCATE)
Commission on Accreditation in Physical Therapy
Education/American Physical Therapy Association

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Graduate Studies Division
Associate Professor John Freeman, Head

Health and Human Performance
Professor Gregory W. Heath, Head

Interior Design
Assistant Professor Dana Moody, Head

School of Nursing
Professor Kay Lindgren, Director

Rehabilitation Science: Occupational Therapy
Assistant Professor Susan McDonald, Coordinator

Rehabilitation Science: Physical Therapy
Associate Professor Randy Walker, Head

Social Work
Assistant Professor Valerie L. Radu, Head

Teacher Preparation Academy
Professor Valerie Rutledge, Head
Health and Human Performance (HHP)

Professor Gregory W. Heath, Head

The Department of Health and Human Performance is within the College of Health, Education and Professional Studies and exists to educate and train students, conduct and translate research, and provide service in the areas of physical activity, preventive and rehabilitative exercise, nutrition, and health promotion. Career program tracks include Exercise Science, Health and Exercise Science Pedagogy K-12, Nutrition, and Sport and Leisure Service Administration.

HHP: Exercise Science (B.S.)

Exercise Science has two concentrations. The Applied concentration is designed to provide the necessary knowledge and skills to assess, educate, counsel and prescribe appropriate exercise programs for apparently health individuals and those individuals with controlled cardiac, metabolic or pulmonary disease. Graduates of this program are employed in a variety of positions related to the fitness and physical activity fields. These positions include, but are not limited to, personal training in a variety of settings, agencies which promote physical activity such as the American Heart Association, and worksite health enhancement programs.

The Preprofessional concentration is designed to prepare students for graduate work in areas of study such as Clinical Exercise Physiology, Athletic Training and Physical Therapy. Students should refer to the Graduate Catalog for additional information about graduate studies.

Continuation Standards, Internship Admittance and Graduation Standards

Due to the nature of the practice of exercise science and the affect on the quality of life, the following standards will be applied for all individuals enrolled in this concentration:

1. To continue to progress in either Exercise Science concentration, students are required to:
   a. Earn a minimum grade of C in all HHP required classes;
   b. Maintain a minimum UTC cumulative GPA of 2.5;
   c. Maintain current CPR and First Aid certification;
   d. Maintain liability insurance for all clinical courses.

2. If, in the judgment of the faculty, there is reason to question the emotional and/or cognitive readiness of the student to successfully complete the clinical internships, the faculty have the right and the obligation to exclude the student from the preclinical or the clinical internships.

3. Students who do not successfully complete any portion of the pre-clinical course series (HHP 310, 410) may repeat the failed course(s) one time.

4. Students will be required to purchase uniforms/lab attire for both pre-clinical and clinical internships. Internship placement is very competitive and based upon previous class work, clinical work, and internship site coordinator interviews. Students may need to be financially prepared for travel and living expenses outside the Chattanooga area.

2560 - HHP: Exercise Science: Applied

General Education (see pages 69-72 for list of approved courses)

Rhhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 131* or higher (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Biology 121* and Chemistry 121/123* (8 hours)

Humanities and Fine Arts: One approved fine arts course (3 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Health and Human Performance 407* and one additional approved behavioral/social science course (6 hours)

Major and Related Courses

Biology 121#

Chemistry 121/123#

English 278

Health and Human Performance 221 and one activity course; 101 or 154; 135; 201; 230 or Biology 191 and 208; HHP 299, 310, 314, 317, 318, 332, 338, 350, 407#, 410, 411, 412, 413, 422, 428, 440, 457, 479

Select 15 hours from:

- Biology 122, 210 or any 300-400 level Biology course;
- Chemistry 122/124, 351/353, 352/354;
- Classics 300 or Physical Therapy 302;
- One course from HHP 216, 217, 218;
- Nursing 226;
- Philosophy 325 or 425 or Physical Therapy 305;
- Physics 103/183, 104/184

Minimum grade of C required in all required HHP courses.

2.5 cumulative grade point average in HHP required for graduation.

2.5 UTC cumulative grade point average required for graduation.

Minimum of 39 hours of 300 and 400 level courses.

Electives to complete 120 hours.

See page 67 for additional requirements.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

2562 - HHP: Exercise Science: Preprofessional

General Education (see pages 69-72 for list of approved courses)

Rhhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 136* or 145* higher (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Biology 121* and Chemistry 121/123* (8 hours)

Humanities and Fine Arts: Philosophy 325* or 425* and one approved fine arts course (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Health and Human Performance 407* and one additional approved behavioral/social science course (6 hours)
Major and Related Courses
- Biology 121#, 122, 191, 208
- Chemistry 121/123#, 122/124
- Classics 300 or Physical Therapy 302
- English 278
- Nursing 226
- Philosophy 325* or 425*
- Physics 103/183, 104/184
- **The Dietetics concentration at the University of Tennessee at Chattanooga is currently granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association, 120 South Riverside Plaza, Chicago, IL 60606-6995, 800/877-1600, ext. 5400, cade@eatright.org.**
- Select 9 hours with a least 6 hours coming from HHP 435, 441, 449 and 465.
- Physics 103/183, 104/184
- Philosophy 325* or 425*
- Nursing 226
- Classics 300 or Physical Therapy 302
- English 278
- HHP 021, 135, 221, 236, 237, 331, 334, 336, 421, 432, 433, 434 and one HHP activity course;
- Accounting 200 or 201; Biology 210; Chemistry 121/123#, 122/124#; Early Childhood 350; Mathematics 131#; Psychology 101#; one course selected from Early Childhood 340# or Sociology 151* (6 hours)
- Complete of one of the following concentrations:

2558 - Nutrition: Dietetics
- Biology 191, 208; Chemistry 351/353, 352/354, 466; HHP 337, 338, 437, 438, 439

2559 - Nutrition: Food and Nutrition
- Communication 101, Management 103, Biology 121, one course selected from English 277 or 278 or Management 310, HHP 409
- 2.0 average in all Health and Human Performance courses.
- Minimum of 39 hours of 300 and 400 level courses.
- Electives to complete 120 earned hours.
- See page 67 for additional requirements.
- *Also satisfies requirement in the major.
- #Also satisfies general education requirement.
cation before the end of the sophomore year in order to plan an appropriate academic program.

2553 - HHP: Sport and Leisure Service Administration (B.S.)

The professional disciplines that comprise Sport and Leisure Service Administration prepare students for management and leadership positions in many commercial settings. It recognizes the marriage between sport and society and allows majors to select an emphasis on either sport administration (the business of sport) or traditional leisure services such as recreation and tourism management.

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: Management 211* or HHP 401* (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Two approved courses, one from humanities and one from fine arts (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Health and Human Performance 407* and Economics 102* (6 hours)

Major and Related Courses

Economics 102#; Management 211 or HHP 401#;

Business Administration Core (18 hours)

Sport and Leisure Service Administration majors may only complete a maximum of 30 hours in the College of Business. Students will select course work which leads to either a Business Administration Minor or Entrepreneurship Minor. Completion of the minor includes a minimum of 8 hours at the 300-400 level and a minimum 2.0 grade point average for all courses attempted for the minor.

4644 - Business Administration Minor: 18 hours including Accounting 200 or 201; Economics 102; Management 315; Finance 300 or 302; Marketing 313; one additional course from the College of Business at the 200-level or higher, excluding Management 211.

4555 - Entrepreneurship Minor: 18 hours including Entrepreneurship 340 and 430 or Management 340 and 430, Accounting 200, Finance 300, Management 103, Marketing 313

Sport Administration Core Course Requirements

HHP 021 and one HHP activity course; HHP 154, 201, 212, 213, 332, 405, 406, 407#, 456, 479, 480

Completion of one of the following options:

Option A: Leisure Service Administration (12 hours)

HHP 209, 218, 220, and 6 hours selected from HHP 216, 217, 305, 453

Option B: Sport Administration (12 hours)

Communication 101, 271, Management 103, Marketing 361

Option C: Outdoor Recreation Administration (12 hours)

8 hours from HHP 202, 306, 307, and 4 hours from one of the following Outdoor Specializations:

Aquatic Management: HHP 049, 058, 059, 088

Paddling: HHP 041, 042, 046, 062, 065, 080

Outdoor Adventure: HHP 028, 054, 090, and one hour from HHP 046 or 062 Electives as approved by Advisor to complete 120 earned hours.

2.0 average in all HHP courses. Minimum of 39 hours of 300 and 400 level courses. See page 67 for additional requirements.

*Also satisfies general education requirement.

HHP MINORS:

4521 - Athletics Coaching

This program is designed to address mental skills, strategies, and concepts of coaching from the allied fields of physiology, psychology, sociology, kinesiology, and management for individuals planning adjunct careers in coaching with majors other than HHP.

21-22 hours including: 3-4 hours from Biology 191 or HHP 201 or HHP 317; HHP 209, 340, 405, 407, 479; two courses from HHP 203, 204, 205 or from 206, 207, 208 or one from 203, 204, 205 and one from 206, 207, 208

Minimum 2.0 average in the minor.

4556 - Exercise Science

Total of 18 hours including: HHP 317, 318, 428, 457 and two courses selected from HHP 314, 350, 401, 440, 441 or 449

Minimum 2.0 average in the minor.

4590 - Food and Nutrition

18 hours including HHP 135, 236, 237 and 9 hours at the 300 and 400 level selected from HHP 331, 333, 334, 336, 337, 338, 439.

Minimum 2.0 average in courses for the minor.

4648 - Leisure Studies

Total of 24 hours including: 6 hours of health to include HHP 100, 154; 6 hours in three courses from HHP 202, 205, 206, 207, 208, 209, 210, 220; 12 hours in four courses from HHP 201, 305, 325, 332, 470

Minimum 2.0 average in the minor.

HEALTH AND HUMAN PERFORMANCE COURSES (HHP)

Physical Recreational Activities

Courses within the service program hold contemporary attractiveness as "life-time" activities and should appeal to the educated adult for maintaining a healthy and wholesome lifestyle.

021 Concepts and Application in Wellness/Physical Education (I)

This course is designed to develop sound strategies for adopting and maintaining a physically active lifestyle. Emphasis is placed upon the concept of health related physical fitness (HRPF) and concepts related to the optimal functioning of the cardiopulmonary system, nutrition and body composition, and musculoskeletal system. Assessments will be used to provide the student with their current levels of HRPF with laboratory activities designed to demonstrate how students might improve and maintain optimal physical fitness. Every semester.

027 Adapted Physical Education (I)

Designed for those students with physiological, anatomical, and medical limitations that limit the amount of physical activity. Registration in or transfer to the class is dependent upon the recommendation of a physician or the major advisor of Exercise Science and Health.

028 Beginning Hiking and Backpacking (I)

This course is for beginners and will teach the philosophy of low impact hiking and camping. The basics of equipment, map, and campus use and trip planning will be covered. Field experience will be a part of the course.

029 Beginning Bowling (I)

This course presents terminology of the game, various grip and stances, the delivery approach, release, and follow through. Rules and scoring as well as tournament bowling are learned. Students with an average of 135 or higher are not eligible for this beginner course.

030 Beginning Golf (I)

This course stresses swing motion and the basic fundamentals. Techniques of the full swing and the short game are presented. Rules and etiquette are covered.

031 Beginning Racquetball (I)

This course is designed to emphasize the fundamental skills of racquetball. Students are taught how to execute shots from a variety of positions and how to
use strategy to their advantage. Tournaments are played within the class to allow students practical application of the skills they are taught.

037 Beginning Tennis (1)
Beginning tennis skills are presented including forehand and backhand ground strokes, the volley and the serve. Rules, terminology, and basic game strategy will be taught. Through play, an increased level of fitness and skill will be gained to promote participation in tennis throughout life.

038 Beginning Badminton (1)
Beginning badminton is a badminton introductory activity class. This class is designed to teach the basic skills and strategies necessary for participating in recreational badminton.

040 Beginning Conditioning and Weight Training (1)
This class is designed to help students understand and apply the basic principles of training as they relate to their individual cardiovascular fitness, flexibility, muscular strength and muscular endurance. Emphasis will be on the introduction of physiological principles and instruction on techniques of weight training.

041 Beginning Rowing (1)
An introductory course that focuses on the fundamental skills of sweep rowing. This course will proceed at a pace that is appropriate for new rowers or those with limited experience, but becomes physically demanding as the semester progresses.

042 Beginning Sculling (1)
This course is designed to proceed at each student’s skill level and ability. The focus is to learn how to row a one person rowing shell (i.e. scull). No prior rowing experience required but must know how to swim.

043 Beginning Circuit Training (1)
This class is designed to improve cardiovascular fitness, muscular strength and flexibility utilizing interval training.

044 Beginning Water Aerobics (1)
This course uses exercises conducted in water such as water walking, aerobic exercise to music and various resistance exercises to develop cardiovascular and musculoskeletal fitness.

045 Beginning Aerobic Dance/Step (1)
The course is designed to provide students with the opportunity to learn the principles and facts about aerobic fitness and to develop aerobic fitness through various beginning level aerobic dances and step aerobics. The aerobic dances are geared for the non-dancer and include a blend of jogging, lunges, arm and leg movements, and other large muscle movement.

046 Beginning Canoeing (1)
This course will teach the beginning student strokes, parts of equipment, and trip planning. Field experience will be a part of the course.

047 Beginning Jogging/Running for Fitness (1)
This course provides an opportunity to develop cardiovascular fitness and weight control. Selection of proper clothing and equipment, the physiological effects of a jogging/running program, care and prevention of injuries, and the mechanics of safe exercise are presented. Nutrition and weight control are covered.

048 Beginning Ballet (1)
This course introduces students to fundamental skills in the art of ballet. Movement combinations of allegro and adagio along with a self-choreographed dance are incorporated.

049 Beginning SCUBA Diving (1)
This course will teach students how to dive safely and be able to plan a scuba dive. Diving equipment, techniques, medical aspects, and diving physics will be covered.

050 Beginning Gymnastics (1)
Beginning gymnastics is designed to acquaint students with the concepts, values, and technical elements of gymnastics.

051 Beginning Swimming (1)
This course affords students the opportunity to work in the shallow and deep waters. Skills are developed as well as safety behaviors.

052 Beginning Modern Dance (1)
Modern Dance is symbolic movement which has been organized, integrated and objectified for individualized expressive purposes. It shares with other art forms and elements of creativity.

053 Power Yoga (1)
Designed to improve cardiovascular strength, muscular strength, muscular endurance and flexibility. Goals are accomplished through the balance of mind and body, along with focus of effort. Also designed to increase awareness and knowledge concerning yoga tradition, technique and practices used to promote health and fitness.

054 Rock Climbing and Rappelling (1)
This course will prepare you for basic rock-climbing practices in the outdoors.

055 Walking for Fitness (1)
This course provides an opportunity to develop cardiovascular fitness and weight control. Selection of proper clothing and equipment, the physiological effects of a walking program, care and prevention of injuries, and the mechanics of safe exercise are presented. Nutrition and weight control are covered.

056 Tai Chi (1)
Provides students with an introduction of Tai Chi exercise, including its methods, principles and applications. Practicing a short form of Yang style Tai Chi Quan, students will be able to use Tai Chi exercises as a way to improve mental and physical health, release stress, promote positive energy, and enrich quality of life.

057 Swimming for Fitness (1)
To gain an understanding of principles of training and benefits of aquatic exercise using swim strokes: freestyle, backstroke, sidestrokes. Timed swims are included.

058 SCUBA Lifesaving and Accident Management (1)
This course will teach scuba lifesaving techniques, CPR, first aid and emergency oxygen use as it pertains to the sport of scuba diving. The student will be able to recognize an emergency and respond in the proper manner.

059 Lifeguarding/WSI (1)
The purpose of the lifeguard training course is to teach lifeguards the skills and knowledge needed to prevent and respond to aquatic emergencies. The course content and activities prepare lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies, and prevent drowning and other incidents. The course also teaches other skills an individual needs to become a professional lifeguard. Not repeatable.

060 Beginning Boxing Aerobics (1)
Boxing Aerobics will be taught at the beginning level. The course is designed to provide each student with the opportunity to learn the principles and facts about aerobic fitness and to develop their aerobic fitness by learning and performing various beginning boxing aerobic routines.

061 Self Defense (1)
This course is designed to provide students with an opportunity to gain self-confidence while learning basic defense techniques. Students will be instructed in the beginning level of self-defense techniques of a variety of martial arts including karate, tae kwon do, judo and kung fu.

062 Beginning Kayaking (1)
This course will teach beginner-level kayaking skills and techniques, and introduce basic river safety concepts and practices.

063 Intermediate Rowing (1)
Intermediate rowing is a class designed for those students who desire to advance their knowledge and skill levels beyond that of students enrolled in beginning rowing. The class will serve to refine skills and conditioning levels achieved in previous sweep rowing classes. The class is significantly more physically challenging than at the beginning level. Prerequisite: Beginning rowing or instructor approval.

064 Intermediate Water Aerobics (1)
This course uses exercises conducted in water such as water walking, aerobic exercise to music and various resistance exercises to develop cardiovascular and musculoskeletal fitness.
067 Intermediate Bowling (1)
This course focuses on refinement of the experienced student's delivery mechanics including the approach, release, and follow through. Maximum quality practice time is emphasized. Alternate approaches and release are presented and several types of tournaments are conducted.

068 Intermediate Golf (1)
This course builds on and refines swing motion. Ball flight control is introduced with more in-depth swing analysis.

069 Intermediate Tennis (1)
Increased proficiency in four basic skills will be developed. New shots taught include the overhead, the drop, the lob, and spin serve. Strategy for singles and doubles play will be stressed. Emphasis is on increased pace and ball placement.

070 Intermediate Conditioning and Weight Training (1)
This course emphasizes the development of individualized muscular strength and endurance programs following instruction in the physiological principles and techniques of weight training.

071 Intermediate Swimming (1)
Five swimming strokes are improved for the student's skills. Diving and combination skills along with safety are enhanced.

072 Intermediate Aerobic Dance/Step (1)
The course is designed to provide each student with the opportunity to learn the principles and facts about aerobic fitness and to develop their aerobic fitness by learning and performing various intermediate level aerobic dances and step aerobics. The aerobic dances are geared for the non-dancer and include a blend of jogging, lunges, arm and leg movements, and other large muscle movement patterns that are set to music.

073 Intermediate Ballet (1)
Increased barr and floor skills are introduced and developed. From the fundamental ballet components, skills and knowledge are gracefully strengthened.

074 Intermediate Gymnastics (1)
Intermediate gymnastics is designed to acquaint students with the concepts, values, and technical elements of gymnastics.

075 Intermediate Racquetball (1)
Increased proficiency in the skills of racquetball. Students are taught how to execute shots from a variety of positions and how to use strategy to their advantage. Tournaments are played within the class to allow students practical application of the skills they are taught.

076 Body Pump (1)
This course is designed to teach students various methods of body conditioning aimed to improve individual fitness components such as cardiovascular strength, muscular strength and endurance, and flexibility. It is also designed to increase awareness and knowledge concerning over-train injuries, nutritional health and recent fitness and diet trends.

080 Advanced Rowing (1)
This class is designed for those students who desire to advance their knowledge and skills and conditioning levels achieved in previous sweep rowing classes. The class is significantly more physically challenging than the intermediate level. Prerequisite: beginning rowing or instructor approval.

083 Advanced Water Aerobics (1)
This course uses exercise conducted in water such as water walking, aerobic exercise to music and various resistance exercises to develop cardiovascular and musculoskeletal fitness. Aspects of nutrition and weight control are covered.

084 Advanced Aerobic Dance/Step (1)
Aerobic exercise will be taught at the advanced level. The course is designed to provide each student with the opportunity to learn the principles and facts about aerobic fitness and to develop their aerobic fitness by learning and performing various advanced level aerobic dances and step aerobics. The aerobic dances are geared for the non-dancer and include a blend of jogging, lunges, arm and leg movements, and other large muscle movement patterns that are set to music. Step aerobics is a combination of arm movements set to stepping up and down on a step.

088 Advanced SCUBA Diving (1)
This course will take certified scuba divers and give them additional experiences in diving. The areas covered will be night diving, deep diving, boat diving, underwater navigation and other special areas of scuba diving.

089 Advanced Conditioning and Weight Training (1)
This course emphasizes the development of individual muscular strength and endurance programs following instruction in the physiological principles and techniques of weight training.

090 Mountain Biking (1)
The study of cycling as it relates to maintenance, safety, trip planning, and competent off-road riding.

100 Personal Health (3)
Significant data and facts helpful in making intelligent decisions about personal health; crucial issues of personal, family, and social living. Every semester.

101 Community First Aid and Safety (1)
This course will teach how to identify injuries, provide first aid steps to keep injuries from becoming worse, and keep a victim alive until EMS arrives. Skills and techniques will be presented in a way that teaches both the rules and the important exceptions in first aid emergencies.

135 Nutrition (3)
An introduction to nutrition science, emphasizing physiological and biochemical interactions between foods and the human body. Explores the relationship between foods, nutrition, and disease promotion/prevention. Applies nutrition to individual food behaviors. Prerequisite: UTC Math Placement Level 20 or Math 106. Formerly Human Ecology 135.

154 Safety and First Aid (3)
Nature and causes of accidents; safety measures for prevention and emergency treatment of common accidents; certification may be given in advanced first aid and CPR. Every semester.

199r Special Projects (1-4)
Individual or group projects. Every semester. Maximum credit 4 hours. Prerequisite: approval of HHP department head.

201 Introduction to Exercise Science, Health, Leisure Studies and Sport (3)
Overview and summary of the fields of exercise science and sport activity based upon historical, social, psychological and physiological forces as they affect the individual and society; philosophy and principles of profession. Spring and fall semester.

202 Camping and Outdoor Education (2)
Study of the professional camping field and how it relates to the concept of outdoor education. Fall semester.

203 Team Sports I – Football and Wrestling (2)
History, basic skills, game and match strategy, coaching techniques of football and wrestling. Spring semester.

204 Team Sports II – Baseball, Softball, and Volleyball (2)
History; analytical approach to fundamental concepts, basic skills, game strategy, coaching techniques and psychology; investigation of contemporary systems of offensive and defensive theories. Fall semester.

205 Team Sports III – Soccer and Basketball (2)
History; analytical approach to fundamental concepts, basic skills, game strategy, coaching techniques and psychology; investigation of contemporary systems of offensive and defensive theories. Spring semester.

206 Lifetime Sports I – Racquet Sports: Tennis, Badminton, Racquetball (2)
History, basic skills, strategy, contemporary teaching and coaching techniques, skill application for recreational and competitive usage appropriate to each sport. Spring semester.
207 Lifetime Sports II – Archery, Cycling, Golf (2)
History, basic skills, strategy, contemporary teaching and coaching techniques, skill application for recreational and competitive usage appropriate to each sport. Fall semester.

208 Stunts, Tumbling, Gymnastics, and Aquatics (2)
Acquisition of fundamental skill development, contemporary teaching and coaching competencies with emphasis on application for elementary, intermediate, and advanced neuromuscular development. Fall semester.

209 Physical Fitness: Weight Training/Conditioning, Aerobics, Track and Field (2)
History, basic skills, strategy, psychology, training systems basic to coaching and teaching with emphasis on progressive program from beginning through advanced neuromuscular applications of weight training, conditioning, track and field. Fall semester.

210 Movement Exploration and Rhythmic Sequences, Ballroom, Modern, Square Dance (2)
Folk and fundamental skill acquisition; teaching progressions for artistic execution and expression; elementary forms of productions with emphasis on lesson planning for classroom presentation of movement exploration and rhythmic sequences: Aerobic, Folk and Square Dance. Spring semester.

212 Field Experiences I in Sport Management (1)
Practica (field experiences) performed in proximity to the campus involved in assistance to the production of sporting events. Lecture 10 hours. Laboratory 40 hours.

213 Field Experiences II in Sport Management (1)
Practica (field experiences) performed in proximity to the campus involved in assistance to the production of sporting events. Lecture 10 hours. Laboratory 40 hours.

216 Team Sports and Games (3)
History, analytical approach to fundamental concepts, basic game strategy, teaching and coaching techniques, psychology; investigation of contemporary systems of offensive and defensive theories.

217 Individual Sports and Games (3)
History, basic skills, strategy, contemporary teaching and coaching techniques, skill applications for recreational and competitive usage appropriate to each sport.

218 Educational Gymnastics, Dance and Aerobics (2)
Skill development and teaching procedures in tumbling, movement exploration, rhythmic sequences, rhythmic gymnastics, folk dance, square dance, aerobic dance, step aerobics and water aerobics.

220 Leisure Studies Skills (2)
Skills relating to various recreational activities and programs. Spring semester.

221 Introduction to the Nutrition and Dietetics Profession (1)
An introduction to career opportunities in nutrition and dietetics, professional practice, developing career goals and leadership skills and portfolio development processes. Fall semester.

224 Movement Education (2)
Skill development and teaching procedures in movement education; fundamental and contemporary movement patterns. Every semester.

227 Skill Concentration (2)
Proficiencies in sports skills essential for the professional physical educator and recreation leader. On demand. Class hours to be arranged. Prerequisite: For HHP majors only.

230 Anatomical/Physiological Basis of Exercise Science, Health, Sports (4)
Designed to increase knowledge in this applied science, this course offers an overview of the structure and function of the human body. The skeletal, muscular, nervous, respiratory, digestive and cardiovascular systems will be presented in detail. The urinary, integumentary, reproductive and endocrine systems will be presented, but in less detail.

236 Food Science (4)
Basic scientific concepts related to the selection, care, and preparation of foods; emphasis on chemical and physical properties and their interaction with environmental variables. Lecture 3 hours, lab 2 hours. Prerequisite: HHP 135. Laboratory/Studio course fee will be assessed.

237 Nutrition Education and Health Promotion (3)
Overview of theories and methods related to health behavior and health education as it applies to food and nutrition professions. Addresses motivation/compliance of individuals with health regimens; methods of education for the adult learner; counseling techniques; sociological, cultural and psychological influences in food nutrition behaviors; and marketing of nutrition and food information. Spring semester even years. Prerequisite: HHP 135.

299 Introduction to Research Methods in Health and Human Performance (3)
This course introduces the design and application of research projects measuring cognitive, affective, health-related, and psychomotor performance. It includes the review of research literature, traditional research methods concepts, research skills, scientific writing, and the interpretation of published research in the discipline. Some statistical procedures will be discussed. Prerequisite: Any approved general education statistics course. For HHP majors only.

302 School Health Program (3)
Investigation of the role of the teacher in planning and implementing a comprehensive school health program. Every semester. Prerequisite: Teaching candidate or approval of instructor.

303 Community and Environmental Health (3)
Interrelationship studies involving home, public health, non-official organizations/ agencies for improved public health and health care delivery. Spring semester.

305 Therapeutic Recreation (3)
Development of programs for physically or mentally ill or convalescent patients: handicapped, retarded, elderly, and other special population groups.

306 Outdoor Recreation (3)
Acquisition of fundamentals of the field of outdoor recreation that include the foundations of outdoor recreation, the social aspects, the economic aspects, the resources for outdoor recreation, and the management policies.

307 Outdoor Leadership Skills (3)
A course to acquire the philosophy of leadership in outdoor recreation, the safety aspects of programs, the ability to use outdoor programs as a counseling tool, and the knowledge of how to use programs to positively influence individuals.

309 Cardiopulmonary Resuscitation (CPR) Instructor Training (1)
An introduction to the methods, skills and procedures utilized in teaching Cardiopulmonary Resuscitation (CPR). Prerequisites: Current Basic Life Support (BLS) certification.

310 Field/Clinical Experience I (3)
An introduction to the methods, skills and procedures used in evaluating and prescribing exercise programs. Fall and spring semesters. Prerequisite: HHP 316, 317 with a minimum grade of C, current First Aid and CPR certification liability insurance. Restricted to HHP majors. Prerequisite or corequisites: HHP 428, 457.

314 Interpretation of ECG I (3)
An introduction to electrocardiography and the interpretation of normal and abnormal cardiac rhythms. Fall and spring semesters. Prerequisite: HHP 230 or equivalent with a minimum grade of C.

315 Interpretation of ECG II (3)
Further study of electrocardiography interpretation including myocardial infarctions, stress testing and other diagnostic aids. Spring semester. Prerequisites: HHP 314, 316 and 317 with a minimum grade of C. Corequisite: HHP 428.

316 Laboratory Methods and Procedures in Exercise Physiology (1)
The study of physiological functions of the human body during exercise. Every semester. Prerequisites: HHP 230 or equivalent with a minimum grade of C and General Education natural science requirement. Corequisite: HHP 317.
317 Exercise Physiology (3)
Intensive study of various physiologic processes related to exercise. Every semester. Prerequisite: HHP 230 or equivalent with a minimum grade of C and General Education natural science requirement. Corequisite: HHP 316.

318 Kinesiology (3)
Study of human motion; analysis of human motion as affected by gross anatomy and principles of motor learning. Prerequisite: HHP 230 or equivalent with a minimum grade of C.

320 Environmental Health (3)
Major ecological problems relative to individuals, schools, and communities with emphasis upon the teaching-learning process. On demand.

325 Leadership and Programming in Leisure Studies (3)
Development of competencies needed for effective recreation leadership and recreation programming techniques for use in a variety of recreational settings. Spring semester.

330 Physical Education in the Elementary School (3)
Practical aspects of planning, organizing, administering, and evaluating program activities, theories of play, principles of movement as they correspond to levels of growth and development of elementary children; teaching methods and materials in elementary physical education. Every semester.

331 Experimental Food Science (4)
Chemical and physical factors affecting food preparation, including experimental methods and individual experimentation in selected food problems. Spring semester even years. Lecture 3 hours, lab 2 hours. Prerequisites: Chemistry 168/170 or 351/353, HHP 236, one approved general education statistics course. Laboratory/Studio course fee will be assessed.

332 Management in Exercise Science, Health, Leisure Studies and Sports (3)
Basic overview and survey of management concepts and guidelines associated with exercise science and leisure sports; decision making, leadership training, effective communication, planning, organizing, controlling, time management, budget, and finance. Fall semester. Prerequisite: HHP 201 or approval of instructor.

333 Food and Culture (3)
An overview of the history of food: sociocultural, geographic, religious and ethnic influences of food and nutrition behavior. A combination of independent assignments, group projects and field trips will provide insight into food practices and cultural influences. Every semester. Formerly Human Ecology 333.

334 Life Cycle Nutrition (3)
Application of the principles of nutrition in dietary management for meeting the physiological, psychological, and social needs of individuals and groups throughout the life cycle; focus on the postulated nutrient requirements in various environments and economic levels. Fall semester. Prerequisite: HHP 135. Formerly Human Ecology 332.

335 Officiating Sports (I)
Rules, interpretations, fundamentals, techniques, and mechanics of officiating seasonal sports. On demand. Prerequisite: HHP major or approval of instructor.

336 Community Nutrition (3)

337 Advanced Nutrition I: Macronutrients (3)
In-depth analysis of macronutrients including: sources, digestion, absorption, transport and metabolism. Special attention given to the physiologic and biochemical role of macronutrients in health promotion and disease prevention or treatment. Fall semester even years. Prerequisites: Chemistry 351/353, HHP 135, Biology 208 or HHP 230. Formerly Human Ecology 335.

338 Sports Nutrition (3)
The study of principles of nutrition and human energy systems as applied to fitness and sport. Spring semester. Prerequisites: HHP 135, Biology 208 or HHP 230. Formerly Human Ecology 336.

340 Care and Prevention of Athletic Injuries (3)
Analysis of common athletic injuries; emphasis on practical aspects within theoretical framework; laboratory experiences. Spring semester. Prerequisite: HHP 230 or approval of instructor.

345 Biomechanics of Human Movement, Exercise and Sport (3)
This course will examine the role of biomechanics in human movement, exercise and sport. Prerequisites: HHP 230 or equivalent with a minimum grade of C.

396 Practicum in Health and Physical Education (2)
The course will consist of three major parts: classroom instruction in pedagogical techniques, observing instruction in a PDS school, and teaching a 3-week unit in Health and Physical Education in a PDS school. An assessment report completed by the student, by the supervising teacher, and by the course instructor will be included. Prerequisites: HHP 201, 216, 217.

400 Current Topics and Problems in Exercise Science and Sports (3)
Investigation and exploration of selected topics and problems in exercise science and leisure sports significant for pedagogy, management, coaching in both schools and agencies providing sport and leisure services. Summer. Prerequisites: senior level and approval of instructor or graduate standing.

400 Measurement and Evaluation in Exercise Science and Leisure Studies (3)
Introduction to basic statistics, measurement, evaluation, tests of neuromuscular ability, muscular strength and endurance, balance, flexibility, motor ability, health related fitness; grading, constructing knowledge tests, measurement of human ability, and instructional outcomes. Fall semester. Prerequisites: Equivalent of HHP 201, 317, 332; UTC Math Placement Level 20 or Mathematics 106 with minimum grade of C; senior level or approval of instructor; or graduate standing.

402 Philosophical Foundations of Exercise Science and Sports (3)
Identification and implication of prominent philosophical schools of thought as they impact professional decision making in exercise science and sports; emphasis upon development of a philosophical process, logical thinking, values clarification, and moral implications. On demand. Prerequisite: senior level or graduate standing.

404 Motor Learning in Exercise Science and Leisure Studies (3)
Conceptual understanding of the principles of performance of motor skills to include information processing and the functional properties of the motor system. On demand. Prerequisite: HHP 317 or approval of instructor.

405 Management of Athletics and Leisure Studies (3)
Management principles, information retrieval and processing, sport law, public relations, personnel direction, faculty development, financial administration as they relate to sports, athletics, and leisure services. Spring semester. Prerequisites: HHP 304 or 332; approval of instructor; or graduate standing.

406 Sport Law and Ethics (3)
This course presents a comprehensive overview of ethics and the law as they apply to sport. Fundamental, legal and ethical principles that most directly affect the actions and activities of sports professionals will be presented by selected case studies.

407 Sociology/Psychology of Exercise Science and Leisure Studies (3)
Emphasis upon exercise science and leisure sports as a socio-cultural psycho-cultural force; psychological and sociological concepts applied to human performance in exercise and sports. Prerequisite: senior level or graduate standing.

408 Seminar, Current Advances in Bio-Kinetics (3)
Current advances in kinesiology and physiologic principles of exercise science, athletic coaching, and sports. On demand. Prerequisites: equivalent of HHP 317 or 318; approval of instructor; or graduate standing.

409 Food and Nutrition Practicum (3-6)
Directed field experience in a selected professional area of human ecology, including a weekly seminar and faculty supervision within an approved institution, agency, or business establishment; written application to department head required three months prior to the semester in which the student plans to register for the course. Every semester. Prerequisites: senior status in Health and Human Performance and approval of department head. Maximum credit: 6 hours.
410 Field/Clinical Experience II (3)
Provided to the student with an opportunity to practice, apply and mas-
ter additional skills presented in course work. Experiences will include evalua-
tions, documentation, and interpretation of results of exercise testing and program
development. Fall and spring semesters. Prerequisites: HHP 310, 316, 317, 428,
457 with minimum grades of C. or approval of instructor. Current First Aid and CPR
certification liability insurance required.

411 Metabolic Measurement/Exercise Stress Testing Laboratory (1)
An introduction to the use of instrumentation utilized in clinical exercise eval-
uation including the use of the metabolic measurement cart, pulmonary function
testing and cardiopulmonary treadmill stress testing. The use of test results for
clinical diagnosis, prognosis and exercise intervention/program will also be dis-
cussed. Prerequisites: HHP 310, 314, 428, 457 with minimum grades of C.
Corequisite: HHP 440.

412 Designing Resistance Training Programs (3)
Study of the design of resistance training programs ranging from health enhance-
ment to sport performance. Prerequisites: HHP 317 and 318 with minimum grades
of C.

413 Exercise Leadership (3)
An introduction to the skills, methods and procedures utilized in exercise and fit-
ness program design. Emphasis will be placed on exercise leadership skills, instruc-
tional techniques and oral communication. Restricted to HHP majors.
Prerequisites: HHP 316, 317, 318 with minimum grades of C. Current First Aid and
CPR certification liability insurance.

421 Nutrition Senior Seminar (1)
Professional practices in nutrition and dietetics including challenges, opportuni-
ties, professional ethics and business practices, leadership and decision-making
skills and governance of nutrition and dietetics practice. Completion of a profes-
sional portfolio. Fall semester. Prerequisite: senior standing in nutrition.

422 Health Behavior Change in Clinical and Community Settings
(3) This class is designed to introduce students to the basic principles of behavior
analysis and their applications to various health behaviors in diverse community
settings.

428 Exercise Prescription in Health and Disease (3)
A comprehensive overview of the physical, physiological, and metabolic responses
of the human body to exercise testing and training in both health and disease; the
processes involved in prescribing safe and effective therapeutic exercise for healthy
individuals as well as for patients with heart and lung HHP, diabetes, and obesity
will be discussed. Prerequisites: HHP 317 with a minimum grade of C.

429 Exercise Prescription Lab (1)
Methods and procedures utilized in exercise testing, exercise prescription and
education for healthy individuals and individuals with cardiac, pulmonary or
metabolic disease. Spring semester. Prerequisites: HHP 316, 317; Chemistry
122/124; Nursing 226 with minimum grades of C. Corequisites: HHP 310, 413, 428.

430 Assessment of Worksite Health and Human Performance (3)
This course is designed to present numerous methods for the assessment of work-
site health and human performance in a variety of settings. Prerequisites: HHP
316, 317, 401, 428 and 457.

431 Teaching Strategies and Materials in Exercise Science and
Health (3)
Curricular and media development appropriate for the respective discipline. Fall
semester. Prerequisites: HHP senior; teaching candidate.

432 Food Systems Administration I (3)
Management, organization, and administration of food service in institutions. Fall
semester odd years. Prerequisite: HHP 135. Formerly Human Ecology 430.

433 Quantity Food Service (3)
Principles, methods, and techniques in planning, purchasing, production, and
service of food in quantity; selection and use of equipment; quality standards; lab-
oratory experiences in approved local institutions. Spring semester even years.
Prerequisite: HHP 432 or 434. Formerly Human Ecology 431.

434 Food Systems Administration II (3)
Food systems administration with an emphasis on production, manpower, facility,
and financial planning in food service and hospitality systems. Fall semester even
years. Prerequisites: HHP 135. Formerly Human Ecology 432.

435 Promotion of Worksite Health and Human Performance (3)
This course is designed to present an integrated, step-by-step approach to planning
and implementing worksite health and human performance in a variety of settings.

436 Exercise Science and Health Promotion for Developmentally
Challenged (3)
Lecture, demonstration, and practical experiences in the study of exercise, health,
and leisure sports and their implications for the developmentally challenged;
emphasis on methods and techniques for teachers, coaches, and exercise leaders
in meeting the legal, ethical, and moral obligations of the developmentally chal-
 lenged. Prerequisites: HHP 302 or equivalent and junior level; or graduate standing.

437 Perspectives in Clinical Nutrition I (4)
The study of diet as it relates to prevention and treatment of disease. Experiences
in nutritional assessment techniques. Dietary calculations for obesity, diabetes
mellitus, cardiovascular disease, and gastrointestinal disorders. Includes practicum/placement. Fall semester even years. Lecture 3 hours, lab 2 hours.
Prerequisites: HHP 135; Biology 208 or HHP 220; Prerequisite HHP 337 or
prerequisite HHP 338. Formerly Human Ecology 434.

438 Advanced Nutrition II: Micronutrients: Vitamins, Minerals and
Phytochemicals (3)
An in-depth study of the role of vitamins and minerals in metabolism and the reg-
ulation of biochemical systems and structures. Evaluation and discussion of the
emerging role of phytochemicals and herbs in health. Prerequisite: HHP 337.

439 Perspectives in Clinical Nutrition II (4)
The study of diet and disease; application of appropriate nutritional therapies for
endocrine disorders, hypermetabolic conditions, immune system disorders, pul-
monary diseases, cancer, liver and renal disease. Includes practicum/placement. Spring semester odd years. Lecture 3 hours, lab 2 hours. Prerequisite: HHP 457.
Formerly Human Ecology 436.

440 Advanced Exercise Physiology (3)
This course details the function of organ systems emphasizing mechanisms of con-
trol and regulation during exercise. Spring semester. Prerequisites: HHP 316, 317
with minimum grades of C and approval of instructor.

441 Exercise and the Older Adult (3)
This course will examine the scientific evidence concerning the relationship
between physical activity level and physical, mental, social, and psychological well
being during aging. Prerequisites: HHP 316, 317 with minimum grades of C.

445 Cardiopulmonary Pathophysiology and Rehabilitation (3)
This course details the functions of the cardiovascular and respiratory systems
emphasizing pathophysiology and treatment. Special reference will be made to
exercise as a mode of therapy. Spring semester. Prerequisites: Nursing 226, HHP
315, 428, 429 with a minimum grade of C. Corequisites: HHP 315, 406, 411, 440,
419.

447 Teaching Health, Safety and Physical Education in Middle
Grades (3)
This course will give in-depth consideration of the individuals’ responsibility to
act in ways that enhance personal health; understand the concepts of adolescent
physical development; obtain and apply health information; understand the
knowledge, skills and attitudes that are goals of physical education; and use phys-
ical activities to promote the cognitive, affective and psychomotor domains.

449 Physical Activity Epidemiology (3)
This course addresses the principles and concepts of epidemiology related to phys-
ical activity behaviors and selected health outcomes. The student will be prepared
to understand the link between physical activity and chronic diseases and begin
to develop the capacity to assess evidence-based interventions designed to pro-
mote physical activity. Biological mechanisms for healthy adaptations to physical
activity and the behavioral determinants of exercise participation will also be
highlighted. Prerequisite: departmental approval.
451 Family Life Studies (3)
Extended study of problem issues related to family life and human sexuality; development of learning units for use in schools and community. Spring semester alternate years.

452 Problems in Health: Aging and Death Education (3)
Analysis of concepts and attitudes toward aging, death, bereavement, prevention and control of communicable and degenerative diseases. Spring semester. Prerequisites: HHP 100, 302, 303, or equivalent.

453 Substance Use, Misuse, and Abuse (3)
Extended study of problems and issues related to use, misuse, and abuse of alcohol and other drugs; development of learning units for use in schools and community. Every semester.

455 Methods and Strategies in Health Promotion (3)
Investigation of current curricula and teaching strategies employed in health education. On demand. Prerequisites: approval of instructor; senior or graduate standing.

456 Research Methods in Exercise Science and Health Promotion (3)
Study of health problems and current professional literature; review of new approaches in techniques and methodology used in health research. Spring and fall semester. Prerequisite: approval of instructor or HHP senior or graduate standing.

457 Fitness Testing and Programming (3)
Introduces students to the various concepts and procedures involved in fitness testing and programming. Students will learn how to screen individuals to determine the appropriateness and safety of test administration, and how to properly administer, interpret and develop exercise programs based on a variety of fitness tests and the individual's fitness goals. Prerequisites: HHP 314, 317 with minimum grades of C. Pre- or corequisite: HHP 428.

465 The Psychological Impact of Injury, Illness and Chronic Disease (3)
Designed to explore how an adult copes with an acute injury, illness or chronic disease. Content of the course is a critical review of the psychological, vocational, and social implications involved in such conditions as chronic pain, coronary artery disease, orthopedic trauma, cancer, rheumatoid arthritis, and a range of functional somatic disorders.

470 Current Topics and Issues in Leisure Studies (3)
Survey of problems and concerns facing recreation leadership, management, facilities development, environmental impact, and special population groups. Spring semester. Prerequisite: above junior level.

479, 480 Internship in Exercise Science and Leisure Studies (6,6)
Supervised internship in leadership and administrative positions; full-time contact, minimum eight weeks, concurrent integrative seminars. Every semester. Prerequisite: approval of program leader and HHP department head. Students in Exercise Science Concentration must first pass the ACSM Health/Fitness Instructor Certification Exam.

490r Workshop and Seminar (2-4)
Special problems; in-service education for specific groups; research in professional literature and evaluation measures to topics studied. On demand.

495r Departmental Thesis (1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
Every semester. Prerequisite: Approval of HHP department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
Every semester. Prerequisite: Approval of HHP department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
Every semester. Prerequisite: Approval of HHP department head.

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**Interior Design**

*Associate Professor Dana Moody, Head*

Interior Design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment. Design solutions are functional, aesthetically pleasing and protect the health, safety and welfare of the public.

The Interior Design program reserves the right to retain student work for upcoming accreditation site visits.

**Continuation Standards**

- A grade of C (70%) or better in an interior design course is required for that course to be considered as successfully completed, and for that course to count as a prerequisite for subsequent courses in the interior design course sequence. A grade of D or F in an interior design course must be repeated in order to continue, prolonging the time it takes to complete the Interior Design program.
- Interior Design 290 (Sophomore Portfolio Review) - In order for a student to continue progression within interior design, the student must make one of the top 15 averaged scores on the Sophomore Portfolio Review. The review consists of a comprehensive exam, a juried project, and a project presentation. Students are not allowed to fail any section of the review and must have an averaged score of 75% or better.
- Interior Design students who successfully pass Interior Design 290 - Sophomore Portfolio Review - are required to obtain a laptop computer with required program software to be used in the 3rd and 4th year classroom setting.

**2427 - Interior Design (B.S.)**

**General Education** (see pages 69-72 for list of approved courses)
- **Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)
- **Mathematics:** One approved mathematics course (3 hours)
- **Statistics:** One approved statistics course (3 hours)
- **Natural Sciences:** Chemistry 119* and one additional approved natural science course (7-8 hours)
- **Humanities and Fine Arts:** Philosophy 425* and one fine arts course selected from Art 111, 214, 215, or 301* (6 hours)
- **Cultures and Civilizations:** Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours)
- **Behavioral and Social Sciences:** Two approved Behavioral and Social Sciences courses in two different disciplines (6 hours)

**Major and Related Courses**
- Chemistry 119#, English 277, Philosophy 425#, and one course selected from Art 111, 214, 215 or 301#
- **Interior Design Core:** Interior Design 100, 105, 110, 115, 200, 205, 210, 211, 221, 290, 300, 305, 310, 315, 320, 321, 323, 324, 400, 410, 415, 420, 421, 490

2.0 average in all Interior Design courses.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.
INTERIOR DESIGN COURSES (INTD)

100 Design Fundamentals (3)
A study of design as related to the individual and his or her environment; review of the basic theories including the elements and principles of design with emphasis on using design to solve utilitarian as well as aesthetic problems. Fall and spring semesters. Studio 5 hours. Laboratory/Studio course fees will be assessed.

105 Sketching in Interior Design (3)
Development of quick sketching techniques needed to efficiently and effectively relay schematic ideas in interior design. Fall and spring semesters. Studio 5 hours. Prerequisite: Interior Design 100.

110 Architectural Drafting (3)
An introduction to architectural drafting including the study of symbols and drafting techniques necessary to the understanding and drawing of architectural plans. Spring semester. Studio 5 hours. Prerequisite or corequisite: Interior Design 100. Laboratory/Studio course fees will be assessed.

115 Model Building (3)
Interior Design model building practices with emphasis on study models, presentation models and proto-typical models and how they relate to the overall design process. Fall and spring semesters. Studio 5 hours. Prerequisite: Interior Design 100 or approval of instructor. Laboratory/Studio course fees will be assessed.

120 Introduction to Architecture (3)
An overview of architectural throughout history. Designed to heighten the student's perception and appreciation of the role architecture has played in the development of society and culture. On demand.

190r Interior Design Study Tour (3)
A field study of design and culture. On demand.

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

200 Space Planning (3)
Application of space planning techniques in small scale commercial and residential design; emphasis placed on human factors. Fall semester. Studio 5 hours. Prerequisites: Interior Design 105 and 110; Prerequisite or Corequisite: Interior Design 115. Laboratory/Studio course fees will be assessed.

205 Color Systems (3)
Experimentation in color systems and their use in interior design; analysis of psychological impact of color systems on people; correlation of color scheme to total room design; development of skills for various media and tools used in color planning. Fall semester. Studio 5 hours. Prerequisite: Interior Design 100. Laboratory/Studio course fees will be assessed.

210 Visual Presentation (3)
An introduction to basic skills, materials, and techniques employed in the presentation of interior design projects. Spring semester. Studio 5 hours. Prerequisites: Interior Design 200 and 205.

220 Interior Textiles (3)
A study of the fundamental properties found in textile fibers, yarns, weaves and finishes, and the application of these properties to interior finishes. Fall semester. Prerequisite: Interior Design 100.

221 Interior Materials (3)
A study of basic components used in the art of interior design: wall treatments, window treatments, floor coverings, fabric selections, furniture selections. Spring semester. Prerequisites: Interior Design 200 and 205.

290 Sophomore Portfolio Review (1)
The successful completion of a comprehensive exam and the preparation and delivery for professional review of an assigned design problem demonstrating competency in the use of skills learned in previous Interior Design courses. Prerequisites: Interior Design 100, 110, 200, 205, 210, 220, 221 with grades of C or better.

300 Kitchen and Bath Planning (3)
A study of the aesthetic and technical elements of kitchen and bath design with emphasis on NKBA standards. Fall semester. Studio 5 hours. Prerequisite: Interior Design 290; Corequisite: Interior Design 323. Laboratory/Studio course fees will be assessed.

305 Computer-Aided Design I (3)
Introduction to the fundamentals of two dimensional (2d) computer drafting using AutoCad. Develop the requisite skills for implementing various basic commands needed to create presentation drawings, working drawings and details. Fall semester. Studio 5 hours. Prerequisite: Interior Design 200. Laboratory/Studio course fees will be assessed.

310 Residential Interiors (3)
Advanced study of residential space planning criteria and the selection of furnishings, equipment, materials, and finishes for the residential market; design considerations for special populations (e.g., disabled, aged) explored. Spring semester. Studio 5 hours. Prerequisites: Interior Design 300 and 323. Laboratory/Studio course fees will be assessed.

315 Computer-Aided Design II (3)
Advanced topics in two dimensional (2d) CAD drawing techniques. Further develop and refine skills in the creation of presentation drawings. Introduction to the concepts of 3 dimensional (3d) design. Spring semester. Studio 5 hours. Prerequisite: Interior Design 305. Laboratory/Studio course fees will be assessed.

320 History of Design I (3)
The study of design characteristics of historical architecture, interiors, furniture and decorative arts including the dominant, socio-economic influences leading to the development of each style – Egyptian to Victorian. Fall semester. Prerequisite: Interior Design 100 or approval of instructor.

321 History of Design II (3)
The study of design characteristics of historical architecture, interiors, furniture and decorative arts including effects of the Industrial Revolution - Victorian to Modern. Spring semester. Prerequisite: Interior Design 320 or approval of instructor.

322 History of American Domestic Architecture (3)
A comprehensive survey, period feature-by-feature, of the styles that have had the greatest impact on the development of American architecture. On demand.

323 Interior Lighting Design (3)
The study of illumination principles, design criteria, and systems applied to architectural interiors. Fall semester. Prerequisite: Chemistry 119; Corequisite: Interior Design 300.

324 Codes and Specifications (3)
The study of the application of laws, codes, regulations, standards and practice that protect the health, safety and welfare of the public including specification guidelines. Spring semester. Prerequisite: Interior Design 290.

390 Professional Competence (3)
Business etiquette and social skills for successful long-term career development. On demand.

400 Contract Interiors I (3)
Development of creative ideas in commercial design projects which integrate interior design elements to achieve predetermined goals. Fall semester. Studio 5 hours. Prerequisites: Interior Design 310 and 324. Laboratory/Studio fees will be assessed.

405 Computer-Aided Design III (3)
Advanced use of modeling techniques for designing interiors in 3 dimensions (3d), including perspectives and renderings. Introduction of related CAD programs for 3d and presentations. Fall semester. Studio 5 hours. Prerequisite: Interior Design 315. Laboratory/Studio course fees will be assessed.

410 Contract Interiors II (3)
Advanced integration of Interior Design elements in contract interior spaces as they relate to large-scale projects. Studio 5 hours. Prerequisites: Interior Design 315 and 324. Laboratory/Studio course fees will be assessed.

415 Responsive Design (3)
Development of creative ideas in response to evolving global issues concerning an interior designer’s ability to affect the health, safety and welfare of the public, as well as the environment. Spring semester. Studio 5 hours. Prerequisites: Interior Design 310 and 324.
Catalog for additional information about graduate studies. Implementation of nursing care. Students should refer to the Graduate Bulletin of the program on the use of knowledge and skills to plan and control the flow of operations, money, materials, and commitments. Spring semester. Prerequisite: Interior Design 420.

422 Aging in the Built Environment (3)
A critical examination of the interaction between the aging population and the "built" environment, including furnishings and finishes. On demand.

490r Internship (3)
Directed field experience providing a full-time work experience that gives students a better understanding of the real Working environment. Prerequisite: Interior Design 421.

495r Departmental Thesis
(1-3 hours per term, 4 hours for two terms)
Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration. On demand. See Departmental Honors.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand.

School of Nursing
Professor Kay Lindgren, Director

The Bachelor of Science in Nursing program prepares students for beginning practice as a registered nurse in a variety of settings. Students are prepared for graduate studies in nursing. The emphasis of the program is on the use of knowledge and skills to plan and implement nursing care. Students should refer to the Graduate Catalog for additional information about graduate studies.

Pre-Nursing
Students must meet the same admission requirements as all other applicants to the University. Academic advising for all students declaring Pre-nursing or nursing majors must be done by a member of the nursing faculty.

Pre-nursing students are advised individually in group sessions. The times and dates of advisement sessions are found on the School of Nursing Web site www.utc.edu/Nursing. All students should regularly check the School of Nursing Web site.

Enrollment in the nursing major is limited. Admission to the University does not ensure acceptance into the nursing major.

Eligibility Requirements for Participation in the Nursing Program
Nursing is a practice discipline, with cognitive, sensory, affective, and psychomotor performance requirements. The faculty of the School of Nursing has identified the skills and professional behaviors that are essential to pursue a course of study to be eligible to write the National Council Licensure Examination-R.N. and practice as a professional nurse. In order to progress in the nursing curriculum, a student must possess a functional level of capability to perform the duties required of a professional nurse. The essential eligibility requirements for participation in the nursing program are identified as Core Performance Standards.

These standards are adapted from the Southern Council on Collegiate Education for Nursing and are congruent with the skills presented in the document entitled Essentials of Baccalaureate Education for Professional Nursing revised (1998), a publication of the American Association of Colleges of Nursing. If these standards cannot be achieved by the student, either unassisted or with dependable use of assistive devices, the faculty reserves the right to exclude the student from clinical areas. Potential students are provided copies of the Core Performance Standards upon request. A copy of the Essentials of Baccalaureate Education for Professional Nursing Practice (2008) is available for review in the school's Office of the Director.

The nursing program includes clinical components, practica and internships. Prior to and during contact with clients in clinical assignments, practicum experiences and internships, students are expected to exhibit good judgement, ethical conduct and appropriate emotional functioning. These are evaluated by the School of Nursing faculty using professional nursing standards.

These standards are listed in the online handbook for undergraduate and Gateway students, and with the Director of School of Nursing and Dean of College of Health, Education and Professional Studies. A student dismissed from the School of Nursing for not meeting these standards has the right to appeal the decision. Information about the process of appeal is available in the UTC Student Handbook and the Undergraduate Catalog.

Admission to the Nursing Major (for non-RNs)
Students desiring admission or readmission to the nursing major must submit a completed written application on forms available from the School of Nursing. Candidates for the nursing major (Nursing 250-254) must make formal application by February 1 for the fall class and by September 1 for the spring class. Students transferring from other nursing programs should also submit the written application by February 1 for the fall class and September 1 for the January class. Enrollment is limited and the number of qualified applicants often exceeds the number of students who can be admitted. The following are considered when evaluating candidates for admission:

1. Admission to UTC prior to the School of Nursing application deadline.
2. Completion of credit hours required for sophomore classification including the following prerequisite courses with no grade lower than a C:
   - Chemistry 121/123
   - Biology 191, 208, 210
   - English 121, 122
   - Psychology 101
   - Nursing 226
3. A minimum grade point average of 2.75 on a 4.0 point scale at UTC.
4. Science GPA (calculated on required sciences only). The nursing major includes a strong biophysical science component;
thus the first grade earned in a required science course will be used to compute the student's science GPA.
5. Three of the five required science courses must be completed by the application deadline.
6. Number of prerequisite courses completed at UTC.
7. TEAS™ (Test of Essential Academic Skills). This is a standardized test administered by the School of Nursing.
8. Physical and emotional characteristics appropriate for nursing practice.

The faculty in the School of Nursing reserve the right to make exceptions to the admission requirements. Written requests for exceptions to admission requirements, supported by evidence of extenuating circumstances, will be considered by the academic affairs committee after an official application for admission to the School of Nursing has been filed.

Acceptance of transfer and substitute credits in nursing to meet requirements of the curriculum will be determined by the school. A student who transfers into the nursing program at UTC will be required to repeat any nursing or other required courses which are not considered comparable to the UTC curriculum or in which the grade earned is lower than a C. Transfer students must meet the same standards as other students in the program.

Candidates will receive written notification of their admission status. Candidates who are accepted for admission must complete a background check and drug screening before being fully admitted. Individuals who are not accepted for a given class, and who desire to be considered for the next class must reapply.

Admission to the Gateway Program for Registered Nurses
The Gateway Program is a flexible curriculum which enables registered nurses to obtain baccalaureate degrees in nursing while maintaining their roles in careers and families. Planned with the mid-career RN in mind, the Gateway Program is individualized and allows maximum college credit for previous educational experiences. The prospective RN student should seek advisement from the Gateway Coordinator and transcript evaluation from the Records Office for this program of study.

1. Graduation from an accredited diploma or associate degree nursing program.
2. Show eligibility to return to the last educational institution attended and meet UTC's continuation standards.
3. Show a C (2.00) average on all postsecondary courses.
4. Admission to UTC.
5. Current licensure as a registered nurse in Tennessee or multi-state privilege to practice is required.

Candidates will receive written notification of their admission status. Candidates who are accepted for admission must complete a background check and drug screening before being fully admitted. Individuals who are not accepted for a given class, and who desire to be considered for the next class must reapply.

Expenses and Transportation
In addition to regular education costs, nursing students must meet the following expenses: uniforms, standardized test fees, yearly liability and health insurance, initial physical examinations, immunizations, CPR certification, respirator fit testing and others as required. Some nursing courses may require miscellaneous fees. Since clinical experiences in nursing are obtained in a variety of health care settings in local and remote areas, students are individually responsible for transportation to these sites.

Insurance and Health Requirements
Students must meet specific physical examination and immunization requirements as specified by state law and by the rules and regulations set forth by the various clinical agencies. All students must have health insurance and must participate in the school's liability insurance program. Specific information concerning these requirements will be provided to the students at appropriate times by the nursing faculty.

Licensure (for non-RNs)
Upon successful completion of the baccalaureate program in nursing, and upon certification by the director that the student possesses the requirements, the student is eligible to write the National Council Licensure Examination-RN. Persons previously convicted of a felony may not be permitted to write the NCLEX exam. Applicants for licensure in Tennessee must obtain an additional background check as specified by the Tennessee Board of Nursing.

Continuation Standards
In view of the nature of nursing and the fact that maintenance and quality of human life may be adversely affected by individuals providing nursing care, the following standards have been adopted and are applied by the nursing faculty.

1. To progress in nursing, students are required to: a) make a minimum grade of C or S in all nursing and required courses (exclusive of electives); b) maintain a cumulative grade point average of 2.0; c) maintain active liability and health insurance policies and other clinical requirements for clinical courses; d) maintain current CPR certification, and e) meet School of Nursing health requirements.
2. Students in the Nursing major may earn a grade of D, F, or NC in only one course with a nursing (NURS) designation. If a student earns a second D, F, or NC, the student will be dismissed from the program, even if the second D, F, or NC is earned in the same semester as the first grade of D, F, or NC.
3. Students who do not complete a course, or who make a grade of D, F or NC in an undergraduate Nursing course, and who are eligible to repeat a course, are permitted to register for that course on a space-available basis.
4. If in the judgment of the professor there is reason to question the emotional or physical condition of a student or the safety or quality of nursing care provided, the professor has the right and obligation to exclude the student from the clinical area. The incident or reason underlying such an action shall be brought to the attention of the course faculty on or before the next clinical day. The student will receive written notification of the recommendation of the course faculty. Should the decision be unacceptable to the student, he/she may appeal to the director, and thereafter in accordance with University policy.
5. Exceptions to the above policies may be made at the discretion of the academic affairs committee or the director of the School of Nursing.
2793 - Nursing: Nursing (B.S.N.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course* (3 hours)

Natural Sciences: Biology 210* and Chemistry 121/123* (8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Psychology 101* and one additional behavioral/social science course (6 hours)

Major and Related Courses

Biology 191, 208, 210*; Chemistry 121/123*, one approved general education statistics course#; Psychology 101*

Nursing 226, 252, 253, 254, 308, 328, 344, 355, 356, 357, 358, 423, 431, 442, 444, 457, 458, 462, 490

Minimum grade of C or S in all nursing and required courses (exclusive of electives).

Minimum of 39 hours at the 300 and 400 level. Electives to complete 120 hours. See page 67 for additional information.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

2791 - Nursing: RN to B.S.N.

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course* (3 hours)

Natural Sciences: Biology 210* and Chemistry 121/123* (8 hours)

Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Psychology 101* and one additional behavioral/social science course (6 hours)

Major and Related Courses

Biology 191, 208, 210*; Chemistry 121/123*, one approved general education statistics course#; Psychology 101*


Note: Nursing 490 is not required if student is an actively working RN.

1. Nursing 226, 252 and/or 254 do not have to be completed prior to beginning 300-400 level nursing courses.
2. Prerequisite courses for 300-400 level nursing courses include: English 121, 122; Mathematics 106 or equivalent.
3. Proof of current registered nurse licensure serves as validation of content in Foundations of Nursing Practice (Nursing 253, 254), Adult Nursing (Nursing 308, 457, 458), Maternal/Child Nursing (Nursing 356, 357, 358), Psychiatric Nursing (Nursing 328, 344). The hours of academic credit for these courses will be entered on the student's academic record the semester of graduation with each course receiving a grade of “S.” Students must have earned a grade of C or better on each previously taken Nursing course to receive credit. Transferred Nursing courses with grades below C must be repeated.
5. Other prerequisites include Nursing 423 (Nursing 250 is prerequisite; Statistics is pre- or corequisite); Nursing 431 (Nursing 250 is prerequisite; Nursing 423 is pre- or corequisite).
6. Nursing 300 is not required of RNs.
7. Nursing 490 is not required of actively employed RNs.

Minimum grade of C or S in all nursing and required courses (exclusive of electives).

Minimum of 39 hours at the 300 and 400 level. Electives to complete 120 hours. See page 67 for additional information.

NURSING COURSES (NURS)

100 Introduction to Nursing (3)
Theoretical introduction to concepts used in nursing practice. Open to non-majors. On demand.

190r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

222 Women's Health Issues (3)
A review of current literature and discussion of issues affecting contemporary women's health. The course will introduce the biological, psychological, social, economic, and cultural factors which affect the health of women in Western society. Students will be challenged to examine their attitudes on controversial issues such as birth control, childbirth alternatives, abortion, women's self image, and aspects of aging. On demand. Prerequisite: English 122 or its equivalent. Open to non-majors. May be registered as Women's Studies 222. Credit not allowed in both Nursing 222 and Women's Studies 222.

226 Pathophysiology (3)
Concepts of pathophysiologic events throughout the life span; includes pathogenesis, morphologic changes, clinical manifestations, and implications for treatment. Every semester. Prerequisites: Biology 191, 208 or approval of instructor. Open to non-majors.

250 Nursing Agency I: Introduction to Conceptual Thinking (3)
Introduction to conceptual thinking about theory, practice and research through the Orem Conceptual Model. Prerequisite: Nursing 226 and admission to major. Corequisites: first semester nursing courses or approval of instructor.

251 Nursing Science I (3)
An introduction to nursing science as it relates to theory, practice, and research. Every semester. Prerequisite: Nursing 226 and admission to major. Corequisites: Nursing 252, 253, and 254 or approval of instructor.

252 Nursing Agency II: Health Assessment (3)
Introduction to a foundation in basic health assessment of individuals from structural, functional and developmental perspectives. Prerequisite: Nursing 226 and admission to major. Corequisites: first semester nursing courses or approval of instructor.

253 Nursing Systems I: Foundations of Nursing Practice (3)
An introduction to foundational concepts of nursing and health associated self care deficits in adults. Prerequisite: Nursing 226 and admission to major. Corequisites: first semester nursing courses or approval of instructor.

254 Nursing Practicum I (4)
Introduction to nursing care of adults with self-care deficits. Prerequisite: Nursing 226 and admission to major. Corequisites: first semester nursing courses or approval of instructor.

280r Strategies for Success in Nursing (0)
This course is designed to help the student maximize success in the nursing curriculum through various strategies such as time management and test taking skills. May be taken no more than three times.

300 Nursing Agency III: Pharmacology (3)
An overview of pharmacology including drug classifications, action, use, nursing implications and drug interactions. Legislation pertinent to drug control included. Prerequisite: first semester nursing courses or approval of instructor.

308 Nursing Systems II: Care of the Adult (3)
Concepts of nursing care of adults with selected health deviations. Prerequisite: Completion of first semester nursing courses. Corequisites: second semester nursing courses.
322 The Physical Process of Aging (3)
A study of normal and pathological physical changes that are linked with the aging process. This course will include the implications of the physiological changes as well as strategies designed to ameliorate or limit health problems that may develop as individuals age. On demand. Open to non-majors.

328 Nursing Systems III: Care of the Patient with Mental Health Needs (3)
Concepts of nursing care for clients with mental health needs. Prerequisite: completion of first semester nursing courses. Corequisites: second semester nursing courses.

329r Nursing Practicum II: Community and Mental Health (2-3, Maximum 5)
Nursing care of clients in the community and mental health systems. Every semester Laboratory: 15 clock hours per week. Prerequisite: Completion of 200-level nursing courses. Corequisites: Nursing 327, 328 or approval of instructor. Graded Satisfactory/No Credit.

344 Nursing Practicum II (5)
Application of concepts of Self-Care Deficit Nursing Theory to the care of patients with selected health deviations and mental health needs. Prerequisite: completion of first semester nursing courses. Corequisites: second semester nursing courses or approval of instructor. Laboratory/Studio course fee will be assessed.

355 Nursing Agency IV: The Individual in Professional Practice (3)
Exploration of agency in the Orem Conceptual Model with an emphasis on social, political and ethical characteristics. Every semester. Prerequisites: Nursing 300, 308, 328, 344. Corequisites: Nursing 355, 357, 358 or approval of instructor.

356 Nursing Systems IV: Care of the Family: Childbearing (3)
Concepts of nursing care of pregnant women and childbearing families and selected health deviations. Every semester. Prerequisites: Nursing 300, 308, 344, 328. Corequisites: Nursing 355, 357, 358 or approval of instructor.

357 Nursing Systems V: Care of the Family: Childrearing (3)
Concepts of nursing care of children and childrearing families with selected health deviations. Every semester. Prerequisites: Nursing 300, 308, 328, 344. Corequisites: Nursing 355, 356, 358 or approval of instructor.

358 Nursing Practicum III: Holistic Care of the Family (4)
Nursing care of childbearing and child rearing families in various clinical settings. Every semester. Prerequisites: Nursing 300, 308, 328, 344. Corequisites: Nursing 355, 356, 357 or approval of instructor. Graded Satisfactory/No Credit. Laboratory/Studio course fee will be assessed.

423 Nursing Agency V: Research (3)
An introduction to nursing research emphasizing nursing theory as a basis for research, and the application of research to improve nursing practice. Every semester. Prerequisites: Nursing 250 and one approved statistics course. Corequisites: Nursing 457, 458, 462.

427 Adult Nursing I (3)
Concepts of nursing care of adults with alterations in functional health patterns in response to complex health problems (including cancer, immune, nutritional, and neurological disorders). Every semester. Prerequisite: Successful completion of 200 level nursing courses. Corequisites: Nursing 429 or approval of instructor.

431 Nursing Agency VII: Conceptual Thinking (3)
Integration of theory based practice, education, and research for application in professional nursing practice. Prerequisites: Nursing 423, 457, 458, 462. Corequisites: Nursing 442, 444, 490.

434 Perioperative Nursing (4)
Concepts and skills necessary for the nurse to practice in a primary role in specialized Perioperative settings. On demand. Lecture 2 hours, clinical lab 6 clock hours. Prerequisites: Completion of 300 level nursing courses or licensure as a registered nurse or approval of instructor.

435 Rehabilitation Nursing (4)
Concepts and principles of rehabilitation nursing including client and family care in rehabilitation and community settings. On demand. Lecture 2 hours, clinical 6 clock hours. Prerequisites: Completion of all required 300 level courses; licensure as a registered nurse or approval of instructor.

440 Preparation for NCLEX-RN (3)
A review of the nursing process with integration of key concepts in the care of the adult client, care of the childbearing family, care of the child, and care of the client with psychosocial disorders. On demand. Open only to seniors in their final semester or approval of instructor.

442 Nursing Systems VII: Concepts of Community Health (3)
This course examines synthesis of concepts and practice of Nurse Agency applied to vulnerable populations and communities. Prerequisites: Nursing 423, 457, 458, 462. Corequisites: Nursing 431, 444, 490.

444 Nursing Practicum V: Care of the Community (3)
This course focuses on applied community/public health principles that guide the practice of Nurse Agency in various multiperson unit service setting with defined vulnerable populations and communities. Prerequisites: Nursing 423, 457, 458, 462. Corequisites: Nursing 431, 442, 490.

455r Advanced Childbirth/Women's Health Education (1-3)
The course expands and enhances the practice of nurses who work or will work with childbearing families and nonpregnant women. Advanced knowledge and skills are presented which enable students to assess and diagnose common gynecological and pregnancy-related problems. On demand. Prerequisites: Nursing 355, 353, 354 or RN license and physical assessment.

457 Nursing Systems VI: The Adult with Complex Health Deviations (3)

458 Nursing Practicum IV: The Adult with Complex Health Deviations (4)
Holistic care of the adult with complex health deviations. Prerequisite: Nursing 355, 356, 357, 358. Corequisites: Nursing 423, 457, 462. Laboratory/Studio course fee will be assessed.

462 Nursing Agency VI: Professional Nursing in the Health Care System (3)
This course examines characteristics of Nurse Agency that focus on the professional nurse as leader and manager in health care systems. Prerequisites: Nursing 355, 356, 357, 358. Corequisites: Nursing 326, 428, 429.

470 Oncology Nursing (3)
In-depth study of the status of cancer as a major health problem. Treatment modalities used for intervention and interruption of the neoplastic process are studied, emphasis on utilizing the nursing process in treating oncology patients. On demand.

471 Nursing Case Management: Theory, Process and Outcome (3)
Web-based course on theory, process, outcome and role function essential to the practice of nursing case management are explored. Prerequisite: approval of instructor.

472 Health Care Information Management (3)
This course provides students with the theoretical foundation of healthcare information management, examines information technology, Internet tools, and use of software applications in professional practice. Prerequisite: Approved computer literacy course or core computer skills integrated into the major, or approval of instructor.

490 Nursing Practicum VI (3)
Application of Orem’s Conceptual Model to theory, practice, and research in a variety of clinical settings; preparation for entry into professional nursing practice. Prerequisites: Nursing 423, 457, 458, 462.. Corequisites: Nursing 431, 442, 444.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.
Rehabilitation Science

Occupational Therapy

Students who wish to receive the B.S. degree in Rehabilitation Science with a concentration in Occupational Therapy at UTC will complete the elective hours for a total of 102 hours at UTC. Admission to UTC does not assure acceptance into the program. The student must follow the procedures for admission to the Occupational Therapy Program at the University of Tennessee Health Science Center in Memphis. After the students are accepted into the University of Tennessee Health Science Center’s (UTHSC) Occupational Therapy program, the Chattanooga students continue to be enrolled at UTC for one semester of their senior year. For the second semester of the senior year, students are officially enrolled at UTHSC but continue to attend classes on the UTC campus.

The pre-occupational therapy students apply for admission into the UTHSC Occupational Therapy program by February of the junior year (see UTHSC’s website at www.utmem.edu for admission requirements into the Masters of Occupational Therapy program). The admission requirements for the B.S. in Rehabilitation Science: Occupational Therapy is to be accepted into UTHSC’s OT program. Students will then move from pre-OT status to the B.S. in Rehabilitation Science concentration in OT status. The student will be informed of their acceptance into the OT program by the end of the Spring semester, which assures a smooth transition to register for fall classes offered at UTC.

The student enters UTC as a freshman or transfer to complete prerequisites for the professional program in occupational therapy. The last 24 of the 92 hours of prerequisite course work must be completed in resident courses at UTC. If elective hours are transferred in after completing the 92 hours, the student must petition residency requirements. The student applies for acceptance into the OT program after completing the prerequisites (92 semester hours) and other requirements for admission into the Masters of Occupational Therapy program at UTHSC. The OT student is required to be enrolled at UTC for the fall semester and take Physical Therapy 410, Human Gross Anatomy. The student completes all the required prerequisites and one semester of required PHYT 410 at UTC, followed by one semester of 18 hours in 400-level course work in the occupational therapy program at UTHSC. The 18 hours of course work taken through UTHSC’s OT program are then transferred back to UTC to complete the degree requirements. The student is awarded the B.S. in Rehabilitation Science with a concentration in Occupational Therapy from UTC provided all other requirements toward the degree have been successfully completed.

The OT student continues to attend UTHSC to complete the requirements for a Masters of Occupational Therapy. This requires an additional 57 hours of course work. The student attends UTHSC for an additional two (2) calendar years beyond the first professional year. This includes an additional 42 semester credit hours of course work and 480 hours of clinical experiences or 15 semester credit hours.

2531 - Rehabilitation Science: Occupational Therapy (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 131 or higher level approved Mathematics course* (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Biology 121* and Chemistry 121/123* (8 hours)

Humanities and Fine Arts: One approved humanities course and one approved fine arts course (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)

Behavioral and Social Sciences: Psychology 101* and one course selected from Sociology 125, 151, 215, 220 (Sociology 151 recommended) (6 hours)

Major and Related Courses

Anthropology 152 or 208; Biology 121#, 122, 191, 208; Chemistry 121/123#; Computer Science 110; Physics 103/183; Psychology 101#, 221, 308; Theater and Speech 109

Anthropology 152 or 208
Biology 121#, 122, 191, 208
Chemistry 121/123#
Computer Science 110
Mathematics 131 or higher level approved Mathematics course#
Physics 103/183
Psychology 101#, 221, 308 and 222 or other 3-hour developmental Psychology course
Physical Therapy 302 or Classics 300
Physical Therapy 410
One course from Sociology 125, 151, 215, 220 (Sociology 151 recommended)#
One additional approved Behavioral/Social Science course in addition to courses used to fulfill the general education requirements. (Recommended courses include political science or economics)
Two additional approved humanities courses in addition to courses used to fulfill the general education requirements. (Recommended courses include foreign languages, philosophy, English literature.)

Completion of Occupational Therapy course work through UTHSC required in the final semester: Occupational Therapy 431, 432, 433, 434, 435, 436

An official transcript from UTHSC documenting satisfactory completion of the Occupational Therapy course work must be submitted to UTC at the time of graduation in order to be awarded the B.S. degree in Rehabilitation Science with a concentration in Occupational Therapy.

Students pursuing only the B.S. degree in Rehabilitation Science with a concentration in Occupational Therapy must meet the minimum standards of a cumulative 2.0 GPA overall and a 2.0 GPA in the major to be eligible for the undergraduate degree.

Minimum of 39 hours in 300, 400, and professional level courses.
Electives to complete 120 hours.
Final 24 of 92 hours must be completed at UTC.
All general education requirements for B.S. degree at UTC must be met.
See page 67 for additional requirements.

*Also satisfies requirement in the major.
#Also satisfies general education requirement.
Physical Therapy
UC Foundation Associate Professor J. Randy Walker, Jr., Head

Pre-Physical Therapy
Pre-physical therapy students admitted to the program with undergraduate standing must meet all undergraduate admission requirements of the University. The prerequisites for the professional program for undergraduate students include the general education requirements of the University, which are outlined elsewhere in this catalog. Students who have already earned a bachelor’s degree at the time of application to the program are not required to complete the general education requirements of the University unless they choose to earn a second bachelor’s degree. Students interested in pursuing physical therapy should seek advisement from the physical therapy faculty by calling the program office to schedule an appointment. Beginning fall 2010, all students admitted to the Doctor of Physical Therapy program must have completed a bachelor’s degree.

Continuation and Graduation Standards
Standards of the physical therapy profession require that graduates be prepared to practice safely and competently with the physical therapy scope of practice. To ensure safe and competent performance by students enrolled in the program, the following continuation standards must be met for students to remain enrolled in the program:

1. To progress in physical therapy, students are required to:
   a) maintain a 2.0 grade point average for all courses taken at the undergraduate level; students must maintain a 3.0 for all courses taken at the graduate level.
   b) maintain an active liability insurance policy for clinical courses;
   c) maintain current CPR certification.
2. If in the judgment of the faculty there is reason to question the emotional or physical condition of a student or the safety or quality of physical therapy care provided, the faculty has the right and obligation to exclude the student from the clinical area.
3. Students who fail courses may be denied progression in the program. Students may repeat failed courses only at the discretion of the Retention and Progression Committee of the Physical Therapy Department.
4. Statement of Ethical and Professional Standards. In certain programs such as physical therapy, professional success depends upon factors other than those measured by normal evaluations in course work. The faculty has the right to separate a student from the program who is not likely to succeed professionally, despite earning acceptable grades. Failure to maintain the high ethical and professional standards of the physical therapy profession may subject a student to suspension, dismissal or other appropriate remedial action by the physical therapy faculty.

2530 - Rehabilitation Science: Physical Therapy (B.S.)

General Education (see page 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 131 or higher level approved Mathematics course* (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Biology 121* and Chemistry 121/123* (8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours total)
Behavioral and Social Sciences: Psychology 101* and one additional approved course (PSY 241 or HHHP 407 recommended) (6 hours)

Major and Related Courses
Biology 121*, 191, 288
Chemistry 121/123* and 122/124 or one biochemistry course
One scientific or medical terminology course (Classics 300 or Physical Therapy 302 recommended)
One 300- or 400-level exercise physiology course (HHHP 317 recommended)
Mathematics 131 or a higher level approved Mathematics course
One biomedical or professional ethics course (Philosophy 325# or 425# recommended)
Physics 103/183 and 104/184
Psychology 101* and one additional approved course (PSY 241 or HHHP 407 recommended)
One 200-level or higher course emphasizing scientific or professional writing
Completion of course work required in the first year of the professional school (please refer to The Graduate Catalog)

Students pursuing only the B.S. degree in Rehabilitation Science with a concentration in Physical Therapy must meet the minimum standards of a cumulative 2.0 GPA overall and a 2.0 GPA in the major to be eligible for the undergraduate degree.
Minimum of 39 hours in 300, 400, and professional level courses.
Electives to complete 120 hours
All general education requirement for the B.S. degree at UTC must be met.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

UNDERGRADUATE
PHYSICAL THERAPY COURSES (PHYT)
Please refer to the UTC Graduate Catalog for a listing of the professional level courses offered in the Physical Therapy curriculum.

302 Medical Terminology for Health Professionals (2)
This course is designed for students interested in the medical and paramedical fields. Utilizing web-assisted instruction, students will study medical terminology related to the major body systems. Emphasis will include the use of medical word parts, pronunciation, spelling and the definitions of key pathology, diagnostic and treatment procedures terms.

305 Ethics for Health Care Professionals (3)
Designed to introduce pre-health professional students to ethical theories and concepts, assist in identifying potential ethical dilemmas, and provide a system for ethical analysis. Current issues in health care ethics will be discussed throughout the course. Web-assisted technology will be utilized to accomplish the course objectives.

410 Human Gross Anatomy (6)
This course is a combined lecture-laboratory program designed to present to the student an understanding of basic and clinical, human gross anatomy. Normal diagnostic imaging techniques will be introduced. Detailed regional analysis of the buttock, lower extremity, and upper extremity will be performed. Structure and
function of the head, neck, and trunk regions will be studied. Major joints will be discussed. Anatomy of the thoracic and abdominal cavities will be introduced. Fall semester. Lecture 3 hours, laboratory 6 hours.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Prerequisite: approval of Department Head. Student must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

Social Work
Assistant Professor Valerie L. Radu, Head

The social work program prepares professional social workers for beginning practice as social work generalists capable both of functioning in a variety of agency and community settings and of practicing with diverse populations. The curriculum provides knowledge and skill for working with individuals, families, groups, organizations, and communities.

Pre-Social Work
Students must meet the same admission requirements as all other applicants to the University. Academic advising for students declaring pre-social work as a major may be done by a member of the social work faculty. Admission to the University does not ensure acceptance into the social work major.

Admission to the Social Work Major
Eligible pre-social work majors seeking admission to the Social Work program must complete the following admission process by February 15th of the sophomore year:
• Complete the Application to the UTC Social Work Program available on the program website: www.utc.edu/SocialWork
• Have a cumulative Grade Point Average (GPA) of 2.0 or higher on a 4.0 point scale.
• Have a social work major Grade Point Average (GPA) of 2.50 or higher on a 4.0 point scale in all pre-Social Work courses (Social Work 110 and 207).
• Earn a grade of C or better in the following pre-social work courses: Social Work 110 and Social Work 207.
• Complete the following cognate courses with a passing grade: Biology 121, Political Science 101, Psychology 101, Sociology 151. Note: Biology 121 is a pre- or corequisite for Social Work 306, 308, 312 and 333.
• Complete a criminal background check process.
• Discuss the above application materials in a scheduled group interview with the Social Work Program faculty.

After the interview, students are notified in writing of their acceptance status in the Social Work program. There are two levels of acceptance:
• Full Acceptance: student has met the above requirements and is accepted into the Social Work program in good standing.
• Conditional Acceptance: student has not met at least one of the admission requirements stated above and is accepted into the program on conditional status. The student and faculty then develop a plan of correction addressing the unmet areas and the student has the semester immediately following the admission interview to address the unmet admission requirement(s). If, at the end of the semester, the admission requirements are not satisfied, the student must completely reapply to the Social Work program.

Admission to Field Education
Students wishing to enter field education must meet the following requirements:
1. Complete all prerequisites for Field Education I (Social Work 412) as listed in the university catalog.
2. Achieve a 2.00 overall grade point average.
3. Satisfactorily complete all incomplete grades.
4. Submit a completed Field Education Application to the field education coordinator which includes a recent transcript, current resume, and peer evaluation form.
5. Participate in the annual Field Fair.

Expenses and Transportation
In addition to regular education costs, social work students must meet the following expenses: liability and insurance for field education, and others as required. Since field experiences in social work are obtained in a variety of health care and social service settings in local and remote areas, students are individually responsible for transportation to these sites.

Continuation Standards
The nature of the social work profession requires the following program continuation standards:

1. To progress in the social work program, students are required to:
   a. Achieve grade of C or higher in all Social Work courses;
   b. Maintain a minimum cumulative grade point average of 2.00;
   c. Maintain a Social Work major grade point average of 2.50 or higher on a 4.0 scale in all Social Work courses.
2. To enroll in 300-level and 400-level Social Work courses, a student must be a Social Work major formally accepted into the program and in good standing.

2889 - Social Work (B.S.W.)

General Education: (see pages 69-72 for list of approved courses)
Rhettoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Biology 121* and one additional approved natural science course (7-8 hours)
Humanities and Fine Arts: One approved fine arts course and one approved humanities course selected from English 133, 219, 313; History 203; Religion 236 (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II and Anthropology 208* OR Option B: World Civilization I, II, III (9 hours)
Behavioral and Social Sciences: Psychology 101* and Sociology 151* (6 hours)

Major and Related Courses
Anthropology 208# OR Economics 101; Biology 121#; Psychology 101#; Political Science 101; Sociology 151#; one approved statistics course; one course selected from English 133, 219, 313; History 203; Religion 236, Sociology 305

NOTE: For Social Work majors who participate in the Tennessee Child Welfare Stipend and Certification Program, Social Work 323 and 423 are required courses as part of that program's certification process.

Minimum 2.5 average in all Social Work courses with no grade lower than C. Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours. See page 67 for additional information.

*Also satisfies requirement in the major.

#Also satisfies general education requirement.

**SOCIAL WORK COURSES (SOCW)**

**110 Introduction to the Social Work Experience (3)**
An introduction to the profession of social work, its historical roots, its values, and its fields of practice. Topics include the field of social work, social welfare policy, social work values and ethics, the social work knowledge base, career opportunities, and current issues in social work. A minimum of 30 hours of supervised volunteer hours in an approved social service setting are required. Every semester.

199r: Special Topics (1-4) Individual or group projects. On demand. Prerequisite: approval of department head. Maximum credit 4 hours.

**201 Introduction to Social Policy and Programs (3)**
This is an introduction to the social welfare system in the United States from both historical and philosophical perspectives. The course focuses on international aspects of social welfare as well as political issues. Every semester. Prerequisite: Social Work 110.

**207 Interviewing Skills (3)**
This is a pre-social work course required for admission to the program. Communication skills (oral and written) and technical skill in interviewing are emphasized. Students complete two video-taped interviews and evaluate their developing interviewing skills. Fall and spring semester. Prerequisite: Social Work 110.

**210 The Family Experience: Matters of Ethnicity, Race, Class and Gender (3)**
An examination of class, ethnic and racial diversity in the American family through the use of different conceptual perspectives. Every semester.

**306 Social Work Practice I (3)**
The first of a four-course foundation practice sequence. The course provides students with a theoretical framework for entry level, generalist social work practice with an emphasis on working with individuals and families. Fall semester. Prerequisite: Social Work 207, Sociology 151, Psychology 101. Pre- or Corequisite: Biology 121. Corequisites: Social Work 308, 312, 333.

**307 Social Work Practice II (3)**
The second of a four-course foundation practice sequence building on the base developed by the earlier practice material in Social Work 306 and 312. Social work with families and group process, practice theory and skills are emphasized along with international content. Prerequisites: Social Work 306, 308, 312, 333. Corequisites: Social Work 342, 376, 408.

**308 Social Work Ability Seminar I (1)**
Seminars are designed assist students with understanding the ability-based approach to learning and in becoming skilled at self-assessment. Seminar content will focus on the program's ten core abilities. Students will learn methods for integrating projects from various courses into their E-Portfolios. Fall semester. Prerequisites: Social Work 207, Sociology 151, Psychology 101. Pre- or Corequisite: Biology 121. Corequisites: Social Work 306, 312, 333.

**312 Human Behavior and the Social Environment I (3)**
This is the first of a two semester sequence that builds on the liberal arts and required social work cognate course knowledge base. The course examines the various contexts for human behavior as well as the place of genetics and biology in the ecological perspective. Fall semester. Prerequisites: Social Work 207, Sociology 151, Psychology 101. Pre- or Corequisite: Biology 121. Corequisites: Social Work 306, 308, 333.

**323 Child Welfare I (3)**
This is the first in a series of two child welfare courses offered as part of the Tennessee Child Welfare Certification Program. The course introduces students to knowledge of child maltreatment and the juvenile justice system. It provides an overview of the child welfare system describing the history, policies, and programs, both state and federal. Fall semester. Prerequisite: Social Work 110 or any Sociology, Psychology or Anthropology course.

**330 Mental Health Policy and Services (3)**
This course provides a basic understanding of mental health and mental illness from a social work perspective. Students are given an overview of current mental health systems and the impact of local, state, and federal policy on delivery of services. The medical model and alternative systems of diagnosis are considered. On demand. Prerequisites: Social Work 306, 312.

**333 Social Work Practice with Special Populations (4)**
This is the third course in the practice sequence and covers how to implement evidence-based social work interventions congruent with culturally competent social work practice. Focus is on populations specific to the southeast area of Tennessee. Prerequisites: Social Work 207, Sociology 151, Psychology 101. Pre- or Corequisite: Biology 121. Corequisites: Social Work 306, 308, 312.

**340 Social Work Healthcare Services and Policies (3)**
This course provides a basic understanding of social work practice in medical and health-related settings. Emphasis is placed on interdisciplinary practice, diverse skills, roles, and functions of social workers in health care. Students are given an overview of current health policy and the impact of local, state, and federal policy on delivery of services. On demand. Prerequisites: Social Work 306, 312.

**342 Human Behavior and the Social Environment II (3)**
This is the second of a two semester sequence. A systems, person-in-environment, perspective will be emphasized, looking at the human development in the context of larger social conflicts associated with class, race, ethnicity, gender, sexual orientation and ability status. Spring semester. Prerequisites: Social Work 306, 308, 312, 333. Corequisites: Social Work 307, 376, 408.

**376 Introduction to Applied Research and Professional Writing (3)**
An introduction to research methods and statistics with particular attention to examples from Social Work research. Students will become familiar with the complete research process including the application of statistics. A full range of alternative research designs, including quantitative and qualitative research methods, will be covered. Students will develop professional writing skills in APA style through various writing assignments. Spring semester. Prerequisites: Social Work 306, 308, 312, 333. Corequisites: Social Work 307, 342, 408.

**407 Social Work Practice III (3)**
The fourth of a four-course social work practice sequence, this course builds on and significantly expands the knowledge base and level of professional sophistication already attained by the student. The focus of the course is community practice and program evaluation. Fall semester. Prerequisites: Social Work 307, 342, 376, 408. Corequisites: Social Work 412, 413, 417.

**408 Social Work Ability Seminar II (1)**
Designed to assist social work majors with understanding the ability-based approach and becoming skilled at self-assessment. Seminar content will focus on the learning styles, self-assessment, and using feedback from multiple sources. Students will learn methods for integrating projects from various courses into their E-Portfolios and prepare for the Field Fair. Spring semester. Prerequisites: Social Work 306, 308, 312, 333. Corequisites: Social Work 307, 342, 376.

**410 Social Work Policy and Practice (3)**
This is the second in the two course social welfare sequence and builds upon the foundation provided in Social Work 201. It is designed to develop analytical skills and the ability to engage in critical thinking concerning social welfare programs, policies and issues. Focus is on critical assessment of current social welfare policies and structure. Political elements in social welfare policy development and implementation will also be explored. Spring semester. Prerequisites: Social Work 407, 412, 413, 417. Corequisites: Social Work 441, 442, 476, 490.
412 Field Education I (4)
This is the first course of the two part Field Education experience. The course provides an opportunity for students to apply practice theory to the development of generalist practice skills, and to become familiar with agency structures, functions, and programs. A minimum 15 hours per week in the agency setting required; the last 30 hours may be used for completing the agency-based research project. Prerequisites: Social Work 307, 342, 376, 408; a minimum 2.0 cumulative GPA and a minimum 2.50 major GPA. Corequisites: Social Work 407, 413, 417.

413 Integrative Field Seminar I (1)
This course is designed to provide a forum for providing mutual support, discussing and completing departmental assignments, exploring on-going practice concerns in the field practicum, and creating an arena in which peer learning takes place. Fall semester. Prerequisites: Social Work 307, 342, 376, 408; approved statistics course. Corequisites: Social Work 407, 412, 417.

417 Applied Research (3)
This course builds on the research and statistical knowledge and skills learned in previous course work. A comparison of both quantitative and qualitative research methodologies will be explored and examined. Fall semester. Prerequisites: Social Work 307, 342, 376, 408; approved statistics course. Corequisites: Social Work 407, 412, 413.

423 Child Welfare II (3)
This is the second in a series of two courses offered as part of the Tennessee Child Welfare Certification Program. It is designed to assist students in acquiring the practice skills to become culturally competent child welfare workers. The course will analyze the practices of various human/social service agencies that provide services aimed at children, youth and families. Spring semester. Prerequisite: Social Work 323.

350 School Social Work and the Law (3)
This course provides an orientation to social work practice in the public school setting. It covers historical, legal, and political developments that affect the modern day role and functions of the social worker in the school setting, and covers the types of students served, resources and knowledge needed to deliver services and an overview of the public school system. This course is required for Tennessee state certification as a school social worker. On demand. Prerequisites: Social Work 306, 312.

441 Integrative Field Seminar II (1)
This course is designed to provide a forum for exploring on-going practice concerns in the field practicum, and creating an arena in which peer learning takes place. The course also provides a vital link between the theoretical knowledge, skills and values derived from course work and practice realities of the field practicum. Spring semester. Prerequisites: Social Work 407, 412, 413, 417. Corequisites: Social Work 410, 442, 476, 490.

442 Field Education II (4)
This course builds on the experiences of the first semester field education course, and provides an opportunity for students to apply theory to practice in their work with individuals, families, communities, and groups. A minimum of 200 total clock hours will be spent working in an approved agency; the last 30 hours may be used for completing the agency-based research project. Prerequisites: Social Work 407, 410, 441, 476, 490; a minimum 2.0 cumulative GPA and a minimum 2.50 major GPA. Corequisites: Social Work 410, 441, 476, 490.

460 Social Work Practice with Aging Families (3)
An overview of social work knowledge, skills, and values applicable to working with older adults and their families. Content includes an examination of theories and attitudes toward aging, the nature and limitations of gerontological social work forces shaping the delivery system, major biopsychological dimensions in practice, and different models of intervention. On demand. Prerequisites: Social Work 306, 312.

476 Data Analysis (1)
This course provides instruction for using the statistical software package, SPSS, to solve statistical problems, analyze and interpret data. Different types of statistical tests and analysis are covered. Spring semester. Prerequisites: Social Work 407, 412, 413, 417. Corequisites: Social Work 410, 441, 442, 490.

490 Senior Seminar (2)
The Senior Seminar is designed to support students in the successful completion of the social work program’s ability-based curriculum. Special emphasis is given to the completion of the E-Portfolio project, demonstrated mastery of the program’s ten core abilities, and participation in the Senior Showcase Event. Spring semester. Prerequisites: Social Work 407, 412, 413, 417. Corequisites: Social Work 410, 441, 442, 476.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
On demand. See Departmental Honors. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

497r Research
(1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.

Teacher Preparation Academy
Professor Valerie Rutledge, Head

The Teacher Preparation Academy provides preparation for individuals seeking to become professional teachers within public and private educational institutions. Programs, in most cases, lead to licensure or credentialing and in every case prepare thoughtful, informed practitioners of learning and leading. Course work is shaped around the development of a reflective practice model.

The Teacher Preparation Academy offers approved programs leading to the Bachelor of Science degree and eligibility for teacher licensure in Tennessee and in those states that grant reciprocity privileges to graduates of institutions accredited by NCATE.

Courses of Study
Undergraduate—The college offers approved undergraduate programs leading to the Bachelor of Science degree and eligibility for teacher licensure in Tennessee and in those states which grant reciprocity privileges to graduates of institutions accredited by NCATE. Courses of study include:

Art Education (K-12)
Early Childhood Education (PreK-3)
Exceptional Learning (K-12)
Health and Exercise Science Pedagogy: K-12
Foreign Language Education (K-12) (French, Latin, Spanish)
Middle Grades Education (4-8)
Music Education (K-12) (B.M.)
Secondary Education (7-12) with concentrations in English, mathematics, natural sciences (biology, chemistry, earth and space science, physics), and social sciences (economics, geography, political science, history)
Theatre Education (K-12)
Field Placements
Students should note that field placements are required in order to satisfactorily complete many courses successfully. Tennessee Code Annotated, Title 49, Chapter 5, Part 5610 specifies that all students wishing to enter approved teacher training programs in Tennessee are required to have a fingerprint-based criminal history background check. In order to comply with TCA 49-5-5610, students seeking to complete the Professional Development School (PDS) program must complete this requirement satisfactorily before they can be accepted into PDS. Students must also provide proof of current professional liability insurance. Details can be found on the Teacher Preparation Academy website and questions should be directed to the TPA Field Placement Coordinator.

Admission to the Teacher Education Program (TEP)*
Applicants who demonstrate qualifications and characteristics reasonably expected for entry into the teaching profession will be considered for admission to the teacher education program. Selection of qualified students is usually made on the basis of application during the sophomore year, with the exception of transfer students who are required to complete a semester of residence at UTC before their admission can be finalized. Applications should be filed no later than the first semester of the junior year. A student who has not been officially admitted to the TEP will not be permitted to register for certain 400-level professional education courses. Prior to formal application to the TEP, freshman, sophomore, and particularly transfer, students must consult with an advisor in the College of Health, Education and Professional Studies to plan their programs. This advisory procedure also applies to students (including post-baccalaureate and graduate) seeking initial teacher licensure or endorsement.

All students (undergraduate, post-baccalaureate and graduate) must satisfy official TEP admission standards set by UTC, the Tennessee Department of Education, and the College of Health, Education and Professional Studies. A student who has earned a degree or credit hours at another institution may be required to enroll in additional courses, including the student teaching experience or practicum, to verify competency in those teaching fields for which initial teacher licensure or endorsement is being requested through a UTC recommendation.

To be considered for admission to the TEP*, an undergraduate or post-baccalaureate student must:
1. File a formal application signed by a College of Health, Education and Professional Studies faculty advisor.
2. Earn a minimum 2.5 cumulative grade point average, a 2.5 average on all courses taken at UTC, a 2.5 in education courses with no grade lower than C, and a 2.5 in content area courses with no grade lower than C.
3. Complete the Praxis I tests or a state-approved equivalent and earn at least the minimum score on each section as mandated by the Tennessee Board of Education for the particular year in which the battery is taken.
4. Submit all other appropriate information (field placement documentation, essay and resume) prior to scheduling the TEP interview.
5. Complete an interview and receive a positive recommendation from the TEP interview committee.
6. Demonstrate a commitment to: a) professional ethics, b) collaboration, c) diversity, d) self-reflection, e) belief in students’ ability to learn, f) technology, g) the teaching profession, and h) professional growth. In addition, specific dispositions are sometimes identified as appropriate for individual programs as a result of other association/organization affiliations. Violations of the honor code or student behavior policies as stated in the

Professional Development School I (PDS I)
The Professional Development School I (PDS I) is an intensive, semester-long field experience. Participants spend all day, every day, in a cohort assigned to a local school. In this exploratory experience, the University students work with the faculty and students at all levels of grades K-12, both in the classroom and in non-classroom settings. University faculty provide on-site instruction through an integrated presentation format.

PDS I participants complete a predetermined core of courses specific to each discipline. Listed below are the courses required for PDS I within the appropriate discipline.

Early Child Education: PreK-3: Education 317, 323, 309, 499; Early Childhood 345, 446; University Studies 330
Foreign Language Education: Education 321, 400, 418, 433, 499; Early Childhood 242
Middle Grades Education: Education 306, 321, 400, 418, 499; Early Childhood 242 and 445
Secondary Education (English, Mathematics, Natural Sciences and Social Sciences) Education 321, 400, 418, 433, 499; Early Childhood 242
Exceptional Learning: K-12: Education 317, 323, 336, 400, 499; Early Childhood 241 or 242, and 445

Students pursuing teacher licensure through UTC’s teacher preparation program must meet requirements in four sequential checkpoints. Effective for students enrolled in Education 201 in fall of 2004 and subsequent semesters, the checkpoints control admission to PDS I, admission to the Teacher Education Program, admission to student teaching and recommendation for licensure.

Included in the checkpoint requirements are successful completion of specified coursework, achievement of appropriate grade point averages, and appropriate test scores on the ACT, SAT or Praxis I as well as on the state-mandated Praxis II tests for the licensure area. In addition, specified paperwork must be submitted in each checkpoint. Success in meeting checkpoint requirements leads to success in completing the teacher preparation program.

Tennessee Code Annotated, Title 49, Chapter 5, Part 5610 specifies that all students wishing to enter approved teacher training programs in Tennessee are required to have a fingerprint-based criminal history background check. In order to comply
current UTC Student Handbook may be reviewed by the TEP Committee and may impact the final decision regarding admission to the TEP and/or approval for student teaching experiences.

7. Students pursuing any degree in education which leads to licensure must meet all required elements at each level of the Checkpoints in order to be able to move forward to additional courses. These provisions include not only those established by the UTC Teacher Preparation Academy, but also those mandated by the school systems in which students complete field placements. Education students must successfully meet the requirements for an initial Background Screening at Checkpoint 1 and must also pass an FBI/TBI Fingerprinting Procedure prior to admission to the student teaching experience. Failure to meet these or any other parts of any Checkpoint will prevent an individual from advancing to the next level.

8. Tennessee Code Annotated, Title 49, Chapter 5, Part 5610 specifies that all students wishing to enter approved teacher training programs in Tennessee are required to have a fingerprint-based criminal history background check. In order to comply with TCA 49-5-5610, students seeking to seeking entry into the Teacher Education Program must complete this requirement satisfactorily before they can be accepted into the program. Students must also provide proof of current professional liability insurance. Details can be found on the Teacher Preparation Academy website and questions should be directed to the TPA Field Placement Coordinator.

*Final responsibility for ensuring that these requirements are met prior to being admitted to the Teacher Education Program rests with the student.

Applicants will receive notification of their TEP status following the interview. An applicant who is denied admission will be notified of the deficiencies and of suggested resources or activities which may correct these. Decisions of the TEP Committee may be appealed. Information may be obtained from the TEP Committee chair.

Tests for Admission to Teacher Education Programs

Individuals seeking admission to teacher education programs in Tennessee must pass the Praxis I Pre-Professional Skills Test (PPST). The Tennessee Board of Education has also approved two additional options for admission of teacher candidates. Undergraduate or post-baccalaureate applicants who have attained an ACT composite test score of 22 or above on the Enhanced ACT or who have attained a combined verbal and mathematics score of 1020 or above on the Recentered SAT shall be exempt from the Praxis I.

UTC is committed to strict adherence to Tennessee Board of Education requirements regarding official admission to the TEP. An applicant to the TEP may take the required test(s) an unlimited number of times.

For full teacher licensure, the Tennessee Board of Education requires the achievement of state-approved minimum scores on specified tests of the Praxis II Series. Information about the tests may be obtained from the Certification Office or the UTC Testing Center.

Admission to Student Teaching*

The application for admission to the student teaching semester must be filed approximately six months preceding the actual experience. If a student plans to student teach during the spring semester of an academic year, the application must be completed and on file no later than September 1 of the preceding year. For the fall semester of an academic year, the application should be completed and on file no later than the preceding March 1.

Application for student teaching is not necessarily contingent upon official admission to the TEP; therefore, a student should apply for student teaching to comply with the required deadline dates. However, a student will not be permitted to student teach until he or she has satisfactorily met all requirements for admission to the TEP.

Before admission to student teaching, the undergraduate or post-baccalaureate student must:

1. Secure official admission to the TEP
2. Submit student teaching application with signature of assigned faculty advisor
3. Satisfactorily complete all professional education courses.
4. Satisfactorily complete at least 90 percent of coursework in content area(s).
5. Earn a minimum grade point average of 2.5 on courses completed at UTC, a cumulative 2.5 grade point average on all courses, a 2.5 grade point average in professional education courses with no grade lower than C, a 2.5 grade point average in content area courses with no grade lower than C.
6. Submit five copies of a resume.
7. Students pursuing any degree in education which leads to licensure must meet all required elements at each level of the Checkpoints in order to be able to move forward to additional courses. These provisions include not only those established by the UTC Teacher Preparation Academy, but also those mandated by the school systems in which students complete field placements. Education students must successfully meet the requirements for an initial Background Screening at Checkpoint 1 and must also pass an FBI/TBI Fingerprinting Procedure prior to admission to the student teaching experience. Failure to meet these or any other parts of any Checkpoint will prevent an individual from advancing to the next level.

8. Tennessee Code Annotated, Title 49, Chapter 5, Part 5610 specifies that all students wishing to enter approved teacher training programs in Tennessee are required to have a fingerprint-based criminal history background check. In order to comply with TCA 49-5-5610, students seeking to student teaching must: 1

1. Secure official admission to the TEP
2. Submit student teaching application with signature of assigned faculty advisor
3. Satisfactorily complete all professional education courses.
4. Satisfactorily complete at least 90 percent of coursework in content area(s).
5. Earn a minimum grade point average of 2.5 on courses completed at UTC, a cumulative 2.5 grade point average on all courses, a 2.5 grade point average in professional education courses with no grade lower than C, a 2.5 grade point average in content area courses with no grade lower than C.
6. Submit five copies of a resume.
7. Students pursuing any degree in education which leads to licensure must meet all required elements at each level of the Checkpoints in order to be able to move forward to additional courses. These provisions include not only those established by the UTC Teacher Preparation Academy, but also those mandated by the school systems in which students complete field placements. Education students must successfully meet the requirements for an initial Background Screening at Checkpoint 1 and must also pass an FBI/TBI Fingerprinting Procedure prior to admission to the student teaching experience. Failure to meet these or any other parts of any Checkpoint will prevent an individual from advancing to the next level.

*Final responsibility for ensuring that these requirements are met prior to being admitted to student teaching rests with the student.
All students seeking teaching licensure must meet the student teaching requirement. Student teaching (PDS II) is a full-semester experience; participants are placed in cohorts in two schools having different characteristics. Assignments vary according to state requirements for the licensure sought.

Student teaching is evaluated on a satisfactory/no credit basis. Successful completion of student teaching requires meeting all of the requirements of the field placements plus passing scores on all of the required Praxis II tests. A student not satisfactorily completing student teaching will receive a grade of no credit and may have the opportunity to repeat the course.

Final authority for the student teaching placement and teaching assignment rests with the Teacher Education Program Committee and the department head in the Teacher Preparation Academy. As a general rule, a student is neither located in the school from which he or she recently graduated nor placed under the supervision of a relative.

**Student Teaching Orientation**

General orientation seminars concerning student teaching and the professional education semester are held for all prospective student teachers preceding the student teaching semester. Non-attendance could delay the student teaching experience. Seminars are also held during the student teaching semester, and attendance is mandatory.

Under special circumstances, policies, procedures, and requirements for admission to the TEP and student teaching may be waived or revised at the discretion of the dean of the College of Health, Education and Professional Studies.

**Recommendation for Licensure**

The School of Educational Leadership will recommend licensure for only those students who have successfully completed one or more of the UTC initial licensure or endorsement programs approved by the Tennessee Department of Education. Application forms may be obtained from Certification Office, 205 Hunter Hall.

Tennessee regulations stipulate that the applicant for an initial teaching license or additional endorsement must be recommended by the designated certifying officer and dean of an approved teacher training institution. To receive this recommendation, the applicant must:

1. Obtain official admission to the TEP.
2. Earn a minimum grade point average of 2.5 in courses completed at UTC, a cumulative 2.5 grade point average on all courses, a 2.5 grade point average in professional education courses with no grade lower than C, a grade point average of 2.5 in content area courses with no grade lower than C.
3. Satisfactorily complete the student teaching experience or an approved alternative.
4. Fulfill specific departmental requirements in the area of concentration.
5. Achieve minimum scores on the Praxis II tests mandated by the Tennessee Board of Education. (Credit for student teaching will not be granted without fulfillment of this requirement.)

*Final responsibility for satisfying all requirements for licensure recommendation by UTC rests with the individual applicant.

UTC does not guarantee that satisfactory completion of a program listed in the UTC Catalog at the time of a student’s initial admission to the University will meet all the licensure requirements at the time the person applies for initial licensure. This means that UTC will recommend only those applicants who have met all the licensure requirements in effect at the time of the University recommendation.

Any student who completes a licensure program at UTC, regardless of whether he or she intends to teach in Tennessee, should apply for Tennessee licensure since many states require an applicant to be licensed in the state where he or she graduated and/or completed an initial licensure program. Licensure standards change frequently; hence, it is prudent to apply for licensure immediately upon graduation or program completion.

A student is considered to have completed UTC’s teacher preparation program when Tennessee standards for the Praxis II tests for licensure are met, all course work requirements have been fulfilled, and the degree appropriate to the program has been awarded.

A student who anticipates teaching outside Tennessee is strongly encouraged to request a check sheet of certification requirements from the Department of Education Office of Certification for the state in which he or she plans to teach. Course and competency requirements to satisfy out-of-state certification standards may be in addition to Tennessee licensure requirements and UTC approved degree requirements.

Graduation with a master’s degree from UTC does not guarantee licensure in any specific area. However, in some instances a student may satisfy all the Tennessee requirements for licensure by completion of a state approved master’s degree program at UTC. Students should refer to the Graduate Catalog for additional information about graduate studies.

**2087 - Art Education (B.S.)**

*See College of Arts and Sciences.*

**2236 - Early Childhood: Child and Family Studies (B.S.)**

**General Education** (see pages 69-72 for list of approved courses)

**Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)

**Mathematics:** One approved mathematics course (3 hours)

**Statistics:** One approved statistics course (3 hours)

**Natural Sciences:** Two approved natural science courses, at least one including a laboratory component (7-8 hours)

**Humanities and Fine Arts:** Two approved humanities and fine arts courses, one from fine arts and one from either (6 hours)

**Cultures and Civilizations:** Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course OR Option B: World Civilization I, II, III (9 hours)

**Behavioral and Social Sciences:** Early Childhood 340* and one additional approved behavioral/social science course (Criminal Justice 295 recommended) (6 hours)

**Major and Related Courses**

- Criminal Justice 201 or 295#; English 228; HHP 021 or one HHP activity course;
- HHP 452, 453; Legal Assistant Studies 245; PANM 325, 405; Psychology 340;
- Sociology 305;

No more that 6 hours in ECHD 405 may be applied toward the degree. Additional hours will increase the minimum number of hours required for graduation.

2.0 average required in all major and related courses.
Electives to complete 120 hours.
Minimum of 39 hours of 300 and 400 level courses.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

2238 - Early Childhood Education: PreK-3 (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 216* (4 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural sciences courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: History 203 or 204* and one course selected from Art 111, 301; Music 111; Theatre and Speech 111, 115* (6 hours)

Cultures and Civilizations: Option A: Western Humanities I and II and one approved Non-Western cultures and civilizations course selected from Anthropology 208, Geography 103 or Religion 111; OR Option B: World Civilization I, II, III (9 hours)

Behavioral and Social Sciences: Political Science 101* and one course selected from Early Childhood 340*, Psychology 101*, 241*; Sociology 215*; Social Work 210* (6 hours)

Two approved courses from Humanities and Fine Arts and Cultures and Civilizations.
The Community Based Experience (CBE) requirements for this major include Education 317, 323, 309; Early Childhood 345, 446; University Studies 330

The Community Based Experience (CBE) requirements for this major are associated with specific field placement expectations.

Major and Related Courses

English 228; History 203# or 204; Health and Human Performance 302, 330; Mathematics 216#; Political Science 101#; University Studies 330
One course selected from Art 111, 301; Music 111; Theatre and Speech 111, 115#
One course selected from Early Childhood 340#; Psychology 101#, 241#; Sociology 215#; Social Work 210#
One course selected from Anthropology 208#, Geography 103#, Religion 211#

Early Childhood Education PreK-3 Core:
Early Childhood 243, 345, 347, 445, 446;
Education 201, 209, 309, 311, 312, 313, 314, 315, 317, 323, 410, 420, 440;
University Studies 311, 320, 340;
Two courses selected from Education 318, 319, 415, 416, 425, 428, 430, 435

For graduation: 2.0 average overall, 2.0 average in College of Health, Education and Professional Studies courses.
For graduation with licensure: 2.5 cumulative, 2.5 at UTC, 2.5 in education courses with no grade lower than C, 2.5 in content area coursework with no grade lower than C (see advisor/check sheet for specific courses).
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

EARLY CHILDHOOD COURSES (ECHD)

199r Special Projects (1-4)
Individual or group projects. On demand. Maximum credit 4 hours.

241 Child Development and Observation II (3)
Study of growth and development of children from age three to adolescence. Includes ecological aspects and effects on development. Instruction in observation skills and directed participation in observational activities. Field component. Every semester.

242 Adolescent Development (3)
Consideration of adolescent developmental, cognitive, social theories and application for teaching. Understanding of peer culture/subcultures and effects of breakdown of social support systems. Field component. Every semester.

243 Child Development and Observation I (3)
Study of development of children from prenatal period to age eight. Includes ecological aspects and effects on development. Instruction in observation skills and directed participation in observational activities. Every semester. Field component. Corequisite: Early Childhood 243 lab.

245 Introduction to Family Life Programs (3)
An exploration of community and school-based programs that focus on empowering and enhancing individuals and families through education. Includes observational experience.

340 Family Relations: Family Interaction (3)
Family relationships and alliances at each stage of the family life cycle; the family as a small group: role, status, and power interactions of spouses, siblings, and generations; crises and adjustments. Every semester.

345 Management of Early Childhood Environments (3)

347 Oral Language and Early Literacy Development (2)
An examination of oral language development in young children and its link to early literacy competencies. The course will focus on issues of speech styles, narrative development, book handling and print-related behaviors as well as the development of other language skills. Fall and spring semesters. Prerequisite: Education 201. Corequisites: Education 309, Early Childhood 445, 446. Field placement required.

350 Communication for Early Childhood Professionals (3)
Responsibilities, ethics, and techniques for the professional in presenting information and materials to the public through radio, newspaper, television, and live performances; general areas of public relations. Every semester. Limited to Early Childhood majors only.

405r Early Childhood Practicum (3-6)
Directed field experience in a selected professional area of early childhood, including a weekly seminar and faculty supervision within an approved institution, agency or business establishment. Written application to department head is required three months prior to the semester in which the student plans to register for the course. Every semester. Prerequisites: senior status in Early Childhood and approval of department head. Maximum credit: 6 hours.

445 Families: Home, School, Community Partnerships (3)
A study of the family system as it assumes the child rearing function and parents the developing child throughout the stages of the family life cycle. Special attention is given throughout to the study of parent-professional, parent-community relationships and skills and approaches for building successful partnerships with families. Includes the study of families with "special" circumstances, and how professionals can be supportive and facilitative. Every semester. Field component.

446 Strategies for Assessing Young Children (3)
Designed to provide an overview of assessment rationale and experiences in administering a variety of assessments from informal to formal. Field component. Prerequisites: Education 323, Early Childhood 345.
2941 - Exceptional Learning K-12 (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: Mathematics 214* (4 hours)

Statistics: One approved statistics course* (3 hours)

Natural Sciences: One approved science course* (3 hours)

Humanities and Fine Arts: Art 301*, and one approved humanities/fine arts course (6 hours)

Cultures and Civilizations: History 103*, 104*, and 105* (9 hours)

Behavioral and Social Sciences: Political Science 101* and Psychology 101* (6 hours)

The PDS I requirements for this major include Education 317, 323, 336, 400, 499; Early Childhood 241 or 242, and 445.

Major and Related Courses

English 228 or 229, Health and Human Performance 302, Early Childhood 445, one course from Psychology 221 or 222 or Early Childhood 241 or 242; University Studies 311, 320, 340, one approved Behavioral/Social Science course# and one approved statistics course#

Anthropology 208; one course from Art 111 or Music 111#; Computer Science 110 or Education 417; History 103#, 104#, 105#; Early Childhood 241, 242; Psychology 101#; University Studies 340

For graduation with licensure: 2.5 cumulative, 2.5 at UTC, 2.5 in content courses with no grade lower than C, and 2.5 in content courses with no grade lower than C.

Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours.

Foreign Language Education: French, Latin, or Spanish (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)

Mathematics: One approved mathematics course (3 hours)

Statistics: One approved statistics course (3 hours)

Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)

Humanities and Fine Arts: Music 111 or Art 111* and one approved humanities/fine arts course (6 hours)

Cultures and Civilizations: History 103*, 104* and 105* (9 hours)

Behavioral and Social Sciences: Psychology 101* and one approved social science course (6 hours)

The PDS I requirements for this major include Education 321, 400, 418, 433, 499 and Early Childhood 242.

Each Foreign Language Education major must complete the requirements for one of the following concentrations.

2526 - Foreign Language Education: French

Major and Related Courses

Anthropology 208; one course from Art 111 or Music 111#; Computer Science 110 or Education 417; History 103#, 104#, 105#; Early Childhood 241, 242; Psychology 101#; University Studies 340

One approved Behavioral/Social Science course# and one approved statistics course#

Concentration Requirements

27 hours of French including 311, 312, 321, 323, 331, 332, 401, 430 or Foreign Languages 010, and electives to complete 27 hours in French

Professional Education Requirements

Education 201, 313, 321, 400, 418, 431, 433, 447

2527 - Foreign Language Education: Latin

Major and Related Courses

Anthropology 208; one course from Art 111 or Music 111#; Computer Science 110 or Education 417; History 103#, 104#, 105#; Early Childhood 241, 242; Psychology 101#; University Studies 340

One approved Behavioral/Social Science course# and one approved statistics course#

Concentration Requirements

23 hours of Latin and Classics including: 201, 202, 310, 312, 350, 351, 425; Classics 310

Professional Education Requirements

Education 201, 313, 321, 400, 418, 431, 433, 447

2528 - Foreign Language Education: Spanish

Major and Related Courses

Anthropology 208; one course from Art 111 or Music 111#; Computer Science 110 or Education 417; History 103#, 104#, 105#; Early Childhood 241, 242; Psychology 101#; University Studies 340

One approved Behavioral/Social Science course# and one approved statistics course#
Concentration Requirements
27 hours of Spanish including 311, 312, 321, 322, 323 or 325, 331, 401, 430 or
Foreign Languages 010, and electives to complete 27 hours in Spanish

Professional Education Requirements
Education 201, 313, 321, 400, 418, 431, 433, 447

For graduation: 2.0 average in foreign language and 2.0 average in College of
Health, Education and Professional Studies courses.
For graduation with licensure: 2.5 cumulative average, 2.5 average at UTC, 2.5
average in education courses with no grade lower than C, 2.5 average in con-
tent area courses with no grade lower than C.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional information.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Middle Grades Education (B.S.)

General Education (see pages 69-72 for list of approved courses)

Rhetoric and Composition: Two approved courses in rhetoric and composi-
tion (6 hours)

Mathematics: Mathematics 216* (4 hours)

Statistics: One approved statistics course# (3 hours)

Natural Sciences: Two approved natural sciences courses with laboratories* (8
hours)

Humanities and Fine Arts: History 204* and one approved fine arts course
(6 hours)

Cultures and Civilizations: Western Humanities I and II (6 hours) and
Geography 103* (3 hours)

Behavioral and Social Sciences: Economics 102* and Political Science 101* 
(6 hours)

The PDS I requirements for this major include Education 306, 321, 400, 418,
499r, Early Childhood 242, 445

Each Middle Grades Education major must also complete the require-
ments for one of the following concentrations and for an area of
emphasis other than the selected concentration.

2225 - Middle Grades Education: English

Major and Related Courses
Economics 102#; English 229 and 410; Health and Human Performance 447;
Geography 103#; History 204#; Early Childhood 445; Mathematics 216#;
Political Science 101#; University Studies 311 and 320
One approved statistics course#
Two approved natural science courses with laboratories#
One approved fine arts course#

Professional Education Requirements

Concentration Requirements (15 hours)
English 205, 206, 300, one Literature elective for diversity and one additional lit-
erature elective.

Complete requirements for one of the following areas of emphasis. Note: A student
must select an area of emphasis different from the concentration.

Mathematics: Minimum 9 hours selected from Mathematics 131, 136, 145,
151/152, 161/162, 212, 307 or maximum of 4 hours Mathematics electives.

Natural Sciences: Chemistry 121/123 and one course from Astronomy 102/182,
Biology 121, 122, Geology 111/181, Physics 103/183, 104/184 (8 hours)

Social Sciences: Geography 101; History 203; and one course from History 103,
104, 105 (9 hours)

NOTE: Courses used to meet general education or major related requirements may not
be used to satisfy concentration and area of emphasis requirements.

2226 - Middle Grades Education: Mathematics

Major and Related Courses
Economics 102#: English 229 and 410; Health and Human Performance 447;
Geography 103#: History 204#: Early Childhood 445; Mathematics 216#: 
Political Science 101#: University Studies 311 and 320
Two approved natural science courses with laboratories#
One approved fine arts course#

Professional Education Requirements

Concentration Requirements
Minimum 15 hours in Mathematics selected from 131, 136, 145, 151/152,
161/162, 212, 307 or Mathematics electives, (maximum of 4 hours of math elec-
tives apply to concentration).

Complete requirements for one of the following areas of emphasis.

English: English 205, 206 and one English literature elective (9 hours)

Natural Sciences: Chemistry 121/123 and one course from Astronomy 102/182,
Biology 121, 122, Geology 111/181, Physics 103/183, 104/184 (8 hours)

Social Sciences: Geography 101; History 203; and one course from History 103,
104, 105 (9 hours)

NOTE: Courses used to meet general education or major related requirements may not
be used to satisfy concentration and area of emphasis requirements.

2227 - Middle Grades Education: Natural Sciences

Major and Related Courses
Economics 102#: English 229 and 410; Health and Human Performance 447;
Geography 103#: History 204#: Early Childhood 445; Mathematics 216#: 
Political Science 101#: University Studies 311 and 320
One approved statistics course#
Two approved natural science courses with laboratories#
One approved fine arts course#

Professional Education Requirements

Concentration Requirements
Biology 121, 122, Chemistry 121/123 and one course from Astronomy 102,
Geology 111, Physics 103 or Physics 104

Complete requirements for one of the following areas of emphasis.

English: English 205, 206 and one English literature elective (9 hours)

Mathematics: Minimum 9 hours selected from Mathematics 131, 136, 145,
151/152, 161/162, 212, 307 or maximum of 4 hours Mathematics electives.

Social Sciences: Geography 101; History 203; and one course from History 103,
104, 105 (9 hours)

NOTE: Courses used to meet general education or major related requirements may not
be used to satisfy concentration and area of emphasis requirements.

2228 - Middle Grades Education: Social Sciences

Major and Related Courses
Economics 102#: English 229 and 410; Health and Human Performance 447;
Geography 103#: History 204#: Early Childhood 445; Mathematics 216#: 
Political Science 101#: University Studies 311 and 320
One approved statistics course#
Two approved natural science courses with laboratories#
One approved fine arts course#
Professional Education Requirements

Concentration Requirements
Geography 101, History 103, 104, 105, and 203.

Complete requirements for one of the following areas of emphasis.

English: English 205, 206 and one English literature elective (9 hours)
Mathematics: Minimum 9 hours selected from Mathematics 131, 136, 145, 151/152, 161/162, 212, 307 or maximum of 4 hours Mathematics electives.
Natural Sciences: Chemistry 121/123 and one course from Astronomy 102/182, Biology 121, 122, Geology 111/181, Physics 103/183, 104/184 (8 hours)

NOTE: Courses used to meet general education or major related requirements may not be used to satisfy concentration and area of emphasis requirements.

For graduation: 2.0 grade point average in College of Health, Education and Professional Studies courses.
For graduation with licensure: 2.5 cumulative grade point average, 2.5 at UTC, 2.5 average in education courses with no grade lower than C.
Minimum of 39 hours of 300 and 400 level courses.
Electives to total 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Electives to complete 120 hours.

3670 and 3672 - Music Education (B.M.)
See College of Arts and Sciences.

2976 - Secondary English (B.S.)
General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course (3 hours)
Statistics: One approved statistics course (3 hours)
Natural Sciences: Two approved natural science courses, at least one including a laboratory component (7-8 hours)
Humanities and Fine Arts: Music 111 or Art 111* and History 203 or 204* (6 hours)
Cultures and Civilizations: Western Humanities I and II (6 hours) and Anthropology 208* (3 hours)
Behavioral and Social Sciences: Psychology 101* and one additional approved social science course (6 hours)
The PDS I requirements for this major include Education 321, 400, 418, 433, 499 and Early Childhood 242.

Major and Related Courses
History 203 or 204*, and History 323 or 324
One year of a foreign language at the college level (6-8 hours)
Anthropology 208#, One course from Art 111 or Music 111#, Computer Science 110 or Education 417, Psychology 101# and one approved statistics course#

Concentration Requirements
36 hours English including English 113#*, 115#*, 205, 206, 229, 300, 307, 361, 370, 410, 460; one elective English course in novel, and one elective English course in literature for diversity.

Professional Education Requirements
Education 201, 321, 400, 418, 433, 443, 450 and Early Childhood 242

For graduation: 2.0 cumulative and UTC grade point average, 2.0 grade point average in English, and 2.0 grade point average in College of Health, Education and Professional Studies courses.

For graduation with licensure: 2.5 cumulative and UTC grade point average, 2.5 in education courses with no grade lower than C, 2.5 in content area courses with no grade lower than C.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

2980 - Secondary Mathematics (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: Mathematics 151/152* (3 hours)
Statistics: Mathematics 307 or 408* (3 hours)
Natural Sciences: Physics 230/280* and Physics 231/281* (8 hours)
Humanities and Fine Arts: Two approved humanities and fine arts courses, one from fine arts and one from either (3 hours)
Cultures and Civilizations: Option A: Western Humanities I and II (6 hours) and one approved Non-Western Cultures and Civilizations course (3)
Behavioral and Social Sciences: Psychology 101 and one approved behavioral/social sciences course (6 hours)
The PDS I requirements for this major include Education 321, 400, 418, 433, 499 and Early Childhood 242.

Major and Related Courses
Computer Science 110 or Education 417, Computer Science 150, Physics 230/280* and 231/281#, Psychology 101#

Concentration Requirements
Mathematics 151/152*, 161/162, 212, 245, 255, 300, 321, 350, 430, 452 and Mathematics 307# plus 9 hours electives in mathematics, OR Mathematics 407 and 408# plus 6 hours electives in mathematics

Professional Education Requirements
Education 201, 321, 400, 418, 433, 443, 451, and Early Childhood 242

For graduation: 2.0 average in Mathematics and 2.0 average in College of Health, Education and Professional Studies courses.
For graduation with licensure: 2.5 cumulative average, 2.5 at UTC, 2.5 average in education courses with no grade lower than C, 2.5 average in content area courses with no grade lower than C.
Minimum of 39 hours of 300 and 400 level courses.
Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

Secondary Natural Sciences (B.S.)

General Education (see pages 69-72 for list of approved courses)
Rhetoric and Composition: Two approved courses in rhetoric and composition (6 hours)
Mathematics: One approved mathematics course selected from Mathematics 131, 136, 145 or 151 (3 hours)*
Statistics: One approved statistics course* (3 hours)
Natural Sciences: Biology 121* and Chemistry 121/123* (8 hours)
Humanities and Fine Arts: One approved humanities course and one approved and fine arts courses (6 hours)
Cultures and Civilizations: Option A: Western Humanities I and II (6 hours) and one approved Non-Western Cultures and Civilizations course (3)
Behavioral and Social Sciences: Psychology 101* and one approved behavioral/social sciences course (6 hours)
The PDS I requirements for this major include Education 321, 400, 418, 433, 499 and Early Childhood 242.

All secondary natural sciences majors must complete at least one of the following concentrations.

### 2973 - Secondary Natural Sciences: Biology

**Major and Related Courses**

Astronomy 102/182; Biology 121#; Chemistry 121/123# and 122/124; Computer Science 110 or Education 417; Psychology 101#; one approved statistics course#

**Concentration Requirements**

Geology 111/181; Mathematics 131 or 145; Physics 103/183; Biology 122, 208, 325, 326

One course from each of the following areas:

(a) Ecology: Biology 306 and 307 or Biology 416
(b) Evolution: Biology 315, 450
(c) Physiology: Biology 210, 311, 304, 323, 463
(d) Botany or Zoology: Biology 312, 313, 342, 352

**Professional Education Requirements**

Education 201, 321, 400, 418, 433, 443, 454 and Early Childhood 242

### 2975 - Secondary Natural Sciences: Chemistry

**Major and Related Courses**

Astronomy 102/182; Biology 121#; Chemistry 121/123# and 122/124; Computer Science 110 or Education 417; Psychology 101#; one approved statistics course#

**Concentration Requirements**

Biology 122; Chemistry 341, 342, 351/353, 352/354, 466; Geology 111/181; Mathematics 136; Physics 103/183, 104/184

**Professional Education Requirements**

Education 201, 321, 400, 418, 433, 443, 454 and Early Childhood 242

### 2982 - Secondary Natural Sciences: Earth and Space Sciences

**Major and Related Courses**

Astronomy 102/182; Biology 121#; Chemistry 121/123# and 122/124; Computer Science 110 or Education 417; Psychology 101#; one approved statistics course#

**Concentration Requirements**

Geography 101; Geology 111/181, 112/182, 303, 321, 341, 342; Mathematics 131 or 145; Physics 103/183, 104/184

**Professional Education Requirements**

Education 201, 321, 400, 418, 433, 443, 454 and Early Childhood 242

### 2987 - Secondary Natural Sciences: Physics

**Major and Related Courses**

Astronomy 102/182; Biology 121#; Chemistry 121/123# and 122/124; Computer Science 110 or Education 417; Psychology 101#; one approved statistics course#

**Concentration Requirements**

Geology 111/181; Mathematics 151/152, 161/162; Physics 230/280, 231/281, 232/282; 12 additional hours in Physics at the 300-400 level

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### Secondary Social Sciences (B.S.)

**General Education** (see pages 69-72 for list of approved courses)

**Rhetoric and Composition:** Two approved courses in rhetoric and composition (6 hours)

**Mathematics:** One approved mathematics course (3 hours)

**Statistics:** One approved statistics course* (3 hours)

**Natural Sciences:** Two approved natural sciences courses, at least one including a laboratory component. Environmental Science 150 and 151 are required for the Geography concentration. (7-8 hours)

**Humanities and Fine Arts:** History 203* and one approved fine arts course (6 hours)

**Cultures and Civilizations:** History 103*, 104*, 105* (9 hours)

**Behavioral and Social Sciences:** Economics 101* and Political Science 101* (6 hours)

The PDS I requirements for this major include Education 321, 400, 418, 433, 499, and Early Childhood 242.

All secondary social sciences majors are required to complete at least one of the following concentrations.

### 2986 - Secondary Social Sciences: Economics

**Major and Related Courses**

Economics 101#, 102; Geography 101, 103; History 103#, 104#, 105#, 203#, 204, 343; Political Science 101#; Computer Science 110 or Education 417; one approved statistics course#

**Concentration Requirements**

Anthropology 208; Economics 324, 325, 453; Political Science 102; 12 hours Economics electives selected with approval of advisor

**Professional Education Requirements**

Education 201, 321, 400, 418, 433, 443, 454 and Early Childhood 242

### 2978 - Secondary Social Sciences: Geography

**Major and Related Courses**

Economics 101#, 102; Geography 101, 103; History 103#, 104#, 105#, 203#, 204, 343; Political Science 101#; Computer Science 110 or Education 417; one approved statistics course#

**Concentration Requirements**

Environmental Science 150#, 151#; Geography 104; Geology 111/181;

One course from each of the following three areas:

(a) Geography 206, 250
(b) Geography 303, 305, 465, 466
(c) Geography 407, 409, 415

12 hours Geography electives selected with approval of advisor, including a minimum of 3 hours at the 300-400 level.

**Professional Education Requirements**

Education 201, 321, 400, 418, 433, 443, 454 and Early Childhood 242
2979 - Secondary Social Sciences: History

Major and Related Courses
Economics 101#, 102; Geography 101, 103; History 103#, 104#, 105#, 106#, 203#, 204, 343; Political Science 101#: Computer Science 110 or Education 417; one approved statistics course#

Concentration Requirements
Anthropology 228; History 301
One course from each of the following four areas:
(a) United States: History 331, 332, 335, 336, 337, 338, 341, 346
(b) European: History 310, 311, 312, 313, 314, 315, 317, 318, 319, 323, 324, 327, 328
(c) Non-western: History 364, 365, 368, 370, 371, 372
(d) Disciplinary: History 411, 412, 415, 416, 419

Complete one of the following:
(a) 6 hours economics electives
(b) 6 hours geography electives
(c) 9 hours political science electives

Professional Education Requirements
Education 201, 321, 400, 418, 433, 443, 452 and Early Childhood 242

2981 - Secondary Social Sciences: Political Science

Major and Related Courses
Economics 101#, 102; Geography 101, 103; History 103#, 104#, 105#, 203#, 204, 343; Political Science 101#: Computer Science 110 or Education 417; one approved statistics course#

Concentration Requirements
Anthropology 208; Political Science 102, 200, 316, and 15 hours political science electives selected with approval of advisor, including a minimum of 6 hours at the 300-400 level.

Professional Education Requirements
Education 201, 321, 400, 418, 433, 443, 452 and Early Childhood 242

For graduation: 2.0 average in social sciences and 2.0 average in College of Health, Education and Professional Studies courses.
For graduation with licensure: 2.5 cumulative average, 2.5 average at UTC, 2.5 average in education courses with no grade lower than C, 2.5 in content area courses with no grade lower than C.

Minimum of 39 hours of 300 and 400 level courses. Electives to complete 120 hours.
See page 67 for additional requirements.
*Also satisfies requirement in the major.
#Also satisfies general education requirement.

2930 - Theatre Education K-12 (B.S.)

See College of Arts and Sciences.

4547 - EDUCATION MINOR

A student may obtain a minor in education by completing Education 201, 321, 400, 418, 433, and Early Childhood 242.
A minimum 2.5 average is required in all courses for the minor.

EDUCATION COURSES (EDUC)

101 Career and Life Planning (3)
Focus is on helping the individual make career and life plans. A series of techniques (role playing, psychodrama, sociodrama, value clarification, and decision making) will be utilized to facilitate each student’s examining his or her interrelated value systems associated with education, work, leisure, and self-expression. Every semester.

105 Strategies for College Reading (3 hours institutional credit)
The course provides insights into the reading process, language expansion, content area language strategies, and improved study skills. Students will engage in a variety of activities involving reading, writing, speaking, and listening to enhance their ability to comprehend a variety of printed materials. Credit not applicable toward any degree.

199r Special Projects (1-4)
Individual projects and field components. On demand. Maximum credit 4 hours. Prerequisite: approval of department head.

200r Investigations of the School in Society (1)
Observations and simulations involving the school as a social institution and the role of the teacher in preparation for instruction. Field component required. Every semester.

201 Education in the United States (3)
Organization and historical development of education in the United States, philosophical concepts and their influences on contemporary education, current issues. Field component. Every semester

209 Introduction to Early Childhood/Early Childhood Special Education (2)
This course provides an in-depth consideration of the historical, philosophical, and legal foundations of early intervention, and early childhood education for children with and without exceptional needs. Focus is on current issues and practices in EC/ECSE. Fall and spring semesters. Prerequisite: Early Childhood 243.

306 Designing Instruction and Evaluation in the Elementary Classroom (3)
Examination of the elements of evaluation, planning and management common to elementary school. Students will demonstrate competency in unit development, selected component teaching skills, and evaluation planning. Prerequisite: Education 201.

309 Young Exceptional Learners: Characteristics and Needs (3)
An in-depth study of the characteristics and needs of young children with special needs. Mild, moderate, and severe and/or multiple disabilities; biological and environmental at-risk factors; and early intervention and prevention will be examined. The needs of gifted and children learning English as a second language will also be included. Fall and spring semesters. Prerequisite: Education 209. Corequisites: Early Childhood 347, 445, 446. Field placement required.

310 Elementary School Curriculum (3)
The curriculum for grades one through six and the impact of technological and social change on curriculum planning and school organization. On demand.

311 Teaching Social Studies in the Elementary School (1)
Designed to model effective methods and materials for teaching social studies in elementary grades. Emphasis on an integrated literature-based spiral curriculum. Prerequisite: Education 306. Corequisite: University Studies 320. Formerly Education 411.

312 Teaching Science in Elementary School (1)
Designed to develop a variety of teaching strategies for science instruction in the elementary grades. Emphasis placed on resources, inquiry skills, and developmentally appropriate activities. Prerequisite: Education 306. Corequisite: University Studies 311. Laboratory/Studio course fee will be assessed.

313 Teaching Language Arts in the Elementary School (1)
Designed to develop an understanding of the basic concepts of language usage in the elementary classroom. Emphasizes the interrelatedness of language arts skills while demonstrating developmentally appropriate instructional strategies, activities, materials, and assessment techniques. Prerequisites: Education 306, 323; English 228, Early Childhood 241. Corequisite: University Studies 340. Formerly Education 413.

314 Teaching Mathematics in the Elementary School (1)
Designed to provide students with effective methods for mathematics instruction in the elementary grades. Emphasis will be placed on assessment techniques and developmentally appropriate strategies and materials. Prerequisite: Education 306; Corequisite: Mathematics 216. Formerly Education 414.
315 Methods in Early Intervention and Early Childhood Special Education (3)
This course prepares students to serve children (birth through age 8) who have disabilities or are at risk in inclusive classrooms and natural environments. Methods, adaptations, and materials used in developmentally appropriate special education and early intervention are examined. Activity-, routine-, and play-based approaches, and family-centered transdisciplinary team work are emphasized. Prerequisites: Education 309. Corequisites: Education 317, 323, 410; Early Childhood 345.

317 Designing Instruction for the Inclusive Classroom (3)
Study of the elements of evaluation, planning and instruction common to an inclusive classroom with emphasis upon instructional design, unit/lesson development, teaching strategies, and adapting/differentiating instruction for diverse learners.

318 Methods in Special Education (3)
Examination of the approaches and methodology concerning remedial, corrective, and compensatory instruction used to support and teach students with mild to moderate disabilities. Emphasis is on mastery of K-12 general education curriculum as well as vocational skill development and transition planning. Prerequisite: Education 400 or equivalent.

319 Behavior Intervention Planning (3)
Theoretical orientations toward behavior management and strategies reflecting these orientations will be examined. This course will also address the development of behavior intervention plans needed when traditional classroom management is insufficient to address the behavioral, emotional and social problems of students. Prerequisite: Education 400.

320 Nature and Characteristics of Mild Disabilities (4)
An in-depth study of the psychological, physical, educational, medical, behavioral, and learning characteristics and needs of populations with mild disabilities. Field component required. Prerequisite: Education 400.

321 Teaching of Reading in the Secondary and Middle Schools (3)
Integrating reading skills and teaching strategies with the teaching of content area subjects. Prerequisites: Education 201 and Early Childhood 242 or approval of the instructor. Required of all secondary and middle grades education majors.

323 Teaching Reading (3)
Emphasis on reading as a developmental process and on useful strategies for getting meaning from print; survey of current methods, ways to integrate literature, teaching procedures, assessment techniques, and materials for the teaching of reading. Field component required. Prerequisites: Education 306, English 228 or 229.

325 Nature and Characteristics of the Individual with Moderate and Severe and/or Multiple Disabilities (3)
The in-depth study of the psychological, physical, educational, medical, behavioral, and learning characteristics and needs of students with moderate, severe, or multiple disabilities. Field component required. Prerequisite: Education 400.

330 Academic and Behavioral Evaluation (3)
A study of the basic principles and techniques of educational evaluation in special education used by the classroom/resource teacher. Fall semester. Prerequisite: Education 400. Corequisite: Education 330 lab.

336 Management of an Inclusive Classroom (1)
An examination of the use of effective proactive management techniques in the classroom.

400 Survey of Exceptional Learners (3)
An overview of exceptional children and youth and the philosophy of inclusion. Emphasis on individual differences among students with particular attention to students with special needs. The interrelated roles of general and special educators and related professionals in adapting instruction to meet special needs will be addressed.

401 Introduction to Counseling (3)
A basic course designed to provide an orientation to the philosophy, theories, and techniques of individual and group counseling to undergraduate students who are seeking foundational understandings for future courses in the functions of counseling in modern society. On demand.

410 Strategies for Early Learners (3)

415 Instructional Technology for the Adolescent Exceptional Student (3)
An examination of the unique needs and particular issues which are specific to adolescents and adults with mild disabilities. The course emphasizes approaches and methodology concerning corrective and compensatory instruction.

416 Instructional Technology for the Elementary Exceptional Student (3)
An examination of the principles of clinical teaching and the individualizing of instruction for elementary students with mild disabilities. The course emphasizes instructional approaches and methodology concerning corrective and compensatory instruction.

417 Technology and Learning (3)
This survey course in technology will extend student knowledge of word processing, spreadsheets, databases, communications software, entertainment software, and the Internet through in-class, hands-on assignments. Projects will be individually geared to the needs of the audience. Every semester. Prerequisites: Computer Science 110 or equivalent; Education 323 or 321.

418 Middle Grades Organization, Curriculum, and Instruction (3)
A theoretical and practical orientation to the middle grades, holistically addressing the personal, social, and academic needs of young adolescents. Emphasizes organizational issues, integration of curriculum, and appropriate strategies for instruction and assessment. Prerequisite: Education 201.

420 Emergent Literacy (3)
Emphasis on the development of an instructional reading program that meets the needs of young children. Surveys classroom teaching models, assessment procedures, methods and materials. Prerequisites: Education 306, 323; English 228; admission to Teacher Education Program.

422 Teaching Reading in the Intermediate Grades and Middle School (3)
Teaching/learning strategies to deal with content and process of reading; emphasis on vocabulary development, comprehension strategies, basic study skills, reading in content areas. Summer semester. Prerequisite: Education 323.

423 The Middle Grades: Assessment and Instruction (3)
Classroom diagnostic and prescriptive teaching; linking middle grades reading, assessment, decision-making and instruction; in-depth study of selected assessment instruments, instructional strategies, materials, and management procedures. Field component required. Prerequisites: Education 323 or equivalent, or approval of instructor; admission to Teacher Education Program. May not be used for graduate credit.

425 Procedures for Individuals with Physical and Multiple Disabilities (3)
An examination of the unique needs and particular issues which are specific to children and adults who have physical challenges or multiple disabilities or are medically fragile. The course emphasizes how instructional approaches and methodology may be altered with special emphasis on physical and health management and adaptive technology. Fall semester. Prerequisite: Education 325 or approval of instructor.

426 Instructional Procedures for Individuals with Moderate, Severe, or Multiple Disabilities (3)
An examination of the unique needs and particular issues which are specific to children, adolescents, and adults with moderate and severe disabilities. The course emphasizes instructional approaches and methodology concerning functional academic curriculum, social skills development, career and vocational development, personal management, recreation/leisure, and general community living skills. Fall semester. Prerequisite: Education 325 or approval of instructor.
428 Introduction to Autism Spectrum Disorder (3)
This course provides a background of the characteristics of individuals who are primarily diagnosed with Autism Spectrum Disorder (ASD), Asperger Syndrome, or other Pervasive Developmental Disorders. Reviewed are behavioral characteristics of students with diagnostic symptoms, family dynamics, varied diagnostic and assessment methods, and theories of etiology. Included is an overview of instructional issues that pertain to the development of individuals with ASD. Every semester. Not eligible for graduate credit. Prerequisite: Education 209.

430 Gifted and Talented Children and Adults (3)
This course examines the social, emotional, and intellectual characteristics of the gifted/talented child and focuses on the appropriate teaching/learning requirements in resource and regular classrooms. Special attention will be given to program models, curriculum development, and teaching strategies. Prerequisite: Education 330.

431 Teaching Strategies and Materials in Foreign Language (3)
Curriculum and methods appropriate for teaching foreign language in grades PreK-12. Fall semester Prerequisite: Education 201. May not be used for graduate credit.

433 Designing Instruction and Evaluation in the Secondary Classroom (3)
Formulating and evaluating appropriate affective and cognitive objectives. Lesson planning and a wide range of teaching strategies will be examined. Each student will be required to demonstrate proficiency in a variety of component teaching skills via the microteaching laboratory and a self-developed teaching unit. Prerequisite: admission to Teacher Education Program.

435 Assessment and IEP Development in Special Education (3)
Capstone experience in assessment for eligibility and for planning of Individualized Educational Programs (IEPs) for exceptional learners. Includes the administration of formal and informal assessment instruments and use of the results to plan an IEP. Heavy Field component is required.

440 Student Teaching in Early Childhood Education (12)
Enhanced student teaching in a Pre-K or kindergarten setting and in primary grades in Professional Development School II. Placements will ensure experiences in diverse schools. Every semester. Prerequisites: All education courses, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. May not be used for graduate credit.

443 Student Teaching in Secondary Schools (12)
Enhanced student teaching in both junior high or middle school and senior high school in Professional Development School II. Placements will ensure experiences in diverse schools. Every semester. Prerequisites: All education courses, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. May not be used for graduate credit.

444r Student Teaching in Music, Visual Arts, Exercise Science, Health Promotion, and Theatre (12)
Enhanced student teaching in both elementary and senior high school grades in Professional Development School II. Placements will ensure experiences in diverse schools. Every semester. Prerequisites: All education courses, specific methods courses related to the discipline, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. Required of majors in Music Education, Art Education, and Theatre Education. May not be used for graduate credit.

445 Student Teaching in Exceptional Learning (12)
Enhanced student teaching in two exceptional learning settings (one modified and one comprehensive) in Professional Development School II. Placements will ensure involvement with students in elementary and secondary grades in diverse schools. Every semester. Prerequisites: All education courses, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. May not be used for graduate credit.

446 Student Teaching in Middle Grades Education (12)
Enhanced student teaching in two middle grades settings and two content areas in Professional Development School II. Placements will ensure experiences in diverse schools. Every semester. Prerequisites: All education courses, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. May not be used for graduate credit.

447 Student Teaching in Foreign Language Education (12)
Enhanced student teaching in Pre-K-8 and 9-12 settings in Professional Development School II. Placements will ensure experiences in diverse schools. Every semester. Prerequisites: All education courses, 90% of content courses, admission to Teacher Education Program, application for and admission to student teaching according to School of Educational Leadership guidelines. May not be used for graduate credit.

450 Teaching Strategies and Materials in Secondary and Middle Grades English (3)
Curriculum and methods appropriate for secondary and middle grades English. Spring semester. Prerequisite: Education 201. May not be used for graduate credit.

451 Teaching Strategies and Materials in Secondary and Middle Grades Mathematics (3)
Curriculum and methods appropriate for secondary and middle grades mathematics. Fall semester. Prerequisite: Education 201. May not be used for graduate credit.

452 Teaching Strategies and Materials in Secondary and Middle Grades Social Science (3)
Curriculum and methods appropriate for secondary and middle grades social science. Fall semester. Prerequisite: Education 201. May not be used for graduate credit.

453 Speech Disabilities and Language Development (3)
Recognition and understanding of language development and speech disabilities. Basic diagnosis, remediation, and speech improvement activities incorporated. Fall semester.

454 Teaching Strategies and Materials in Secondary and Middle Grades Natural Science (3)
Curriculum and methods appropriate for secondary and middle grades natural science. Spring semester. Prerequisite: Education 201. May not be used for graduate credit.

458 Readings and History: Teaching English as a Second Language (3)
In-depth study of the history of English as a Second Language instruction. This course will investigate the development and characteristics of various programs used in teaching English to limited English proficient (LEP) students. Additional study will focus on articles written by major researchers in this field. The central purpose of this course is to provide experience in identifying, analyzing, and discussing significant current issues in the field of English as a Second Language.

459 Strategies and Methods of Teaching English as a Second Language (3)
Involves the study and application of second-language theories and cultural knowledge to ESL teaching methodology and curriculum design. In addition, explores various approaches which should benefit second-language learners and presents techniques of adjusting lessons to suit the needs of second-language learners and enhance their acquisition and use of English. Concentrates on assisting educators in the development of appropriate strategies for teaching speaking, writing, and grammar in ESL environments.

480 Teaching Media (3)
The selection, use, and evaluation of technological innovations in audiovisual media, emphasis on laboratory experiences in communication media.

481 Educational Tests and Measurements (3)
Measurement of human abilities and instructional outcomes, survey of elementary statistical concepts, construction of valid and reliable tests and evaluative instruments. On demand.

482 Teaching Social Science Through Science Fiction (3)
Explores uses of science fiction in teaching social issues and the future. Emphasis on creativity and integration with traditional content. On demand.
483r Teaching Experience (3)
For the temporarily certified employed teacher. Provides close supervision in planning, implementation, and evaluation. Tailored to fit specific school setting. On demand. Prerequisites: Approval of College of Education and Applied Professional Studies dean. May not be used for graduate credit.

485 Orientation to Schools for Counselors (3)
For school counselor candidates without teaching experience. The orientation experience will be structured to provide observation, participation in, and analysis of classroom instruction; will also provide the candidate with teaching experiences and feedback regarding those experiences. May not be used for graduate credit.

490r Workshop and Seminar (2-4)
Special problems and discussion of current topics in education. On demand. Prerequisite: senior or graduate standing.

495r Departmental Thesis
(1-3 hours per term, 4 hours for the two terms)
Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration. On demand. See Departmental Honors.

497r Research (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

498r Individual Studies (1-4)
On demand. Prerequisite: approval of department head. Students must submit an Individual Studies/Research Contract to the Records Office at the time of registration.

499r Group Studies (1-4)
On demand. Prerequisite: approval of department head.
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James Gross, B.S.P.T., University of Tennessee, Memphis.
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Jeannette Beach, Adjunct Physical Therapy
M. Daniel Baker, Adjunct Social Work
Amy Doolittle, Social Work
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Velisa Thomas, M.S.W., University of Tennessee, Knoxville.

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Colleen Harris, Assistant Professor, M.L.S., Spalding University.
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ENDOWED FUNDS

Through the years, many people have made generous gifts to establish endowed funds for various purposes. The University recognizes and thanks them by publishing their names here.

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See Student Financial Aid.

Chairs

Walter M. Cline Jr. Chair of Excellence in Rehabilitation Technology: In cooperation with UTC’s College of Health, Education and Professional Studies and the College of Engineering and Computer Science, the Cline Chair of Excellence is designed to make major contributions to the field of rehabilitation technology and to the education of students interested in pursuing careers related to this discipline. The charge to the holder of the chair, established in 1986-87 with a gift from Mr. Cline’s widow, JoAnn, and matching funds from the UC Foundation, is development of programs, curricula, and research in rehabilitation engineering, physical therapy and rehabilitation nursing.

J. Burton Frierson Chair of Excellence in Business Leadership: Designed to give business majors at UTC exposure to exceptional educational opportunities in business leadership, this chair of excellence was funded by the Dixie Yarns Company and matched by state funds in the 1986-87 academic year in honor of J. Burton Frierson. The holder of the chair, a person of national stature in business, government, or technology, helps the University advance its stated goals of becoming a regional leader in business education.

Clarence E. Harris Chair of Excellence in Business Administration and Distinguished Lecture Series in Entrepreneurship: The first chair of excellence to be funded by an alumnus, this chair provides the students and faculty of the school, as well as the broader community, a better understanding of the world of business. Distinguished lecturers will be brought to the campus each year in order to engage students, faculty and others in discussions related to trends in innovation, entrepreneurship, corporate strategies, and the global economy. Harris, class of 1964, was the president and chairman of the board of Carriage Industries, Inc., Calhoun, Georgia, when the chair was established in 1987.

Chair of Excellence in Judaic Studies: Offering a focus for special examination of the impact of Judaic influence on Western civilization and history, this chair was established in 1986 by a special Committee for the Judaic Chair of Excellence and from private community support. Enriching the curriculum of the Department of Philosophy and Religion, the chair is also a major asset to the cultural life of the community and the holder of the chair serves as a key resource for the integration of Judaic studies in appropriate contexts throughout the University and in the community at large.

Lyndhurst Foundation Chair of Excellence in Arts Education: Funded in 1988 as a complement to the Southeast Center for Arts Education established on the UTC campus with grants from the Getty Foundation, the Gherkin Foundation, and Lyndhurst, this chair is designed to bring to the University and the southeast region of Tennessee a nationally recognized expert in discipline-based arts education (DBAE). The chair holder will teach art education courses to undergraduate and graduate students, conduct research, serve as an advocate for improved arts education, and oversee the center’s programs, including three constituent institutes for teachers in the visual arts, theatre, and music.

O.D. McKee Chair of Excellence in Learning: Established in 1998 in honor of the late O.D. McKee, founder of McKee Foods Corporation, makers of Little Debbie snack cakes. A professorship to provide leadership and direction in the research, teaching, and outreach programs for the study of dyslexia and exceptional instruction. Funded by a $500,000 endowment from Mr. McKee and an equal matching grant from the State of Tennessee.

Burkett Miller Chair of Excellence in Management and Technology: A cross-disciplinary chair of excellence that bridges the resources between the College of Business and the College of Engineering and Computer Science. Funded in 1977 by the Tonya Memorial Foundation of Chattanooga, the holder of this chair assists the University and the Chattanooga community in understanding the importance of technology; identifying and nurturing the development of technology; and assisting with the transfer of that technology to the marketplace in ways which foster economic development.

Scott L. Probasco Jr. Chair of Free Enterprise: Established in 1976 by Burkett Miller, a leading Chattanooga attorney and philanthropist, in honor of a longtime friend, well-respected Chattanooga citizen, and trustee of the University of Tennessee and the UC Foundation, for a distinguished professorship relating to the free enterprise system.

Provident Life and Accident Insurance Company Chair of Excellence in Applied Mathematics: This chair of excellence, funded in 1986 by joint gifts from Provident and the University of Chattanooga Foundation, brings to the University and the community a heightened sense of the significance, utility, and relevance of mathematics and its applications. The holder of this chair functions not only as a scholar, teacher, and researcher, but also as a valuable resource and vigorous advocate for mathematics in the schools and community.

Siskin Children’s Institute Chair of Excellence in Special Education: Established in 2005 with joint funding by the Siskin Children’s Institute and the UTC Lupton Renaissance Fund, this chair is designed to attract a recognized expert with experience in early childhood programming and special education to the community. The expert will serve as a faculty member in the UTC College of Education and Applied Professional Studies. The holder of the chair will teach graduate and undergraduate courses at the university, conduct research at Siskin Children’s Institute, consult with other educators in the community, and help the Institute stay on the cutting edge of educational programming for children with disabilities. The chair also oversees the Circle of Scholars, a scholarship program that will allow students in special education and school psychology to complete their degree while continuing employment.

SunTrust Bank Chair of Excellence in the Humanities: Established by its predecessor, American National Bank and Trust Company, this chair, administered through the College of Arts and Sciences, has as its purpose presenting the best that has
been and is now being thought in the humanities. This revolving appointment brings to the community visiting professors of national and international stature. The Humanities Chair, established by American National Bank and Trust Company in 1986, helps meet UTC's commitment as a cultural center for the region.

George R. West Jr. Chair of Excellence in Communication and Public Affairs: Funded by the Westend Foundation in 1986 in honor of its founder, George R. West, Jr., this chair of excellence is designed to assist UTC in educating students for responsible and effective communications in the realm of public affairs. Students pursuing careers in business, education, communications, political science, and other disciplines benefit from this chair which emphasizes critical analysis and presenting, particularly by the written word, the issues of public affairs in a truthful, effective and responsible fashion.

Professorships
Alumni Distinguished Service Professorships: Awarded to outstanding faculty members of each of the four campuses of The University of Tennessee by the University of Tennessee National Alumni Association.
The Rev. Herman H. Battle Professorship: Created in 1999 in honor of the late Rev. Herman H. Battle, one of Chattanooga's most admired Black citizens who did much to improve community race relations. The professorship is in African-American studies.
C.C. Bond Minority Professorship in Education: Established in 1987 by friends and colleagues of Dr. Claude C. Bond, distinguished educator in the Chattanooga public schools. The professorship is intended to attract an outstanding minority leader to the College of Health, Education and Professional Studies at UTC.
J.C. Bradford Portfolio Management Professorship: Established in 1996 by the J.C. Bradford & Company Foundation to provide students with guidance in security analysis and portfolio management. The fund provides resources for faculty and student development for the professor who directs the Portfolio Management Seminar in the Department of Accounting and Finance in the College of Business.
Chattanooga Manufacturer’s Association Professorship in Engineering: Established in 1980 to provide support for the College of Engineering and Computer Science and enable the University to reward a member of the engineering faculty for excellence in teaching, public service, and research.
Kay Kittrell Chitty Professorship in Nursing: Established in 1996 by Memorial Hospital in honor of Dr. Chitty, former director of UTC’s School of Nursing and former chair of Memorial’s board of directors, the appointee holds a joint appointment with the University and the hospital in the area of family nurse practitioner.
George C. Connor Professorship in American Literature: Named for Guerry Professor of English Emeritus George C. Connor, this professorship was established in 1985 by colleagues, former students, and friends in honor of his 26 years of service.
Robert M. Davenport Professorship in Biology: Established in 1997 by the children of Robert M. Davenport: Eleanor Howell Davenport, Adelaide Davenport Bratcher, Robert M. Davenport, Jr., and S. Elliot Davenport, and other friends and colleagues, as a tribute to Davenport, an executive with the Krystal Co. and founder of the Central Park restaurant chain. Davenport, who died in 1994, was committed to both education and the environment through his understanding of the earth's fragile environment and devotion to property at Lula Lake on Lookout Mountain. The appointee is a faculty member of the Department of Biological and Environmental Sciences.
Joseph F. Decosimo Centennial Professorship in Accounting: Established in 1977 by Mr. and Mrs. Joseph F. Decosimo, civic and business leaders, to support the program in accounting and upgraded during the Centennial campaign of 1986.
W. Max Finley Centennial Professorship in Business Administration: Established by friends and family of alumnus W. Max Finley, class of 1931, this fund promotes faculty research which involves students.
First Tennessee Bank Distinguished Professorships in Business: Established in 1996 as part of a 21st Century Campaign gift to the University of Tennessee by First Tennessee National Corporation of which First Tennessee Bank is a subsidiary, this professorship for the Chattanooga campus is awarded to a member of the faculty with expertise in the various areas of banking and finance.
Benjamin H. Gross Professorship in Chemistry: Awarded to a member of the faculty of the Department of Chemistry who has shown outstanding accomplishments in teaching, research, and civic involvement. Established in 1998, the endowment honors Dr. Benjamin Gross, who served as head of the UTC Chemistry Department from 1964 through 1990. Dr. Gross, a nationally known chemist, was an outstanding professor of general and organic chemistry.
Mary Harris Distinguished Professorship in Entrepreneurship: Established in 2002 by the Clarence E. Harris Foundation in the College of Business, in memory of Mr. Harris’s sister, to foster excellence in entrepreneurship studies. The holder must be actively engaged in research, writing, and lecturing in the area of entrepreneurship, small business marketing and related areas, and have the minimum rank of associate professor at UTC.
Nita T. and Irvine W. Grote Professorships in Chemistry: Established in 1986 to honor outstanding teaching through a generous gift from the estate of Dr. and Mrs. Grote. An inventor of note, Grote taught at UC for 38 years.
Alexander and Charlotte Patten Guerry Professorships: Established by anonymous gifts in 1959 and 1961 in memory of the University’s esteemed seventh president and in honor of his dedicated wife, to recognize a select group of outstanding professors.
Henry Hart Professorship in Business Administration: Established in 1978 by R. Henry Hart, a civic and business leader, to provide faculty support for the University’s College of Business. Marilyn Helms Professorship in Business Administration: Awarded to a member of the faculty of the College of Business who has shown outstanding accomplishments in teaching, research and public service. Established in 1998, the endowment honors Dr. Marilyn Helms, who served as a professor of management from
1987 through 2000. Dr. Helms coordinated a wide range of programs in the areas of entrepreneurship, international business, family businesses and women in business.

**Brice L. Holland Centennial Professorship in Taxation:** Established in 1989 by Brice L. Holland, distinguished alumnus, benefactor and community leader, desiring to enhance the teaching and level of expertise offered in the field of taxation in the College of Business.

**Ruth Kiser Hyder Endowed Professorship of Educational Leadership:** Established in 1985 by Dr. Charles Hyder, Guerry Professor Emeritus of Education, in honor of his wife, a distinguished teacher in the elementary schools of Chattanooga. This professorship recognizes leadership in the preparation of teachers in the public school system grades K-12.

**Mary B. Jackson Professorship of Nursing:** Established in 1989 to support and maintain a high caliber nursing faculty by friends and colleagues of Mrs. Jackson, who came to UTC in 1973 and was charged with organizing the nursing program.

**H. Clay Evans Johnson Professor of Nursing:** Established in 1989 to emphasize the training of talent and upholding the ethical standards of nursing by Johnson, former chair of the Board of the UC Foundation. He served as president of the Hamilton County Memorial Hospital Association.

**Summerfield Key Johnston Centennial Scholars Endowment for Junior Faculty Development:** Established in 1987 as a Centennial gift by local Coca-Cola executive Summerfield Johnston Jr., this endowment provides support for new faculty members in the College of Business who have demonstrated potential for making substantial contributions to teaching and research.

**Kennedy Distinguished Teaching Professorship in English Literature:** Established in 1995 by The Kennedy Foundation for an outstanding professor who teaches English literature and is involved in scholarly research and public service.

**Alan S. Lorberbaum Professorship in Marketing:** Established in 1978 by Alan S. Lorberbaum, a business leader and carpet executive in Dalton, Georgia, to provide faculty support for the marketing program in the College of Business.

**Robert L. Macellan Centennial Professorship in Insurance:** Robert L. Macellan, Provident Life and Accident Insurance Company insurance executive and UC Foundation trustee, was a major benefactor of the University. This professorship was established in 1986 by his widow to provide expertise and support for the Chattanooga insurance industry by teaching the principles and practices of insurance.

**LeRoy A. Martin Distinguished Professorship of Religious Studies:** Supported by the UC Foundation in memory of the last ordained Methodist minister to serve as president of UC, 1959-66, and John H. Race Professor of Classics until his death in 1971. This professorship was established to ensure ties with the University’s Methodist heritage.

**Luther Masingill Professorship in Communication:** Established in 1990 by friends and associates of the local celebrity in honor of his 50 years in broadcasting. The professorship is designed to emphasize the training of talent and to uphold the high standards of communication set by Masingill.

**Frank McDonald Professorship in Communication or Management:** Established in 1998 with ongoing gifts in honor of long-time Chattanooga Free Press President Frank McDonald by friends.

The professorship goes either to a faculty member in the University communication or management departments.

**George Lester Nation Centennial Professorship of Entrepreneurship:** Established in 1986 by his son Ray Nation, this professorship honors the late founder of Nation Hosiery Mills. Both in the classroom and the community, the holder of the professorship is charged with emphasizing entrepreneurship and economic development.

**Patricia Draper Obear Distinguished Teaching Professorship:** Established with memorial gifts given by friends and family in honor of the wife of the 13th chief executive officer of UTC, Chancellor Frederick W. Obear. Mrs. Obear, who died in 1993, was a community volunteer who had a particular interest in social service and early childhood education, the areas given preference in the awarding of this professorship.

**Adolph S. Ochs Centennial Chair of Government:** Established in 1925 by Ochs, owner and publisher of The Chattanooga Times and The New York Times, friend of the University, father and grandfather of trustees. It was upgraded to a Centennial title in 1986 by members of the family.

**Katharine Pryor Professorship of English:** Established in 1991 by Rodney L. Grandy and other friends and former students in honor of Katharine Pryor, a long-time teacher of English and assistant principal at Chattanooga High School, and a 1936 graduate of the University of Chattanooga.

**Dalton Roberts Professorship in Public Administration:** Established by friends and colleagues in 1995 to honor former Hamilton County Executive Dalton Roberts for his contributions to public service, this award goes to faculty members whose major field of study and teaching is public administration. Roberts held the position of county executive from the time it was established in 1978 until his retirement in 1994.

**Mildred Rount Outstanding Teaching Professorship:** Established in 1993 through a bequest from the educator for whom it is named to recognize professors who represent the qualities and high standards of good teaching both at the University and in the community. Recommendations for the award are made by the Provost and approved by the Chancellor.

**Salem Carpets Professorship in Industrial/Organizational Psychology:** Established in 1989 by Salem Carpets Inc., for a faculty member in psychology with half the endowment earnings to provide a stipend and half to support research in the field.

**John Stagmaier Chair of Economics and Business Administration:** Established in 1956 by the Tennessee Paper Mills in memory of its founder, respected and admired citizen of Chattanooga and University trustee from 1932 until his death in 1944.

**UC Foundation Professorships:** Established in 1976 to recognize outstanding younger faculty and to provide an incentive for their continuing to teach at UTC.

**Sharon Vanderbilt Professorship in Physical Therapy:** Established in 1995 by Douglas L. Vanderbilt, M.D. in honor of his wife Sharon Vanderbilt, a pediatric physical therapist who was an advocate for the development of the UTC Physical Therapy Program, for an outstanding professor who teaches physical therapy and is involved in scholarly research and public service.

**Frank Varallo Professorship in Business Administration:** Established in 2003 by Chattanooga Businessman Frank Varallo, longtime supporter of the University, to foster teaching and research in
business administration.

Arthur G. Vieth Professorship in Business Finance: Established in 1983 by former students and friends in memory of the former holder of the John Stagmaiter Chair of Economics and Business Administration, a greatly admired teacher and public-minded citizen.

Marvin Edward White Professorship in Business Administration: Established in 1983 by vest in the Department of Physics, Geology and Astronomy since 1986 after a long and distinguished career at Oak Ridge Associated Universities, serving in Vienna, Austria, and Washington, D.C. He earned his Ph.D. from Vanderbilt University.

Alpha/Ann Tinnon Memorial Award: Established in 1997 as a permanent endowment by the Alpha Society, UTC's highest scholastic honor society, in honor of its former president, the late Ann Tinnon, who was the Director of Financial Aid. The award is based on a vote of the membership to a graduating senior based on the strength of his or her undergraduate degree program and prospective graduate program.

Harold Cadek Music Fund: Established in 1979 to provide financial assistance to enable Chattanooga young people to take private music lessons at the Cadek Conservatory of Music.

Dr. North Callaham Honors Essay Prize: Established in 1984 by Professor Emeritus of History, New York University, author, and UTC Distinguished Alumnus. Prize awarded to a UTC student for the best honors essay, as determined by an honors commit-tee, based on UTC library research.

Challenger Learning and Teaching Center Endowment Fund: Established in 1993 to provide program support for the Challenger Center, one of a national network of learning centers that encourage young people in math, science and team building through simulated space missions.

Morrow Chamberlain Memorial Library Fund: Established in 1971 by a bequest from Mrs. Chamberlain in memory of her husband, Chattanooga business and civic leader, chairman of the UC Board of Trustees from 1932 to 1958, member from 1919 until his death in 1959.

Bess Taylor Cofer Endowed Professional Health Care Student Advocacy Fund: Established in 1985 by Dr. Robert H. and Mary A. Cofer, this fund is used to promote the highest level of guidance and preparation to students pursuing careers in nursing, dentistry, medicine, cytotechnology, dental hygiene, medical technology, pharmacy, physical therapy, or veterinary medicine.

George Connor Society: Established in 2003 to honor the late Guerry Professor of English and department head who joined the faculty in 1959 and served the University for 26 years. The fund is for an annual colloquium featuring prominent authors. Mr. Connor grew up in Red Bank and received his A.B. degree from the University of Chattanooga in 1947.

George Ayers Cress Gallery of Art Endowment Fund: Established in 1992 by friends, former students, and colleagues in honor of George Cress, artist-in-residence and Guerry Professor who taught at UTC for 50 years, on the occasion of the naming of the University gallery in the Fine Arts Center for Cress. The funds are to help defray the cost of operating and staffing the gallery and in support of its exhibitions.

Paul W. Curtis Jr. Awards: Endowed in 1948 for outstanding students in engineering by Mr. and Mrs. Paul W. Curtis in memory of their son, class of 1933, who died in World War II.

Excellence in Engineering Fund: Established in 1979 to support the UTC College of Engineering and Computer Science.

Stanton J. Fjeld Fund: Established in memory of Dr. Stanton J. Fjeld, a faculty member in the University's Departments of Psychology and Criminal Justice. The fund provides for program enhancement.

Elizabeth E. Fleming Fund: Enabled by a gift from the estate of Mrs. Fleming to be used in the field of fine arts as determined by University of Chattanooga Foundation Trustees. Established in 2001 in memory of the late Dr. Alex and Charlotte Guerry.

Irvine W. Grote Fund for the Department of Chemistry: Established in 1976 by a bequest from the estate of Dr. Irvine W. Grote, Guerry Professor of Chemistry, to be used for the benefit of the Chemistry Department.

Hartung Fund for Nursing Education: Established in 1969 by Dr. and Mrs. Carl A. Hartung, UC graduates of 1929 and 1931 respectively, to support the nursing program.

John B. Haskins Jr. Memorial Laboratory: Science laboratory equipped and its upkeep endowed in 1948 by gifts from Dr. John B. Haskins in memory of his son, a UC student who died in 1944 after a long illness.

Marjorie Fox Higdon Chemistry Fund: Endowed fund created by Marjorie Fox Higdon to provide book stipends to chemistry majors as recommended by the head of the Chemistry Department and approved by the Dean of the College of Arts.

Hinds Memorial Book Fund: Established in 1921 by Mrs. Kate Hinds Steele and Mrs. Bashie Martin in memory of their father, J.I.D. Hinds, for the purchase of chemistry books.

Martha Chase and Andrew David Holt Library Endowment Fund: Established in 1970 by the Hamilton County chapter of the UTNAA and other friends in honor of the retiring UT president and his wife, for the purchase of library books.

Mary B. Jackson Award Endowment: Established in 1977, with endowment funded in 1984, to honor outstanding senior nursing student selected by peers.

Dr. Joseph A. Jackson Endowment for Library Faculty Development: Established in 1988, by Mary B. and Joseph A. Jackson in the name of Dr. Jackson, Professor and Dean of Libraries, to encourage, promote, and recognize achievement in library faculty of the T. Carter and Margaret Rawlings Lupton Library.

John W. Jayne Memorial Mathematics Award: Established in 1994 by family and colleagues in memory of Dr. John W. Jayne, member of the Department of Mathematics for 22 years who died in 1993. The award is given each year to an outstanding mathematics student.

H. Clay Evans Johnson Nursing Endowment Fund: Established in 1992 by H. Clay Evans Johnson, past chair of the University of Chattanooga Foundation, also past chair and member of the UT Development Council. A retired insurance executive and community leader, Johnson also established, in 1990, the H. Clay Evans Johnson Professorship in Nursing. The income from the endowment provides funds for student awards for academic achievement, clinical excellence and/or community service. It also helps fund the clinical renewal program for nursing faculty.

Summerfield Johnston Endowment for the Restoration of the American Chestnut: Established in 1997 by Summerfield K. Johnston Jr. in honor of his father and to provide income to the holder of the Robert M. Davenport Professorship of Biology for research, teaching, scholarship, and service which supports the objective of restoring the American chestnut tree to successful survival in its natural state.

Keese Lecture Series: Established in 1962, endowed in 1964 by Will S. Keese, Jr., in memory of his mother, Lucy Beall Keese, who died in 1959, and in honor of his father, the late William S. Keese, longtime directors of the Bonny Oaks School, to bring an outstanding speaker to the campus each year.

Gene H. Kistler Golf Endowment: Established in 1994 through an estate gift by the late Dr. Kistler, a Chattanooga physician and general surgeon and a golf enthusiast who competed avidly for more than 70 years after learning the game when he was 16. The fund is intended to support the men's intercollegiate golf program.

Lukens/Hatch Awards Endowment: Established in 1994 by Dr. Terrance Carney, UTC Professor of Engineering, and his wife Marian, alumna of the Class of 1977, in honor of their respective parents, Dr. Frances D.W. Lukens, Mrs. Carney's father, and Harriet Hatch Carney, Dr. Carney's mother. The Lukens Award is given to the rising junior in the College of Engineering and Computer Science with the highest grade point average. The Hatch Award goes to the adult part-time student in the College of Business with at least 60 hours who has the highest grade point average.

O.D. McKee Center for Dyslexic Studies Endowment: Established in 1994 by Ellsworth McKee, president of McKee Foods Inc., in honor of his father, to provide educational opportunities to dyslexic students enrolled in the College Access Program.

Ellis K. Meacham Annual Writers Workshop and Creative Writing Professorship: Established in 1985 by Jean Austin Meacham, former UTC professor and dean in honor of her husband, Judge Ellis K. Meacham, a distinguished jurist, author and UC alumnus. The income from the endowment provides a stipend each year for the faculty member responsible for that year’s Meacham Writers Workshop.

T. Carter and Margaret Rawlings Lupton Library Endowment Fund: Established with an anonymous gift, this fund provides for the continued acquisition of materials to enhance the holdings of the library.

Captain Daphne Marjorie Painter Memorial Art Education Endowment Fund: Endowed in 1984 by Mrs. Marjorie Painter in memory of her daughter to send teachers from under-served Southeast school districts to the Southeast Institute for Education in the Visual Arts at UTC.

Zeboim C. Patten Fund: Established by the Patten estate for the unrestricted endowment and set aside in 1999 as a separate endowment. Patten was the father of Dorothy Patten.

Cranston B. Pearce Center for Applied Engineering and Technology: Complementing UTC’s Center of Excellence for Computer Applications, the Pearce Center in the College of Engineering and Computer Science was funded by the Tonya Foundation in 1984 in memory of its president. The purpose of the center is to move the University to the forefront of instruction, research, and service in the area of computer and information sciences. The center also plays a role in the economic development of Chattanooga and the Southeastern region.

Physics and Astronomy Endowment Fund: Established in 1986, the fund provides research and program enhancement funds for the Department of Physics, Geology and Astronomy.

Nathaniel and Mildred Pinkard Textbook Stipend: Established in 2007 by Mr. and Mrs. Pinkard to assist a student in the Educational Opportunity Center (EOC).

Seth C. Smith Management Award: Established in 1975 by the Society for the Advancement of Management in memory of its distinguished business leader, awarded annually to an outstanding student majoring in management.

Southeast Center for Education in the Arts Endowment Fund: Established in 1993 to provide program enhancement funds for the center’s efforts in discipline-based arts education.

J. Gilbert Stein Fellowship Endowment Fund: Established in 1997 by J. Gilbert Stein to provide graduate assistantships in support of the Scott L. Probasco Chair of Free Enterprise. A businessman, Stein served as an adjunct scholar with the Probasco Chair for over 16 years. The student receiving this honor will hold the title of “J. Gilbert Stein Fellow.”

SunTrust Bank Chair of Excellence in Humanities Program Support Endowment: Established in 1997 by SunTrust as its 21st Century Campaign gift to the University. Proceeds provide program support to the holder of the SunTrust Bank Chair of Excellence in Humanities.

Carl A. Swafford Jr. Endowment Fund: Endowed in 1984 by Carl A. Swafford, Sr. in honor of his son for the purchase of equipment and supplies for biology and chemistry.
Terrell Louise Tatum Memorial Fund: Established in 1968 by the University in memory of the Guerry Professor of Spanish who served her alma mater for 43 years, for the purchase of books and teaching materials for the modern languages.

Terrell Louise Tatum Spanish Award: Endowed in 1964 by an anonymous donor to honor the Guerry Professor of Spanish, to the outstanding senior Spanish major.

Tennessee Tomorrow Projects Fund: This fund was established with private gifts received for various projects at UTC during the UT System’s Tennessee Tomorrow Campaign, launched in 1977.

Edgar B. Tolson Memorial Book Fund: Established in 1942 from Tolson’s estate, authorized by Wilfred O. Stout, Sr., executor, for the purchase of history and philosophy books.

UTC Children’s Center Scholarship: Established in 1988 by a group of donors including the late Patricia Obear to provide tuition assistance for the UTC Children’s Center to parents who demonstrate financial need.

James G. Ware Mathematics Education Award: Established in 1994 by Dr. James G. Ware, faculty member of the Department of Mathematics for 30 years, 22 of which were as head of the department, upon the occasion of his retirement. The award goes to the outstanding student planning to teach mathematics at the high school level.

Dr. Marjorie Watson Mathematics Fund: Established in 2001 by Dr. Marjorie Watson for program support to the Mathematics Department as recommended by the Provost and approved by the Chancellor.

William H. Wheeler Center for Odor Research: The center is a cross-disciplinary laboratory established by a gift from the Wheeler estate. The center supports the study of the objective relationships between various substances and their effect upon olfaction.

Earl W. Winger Broadcast Center: Established in 1987 by the children of Earl W. Winger, a distinguished businessman, civic leader, lifetime trustee of the UC Foundation, and broadcast pioneer, for the renovation and acquisition of broadcast production equipment for WUTC. The children include Robert Allan Winger, Charles E. Winger, Betty V. Hunt, and Virginia A. McAllester.

Witt-Bagley Fund: Established in 1988 by University of Chattanooga alumnus and University of Chattanooga Foundation past chair Raymond Witt and his wife, Florence Bagley Witt, the fund supports the annual Perspectives Series and other programs. The series brings to the campus nationally recognized speakers to address various issues.

For more information about establishing an endowment or supporting an existing one, please contact the UTC Office of Development at (423) 425-4232.
Indexed: 229

Philosophy Minor 129
Physical Education (See Exercise Science, Health, and Leisure Studies)
Physical Therapy 198
Physically Challenged Student Services 47
Physics 131
Physics (B.S.) 134
Physics, Geology, and Astronomy 131
Physics Minor 134
Placement Exams 21
Placement Services 52
Plagiarism 62
PLUS Loans 31
Political Science, Public Administration and Nonprofit Management 136
Political Science (B.S.) 136
American Studies 137
International and Comparative Studies 137
Legal Studies 137
Public Administration and Nonprofit Management 137
Public Policy and Administration 137
Political Science Minor 137
Post-baccalaureate Admission 17
Post-baccalaureate Fees 45
Preclinical Pharmacy 75
PreMajor Advisement 23
Prepayment Plan 44
Preprofessional Programs 73
Preventive Medicine, Preprofessional 210
Second Bachelor’s Degree 17, 69
Security 52
Senior Citizens Fees 45
Service Organizations 56
Social Work 199
Social Work (B.S.W.) 199
Sociology 144
Sociology, Anthropology, and Geography 143
Sociology, Anthropology, and Geography Minors 144
Sociology and Anthropology and Geography Minor 144
Sociology 144
Sociology and Anthropology (B.S.) 144
Anthropology 144
Sociology Minor 144
Software Systems 177
Sororities 57
Southeast Center for Education in the Arts 53
Spanish 107
Spanish (B.A.) 107
Spanish Minor 107
Special Admission 14
Special Credit Limitations 17
Special Education: General (B.S.) 206
Special Education: General (B.S.) See Exceptional Learning K-12 (B.S.) 206
Special Education: General (B.S.) See Exceptional Learning K-12 (B.S.) 206
Specialization 30
Specialization 30
Speech Minor 149
Sport and Leisure Service Administration 185
Stafford Loans 31
Student Classification 24
Student Conduct 6
Student Dining Plans 46, 49
Student Email 49
Student Employment 31
Student Fees and Expenses 45
Student Financial Aid 31
Student Government Association 53, 57
Student Handbook 53
Student Loans 31
Student Newspaper 53
Student Organizations and Activities 57
Student Placement Service 52
Student Publications 57
Student Records 21
Student Right to Know Act 6
Student Rights and Responsibilities 6
Student Services and Resources 47
Student Support Services 53
Student Teaching 50
Student Tickets 53
Students with Disabilities 47
Study Abroad Opportunities 50
Summer School Fees 45
Supplemental Educational Opportunity Grants (SEOG) 30
Suspension, Academic (See Retention and Continuation Standards) 61